## ARE THE KIDS ALRIGHT?

Clinical Update on Adolescent Depression 2022

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## DISCLOSURES

Dr. Leipsic is medical director of Palo Verde Behavioral Health

He is not on any speaker panels currently or commercially motivated.

Past speaker panels include: Pfizer, Otsuka, Bristol Myers

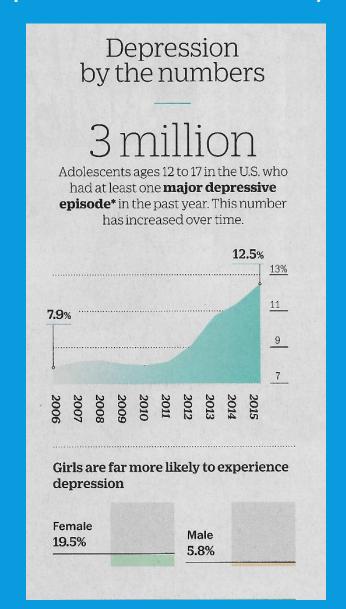
Child and Adolescent Psychiatrists commonly use medications off label and with non-FDA approved indications. These may be discussed.

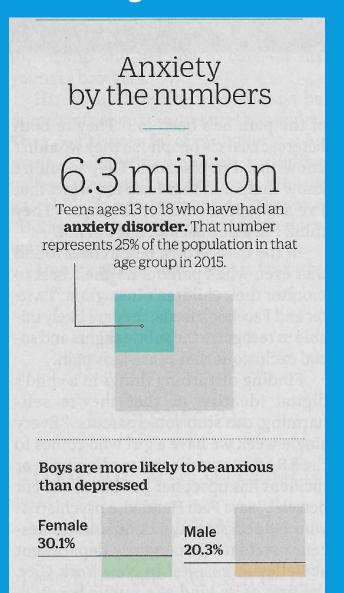


#### My Titanic

My depression is a shadow, it's a dark figure sticking to me ignored by the others around. They don't realize how it clings to me every moment of the day. It's like a piece of gum in my hair, refusing to leave. It keeps me in a jail cell, trapped in my room, alone with my thoughts, I don't like where they're headed to. They keep me in the dark away from my friends, not knowing if I'll get better again. I am a ship in a stormy sea, trying to head towards the lighthouse but the light is dimming and I am drowning and nobody can see me in the darkness around. The waves are crashing down on me and I am trying to stay afloat but it's hard holding the sea with my bare hands. But I keep pushing and pushing because there were survivors on the Titanic and I can be one of them and even though I feel so alone, when my head is about to go underwater and I finally call out for help, I see someone rushing to replace the bulb that leads me home and there are rafts on this boat and I am starting to float.

#### Depression and Anxiety are increasing over time 2006-2015





ADHD, Anxiety, Behavioral Problems and Depression are the most commonly diagnosed mental disorders in children 3 to 17

Pre-pandemic from 2016-2019, anxiety and depression were becoming more common, increasing 27 percent (anxiety) and 24 percent (depression)

By 2020, 5.6 Million kids were diagnosed with Anxiety (9.2%)

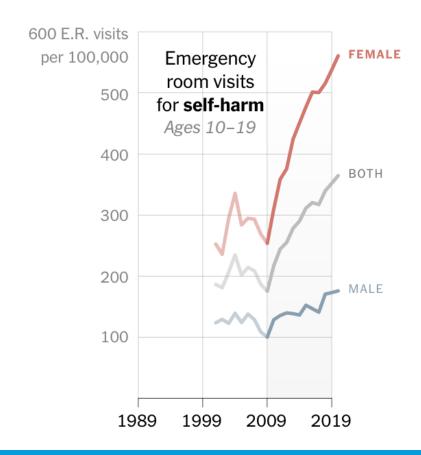
And 2.4 Million kids were diagnosed with Depression (4%)

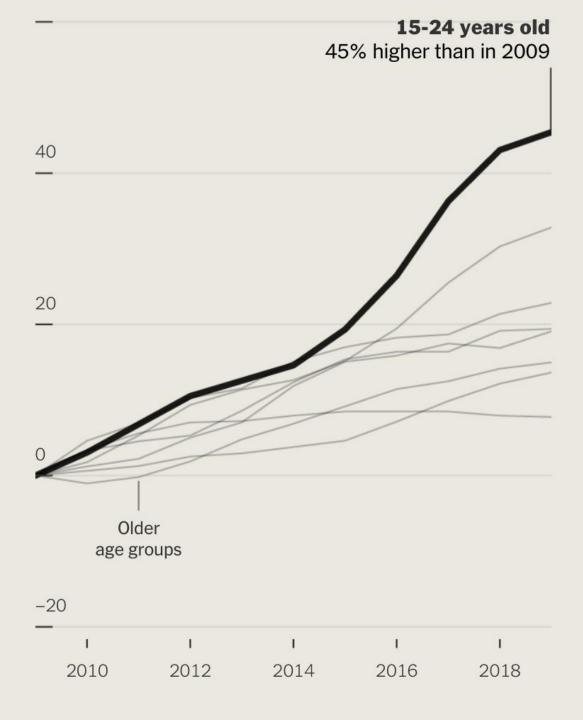
ADHD 9.8% (6 Million)

Behavior Problems 8.9% (5.5 Million)



Emergency room visits for self-harm by children and adolescents rose sharply over the last decade, particularly for young women.





While adults age 45 to 54 had the highest suicide Rate in 2019, the greatest percentage increase in The decade leading up to 2019 was in the 15 to 24 Year old age group

Source CDC

#### 2022 Latest CDC Statistics

More than 1 in 3 high school students experienced poor mental health during the pandemic

Nearly half of students felt persistently sad or hopeless

A quarter of teens struggled with hunger

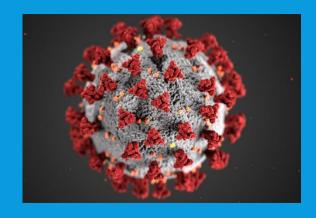
Two thirds of teens said they had difficulty with schoolwork

More than half of students experienced emotional abuse in their home.

#### Depression and Anxiety in children and teens: Pandemic Effect

2003 Anxiety and Depression 5.4% 2007 8%, 8.4% 2011 to 2012

Pandemic Effect



Anxiety and Depression Doubled in the Pandemic to: 20% Anxiety, 25.2% Depression

JAMA Pediatrics 2022

COVID-19
Social Isolation
TikTok



FOMO

Increased Screen Time

Instagram/Snapchat

## Behavioral Signals of Childhood Depression

Children may not verbalize or be able to express how they feel. Depression may manifest in the following behaviors:

Drop in school performance

Excessive fidgeting or loss of energy

Irritability

Crying

Expressions of fear or anxiety

Aggressive or antisocial behavior

Use of alcohol or drugs

Somatic complaints: aches/pains, headache, stomachache



Depression is a leading cause of disability in the US.

Children and adolescents with depression typically have functional impairments in their performance at school or work, as well as in their interactions with their families and peers.

Depression can also negatively affect the developmental trajectories of affected youth.

Major depressive disorder (MDD) in children and adolescents is strongly associated with recurrent depression in adulthood; other mental disorders; and increased risk for suicidal ideation, suicide attempts, and suicide completion.

Suicide is the second-leading cause of death among youth aged 10 to 19 years.

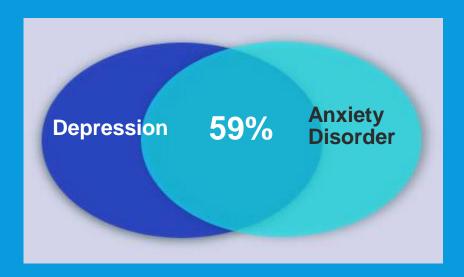
Psychiatric disorders and previous suicide attempts increase suicide risk.
Rates of suicide attempts and deaths vary by sex, age, and race and ethnicity

# Comorbid Depression/Anxiety

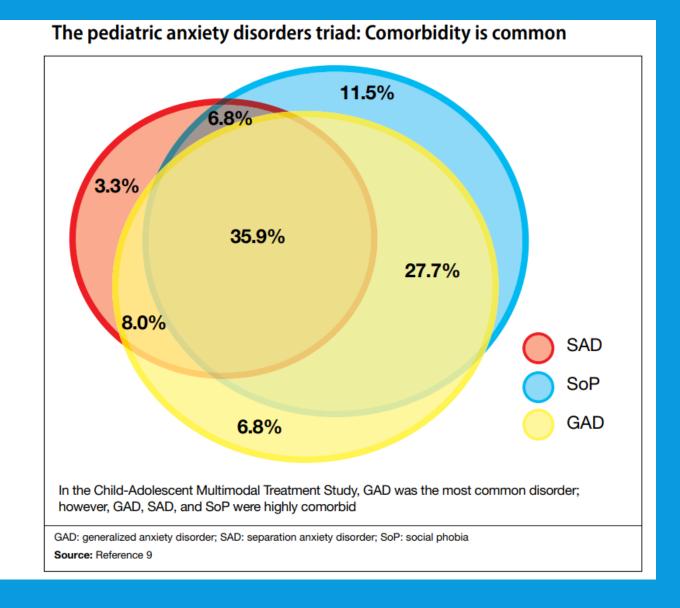
Up to 90% of depressed patients have anxiety symptoms<sup>1</sup>



59% of depressed patients have an anxiety disorder<sup>2</sup>



Sadock 2003<sup>1</sup>; Kessler 2003.<sup>2</sup>



Walkup JT, Albano AM, Piacentini J, et al. Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. N Engl J Med. 2008;359(26):2753-2766.

# Comorbid Depression/Anxiety

3 in 4 children with Depression also had Anxiety (73.8%)

1 in 2 children with Depression had Behavior Problems (47%)

1 in 3 children with Anxiety have behavior problems (38%)

1 in 3 children with Anxiety also had Depression

For children with Behavior Problems: 1/3 had Anxiety (36%) and 1/5 had Depression



Pediatric anxiety disorders

Social and educational disruptions during the COVID-19 pandemic have exacerbated concerns about adolescents' mental health and suicidal behavior.

Data from the 2021 Adolescent Behaviors and Experiences Survey (ABES) indicate that 37.1% of U.S. high school students reported poor mental health during the COVID-19 pandemic, with 19.9% considering and 9.0% attempting suicide in the preceding year.

Adverse childhood experiences (ACEs) are associated with poor mental health and suicidal behaviors, and high prevalence of some ACEs have been documented during the pandemic. ACEs are preventable, potentially traumatic events that occur in childhood (ages 0–17 years) such as neglect, experiencing or witnessing violence, or having a family member attempt or die by suicide.

Also included are aspects of a child's environment that can undermine their sense of safety, stability, and bonding.

#### **ABES Findings**

#### Adolescents Are Experiencing a Mental Health Crisis

- More than 1 in 3 high school students experienced poor mental health during the pandemic and nearly half of students felt persistently sad or hopeless.
- Female students and those who identify as lesbian, gay, bisexual, other or questioning (LGBQ) are experiencing disproportionate levels of poor mental health and suicide-related behaviors. For example, in 2021, 12% of female students, more than 25% of LGB students, and 17% of other or questioning students attempted suicide during the past year compared to 5% of their male peers and 5% of their heterosexual peers, respectively.

#### Daily Life Was Disrupted

- The range of impacts on youth's daily lives was broad including difficulties, family economic impacts, hunger, and abuse in the home.
- More than half of students experienced emotional abuse in the home and more than 10% reported physical abuse in the home.
- Lesbian, gay, and bisexual students were far more likely to report physical abuse, with 20% reporting that they had been physically abused by a parent or other adult in their home, compared to 10% of heterosexual students.
- Black students were most likely to report hunger, with nearly a third reporting that there was not enough food in their home during the pandemic.

# Adverse childhood experiences (ACEs) are common, potentially traumatic events



3 in 4 high school students experienced at least one ACE during the pandemic These students were more likely to report poor mental health and suicidal behavior





We can prevent ACEs and support adolescents who have experienced them with timely, effective care

bit.ly/mm7141a2

OCTOBER 14, 2022

MMWR

Adolescent Behaviors and Experiences Survey (ABES) CDC 3/22 https://www.cdc.gov/healthyyouth/data/abes.htm

#### What Can Be Done

# **Connectedness Protects Youth**

The ABES data showed that youth who felt more connected to people at their schools had better mental health; however, young people who experienced racism were less likely to benefit from this protection. More must be done to ensure that schools provide a safe and supportive where all students feel connected to people who care, so that all students can fully benefit from the protections connectedness provides.

#### **Summary of Recommendations**

Population	Recommendation	Grade
Adolescents aged 12 to 18 years	The USPSTF recommends screening for major depressive disorder (MDD) in adolescents aged 12 to 18 years.	В
Children 11 years or younger	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for MDD in children 11 years or younger.	1
Children and adolescents	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in children and adolescents.	1

See the Practice Considerations section for additional information regarding the I statement. USPSTF indicates US Preventive Services Task Force.

### Pediatric Depression Treatment Issues

TCAs not used anymore: require ECG monitoring, sig anticholinergic and potential cardiac s/e, drowsiness (maybe for migraines or sleep issues)

SSRIs remain first line: Fluoxetine and Escitalopram are FDA approved agents. Evidence for Sertraline as strong as Fluoxetine

Sertraline preferred for co-occurring anxiety/depression

SSRI activation syndrome: Rare, low dose sensitivity. Ddx: agitated depression Agitation with higher doses can be caught early and reversed

FDA BBW: Media distortion, but discuss with parents small risk of activation

Wellbutrin for co-occurring ADHD or treatment resistant depression

#### Practical dosing of SSRIs and SNRIs in pediatric patients with anxiety<sup>a</sup>

Medication	Initial child dose (age <12; mg/d)	Initial adolescent dose (age 12 to 17; mg/d)	Target dose (mg/d)	
Citalopram	5 to 10	10	20 to 40	
Escitalopram	2.5 to 5	5 to 10	10 to 20 20 to 40 (children), 40 to 60 (adolescents) 20 150	
Fluoxetineb	10	20		
Paroxetine <sup>b</sup>	5 to 10 10 to 12.5	10		
Sertraline		25		
Venlafaxine	37.5	37.5	150	

<sup>&</sup>lt;sup>a</sup>Generalized anxiety disorder, social phobia, and separation anxiety disorder

SNRI: serotonin-norepinephrine reuptake inhibitor; SSRI: selective serotonin reuptake inhibitor

Source: Adapted from reference 34

indling RL, Kowatch RA. How (not) to dose antidepressants and antipsychotics for children. Current Psychiatry. 2007;6(6):79-83.

<sup>&</sup>lt;sup>b</sup>May consider cytochrome P450 genotyping for 2D6, which may suggest an alternate dosing strategy

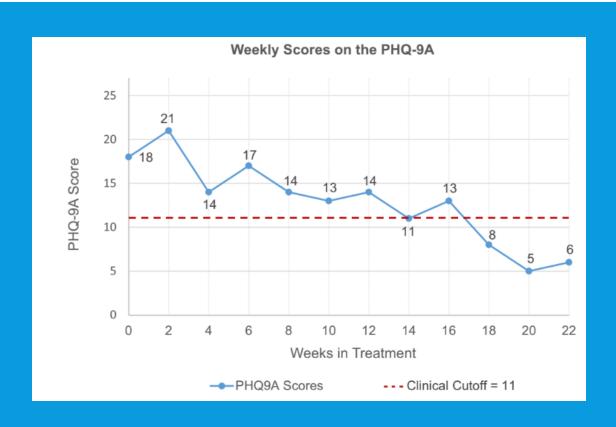
<sup>°</sup>Sertraline is available in a liquid formulation (20 mg/mL)



# Is Treatment Working? Detecting Real Change in the Treatment of Child and Adolescent Depression

Freda F. Liu, PhD, and Molly C. Adrian, PhD

PHQ-9: Modified for Teens							
	Name: Clinician:			Date:			
<b>Instructions:</b> How often have you been bothered by each of the following symptoms during the past <u>two weeks</u> ? For each symptom put an "X" in the box beneath the answer that best describes how you have been feeling.							
		Not At All	Several Days	More Than Half the Days	Nearly Every Day		
1.	Feeling down, depressed, irritable, or hopeless?						
2.	Little interest or pleasure in doing things?						
3.	Trouble falling asleep, staying asleep, or sleeping too much?						
4.	Poor appetite, weight loss, or overeating?						
5.	Feeling tired, or having little energy?						
6.	Feeling bad about yourself – or feeling that you are a failure, or that you have let yourself or your family down?						
7.	Trouble concentrating on things like school work, reading, or watching TV?						
8.	Moving or speaking so slowly that other people could have noticed?						
	Or the opposite – being so fidgety or restless that you were moving around a lot more than usual?						
9.	Thoughts that you would be better off dead, or of						



# Brief Behavioral Therapy (BBT) for Pediatric Anxiety and Depression in Primary Care

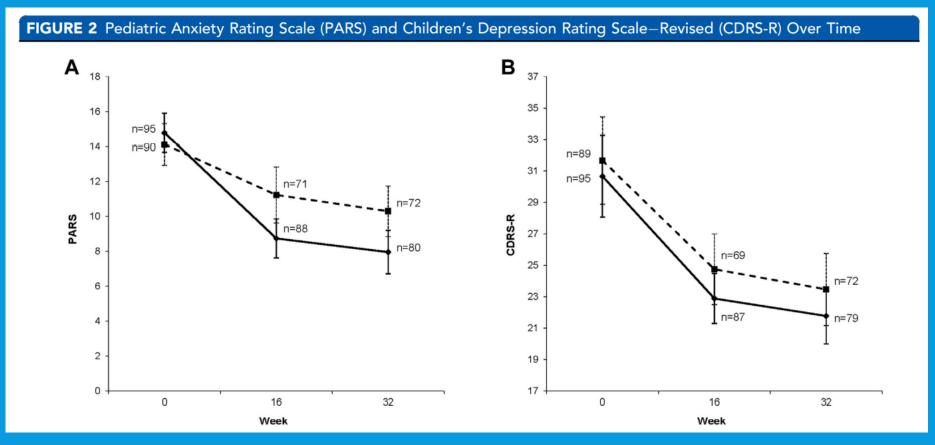
Brief Behavioral Treatment for anxiety and depression is treatment designed to be delivered in a pediatric primary care setting.

BBT is an intervention that combines exposure for anxiety and behavioral activation for depression to encourage graded engagement and approach toward avoided life tasks.

BBT relies on problem solving, a frequently used and evidence-based treatment among community clinicians

BBT emphasizes behavioral activation and exposure, both key effective elements for treatment response in depression and anxiety.

# Brief Behavioral Therapy for Pediatric Anxiety and Depression in Primary Care:



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