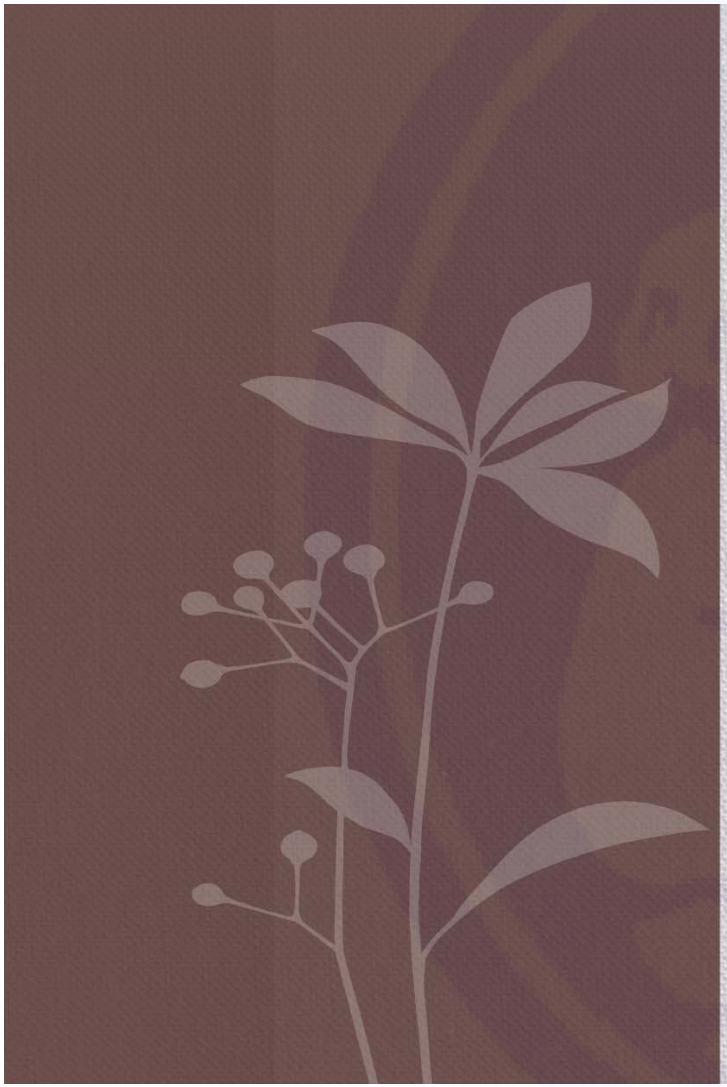

MANAGEMENT OF PEDIATRIC DEPRESSION

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September 2020

Disclosures

- I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this CME activity.
- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.
- Who am I?

Objectives

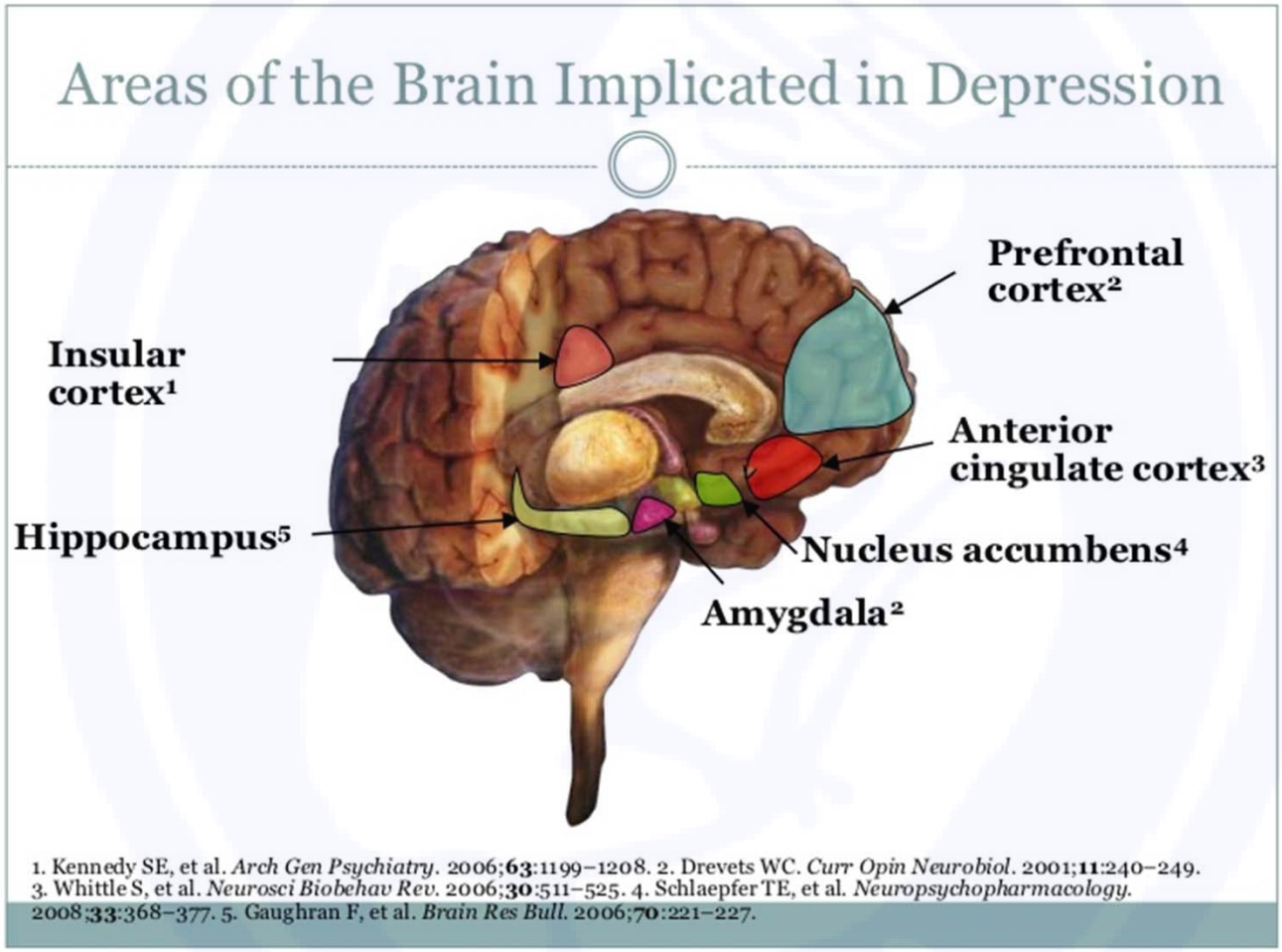
By the end of this session, participants should be able to:

- Summarize recent trends in diagnosis and treatment of pediatric depression
- Clarify diagnostic parameters for overlapping symptoms
  - Recognize risk factors for aggression and when to refer to psychiatry or a higher level of care
  - Understand medication treatment options
- Summarize trends in adolescent suicidal ideation
- Create and utilize safety plans

Overview

- Pediatric Depression Trends
  - Prevalence, Screening, Treatment
- Irritability and Aggression
  - Diagnostic clarification: MDD vs. ADHD vs. BPAD, when to worry
- Adolescent suicidality
  - Trends, statistics, and risk factors
  - How to assess risk and develop a safety plan
- Creating a team: "it takes a village to raise a child" (African proverb, attributed)

Neurobiology of Depression



Courtesy of slideshare.net

Prevalence and Screening

Depression Trends

- Major Depressive Episodes
  - Age 12-17 yrs: 8.7 % (2005) → 11.3% (2014) p<0.001
  - Age 18-25 yrs: 8.8% (2005) → 9.6% (2014) p=0.001
- Regardless of substance use, SES

Mojtabai et al Pediatrics 2016
Slide courtesy of Dr. Paige Partain, MD

Depression Treatment Trends

- Counseling or Treatment for Mental Health
  - No sig change 2005-2014
  - Changes to type/location of care, with MORE of:
    - Specialty mental healthcare providers and Private mental healthcare settings
    - Inpatient stays
    - Day treatment **3.1% → 5.5%** p=0.001
  - Prescription medications
    - 16% ⟶ 20.0 % p =0.006

Mojtabai et al Pediatrics 2016
Slide courtesy of Dr. Paige Partain, MD

DSM-V Diagnostic Criteria

S leep
I nterest (Anhedonia)
G uilt
E nergy
C oncentration
A ppetite
P sychomotor Retardation
S uicidal Ideation

- Must cause distress or impair functioning
- ≥ 5, including depressed mood or loss of pleasure (anhedonia)
- Majority of days x 2 weeks

Diagnostic and Statistical Manual of Mental Disorders, version V

Screening Tools

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME:_____ DATE:_____

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(use "✓" to indicate your answer)*

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
add columns		+	+	
(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:				

10. If you checked off *any problems*, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____ Somewhat difficult _____ Very difficult _____ Extremely difficult _____

A2663B 10-04-2005

Williams JBW, Kroenke K, Pfizer, 1999

TABLE 2

PHQ-2 Screening Instrument for Depression

Over the past two weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

Scoring: A score of 3 or more is considered a positive result. The PHQ-9 (Table 3) or a clinical interview should be completed for patients who screen positive.

PHQ = Patient Health Questionnaire.

Adapted from Patient Health Questionnaire (PHQ) screeners. http://www.phqscreeners.com. Accessed February 8, 2018.

Gilbody, Richards, Brealey, and Hweitt, 2007

Irritability as a symptom of Pediatric Depression

S leep
I nterest (Anhedonia)
G uilt
E nergy
C oncentration
A ppetite
P sychomotor Retardation
S uicidal Ideation

- Irritability is present in up to 80% of cases of MDD
- Unipolar (80%) > Bipolar (37%)

Judd LL et al., JAMA psychiatry 2013
Mick et al., Biol Psychiatry 2004

"Although symptoms of irritability or anger are not central to the diagnosis of unipolar major depressive episodes (MDEs), these symptoms have been found, in cross-sectional studies, to be **highly prevalent and associated with increased depressive illness burden.**"

Judd LL et al., JAMA Psychiatry 2013

Irritability as a symptom of Pediatric Depression

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Recent creation of Disruptive Mood Dysregulation Disorder (DMDD)

Judd LL et al., JAMA psychiatry 2013
Mick et al., Biol Psychiatry 2004

DMDD

Severe irritability/outbursts superimposed on baseline dysphoric mood

- Outbursts "grossly out of proportion in intensity or duration" and inconsistent with developmental stage (DSM-V)
- 3+ times/week
- Persistent dysphoria
- Present in at least 2 settings for minimum 12+ months

Designed to more accurately identify children previously diagnosed with pediatric bipolar disorder

Lifelong, chronic, but does not develop into bipolar disorder

	ADHD	DMDD	Bipolar Disorder
Irritability	Defiant	Chronic, severe	Episodic
Age of onset	Latency years (4-12)	Age 6-18	Typically >18
Psychotic Sx	None	Rare	Can be present
Comorbidity	Tics, anxiety, depression	Anxiety, ADHD	
Prognosis	70% remittance	“Chronic dissatisfaction”	Chronic
Specific symptoms	Inattentive, headstrong, tantrums that resolve to baseline	neurovegetative symptoms, tantrums with ongoing persistent dysphoria	Grandiosity, loosening of associations, insomnia, risky behaviors Decreased focus on tantrums in DSM-V
Classification	Neurodevelopmental Disorder	Mood disorder	Mood disorder

MDEdge.com

Heterogeneity of Irritability as a diagnostic indicator

chronic basal ⟹ Depression ("Chronic dissatisfaction")

Episodic, severe ⟹ Mania

Headstrong defiant behavior ⟹ ADHD/ODD

Aggression

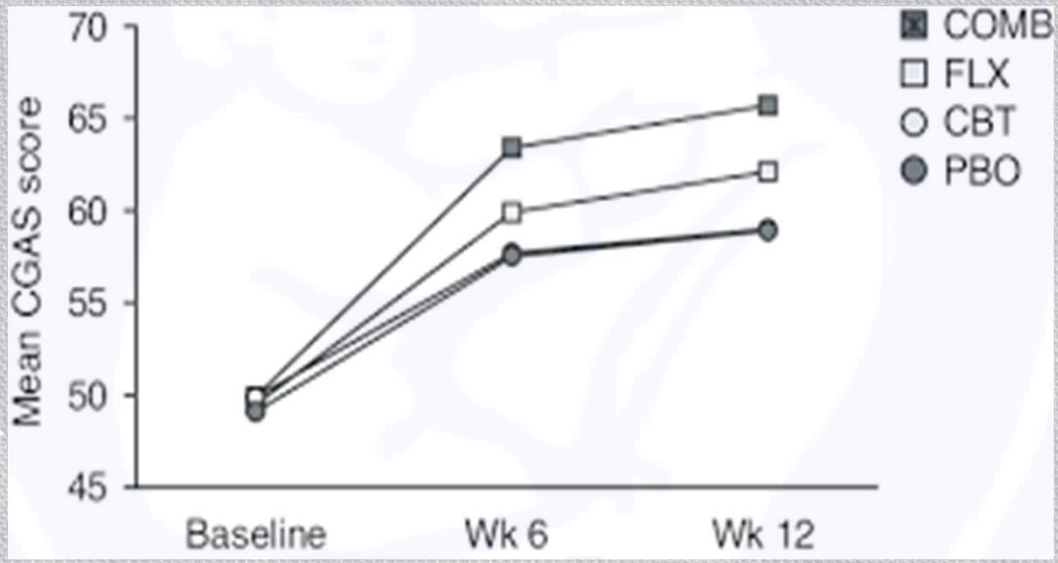
Treatment

Treatment for Adolescents with Depression Study (TADS)

	12 weeks	18 weeks	36 weeks
Placebo	35%		
Fluoxetine alone	61%	69%	81%
CBT alone	43%	65%	81%
Fluoxetine and CBT	**71%**	85%	**86%**

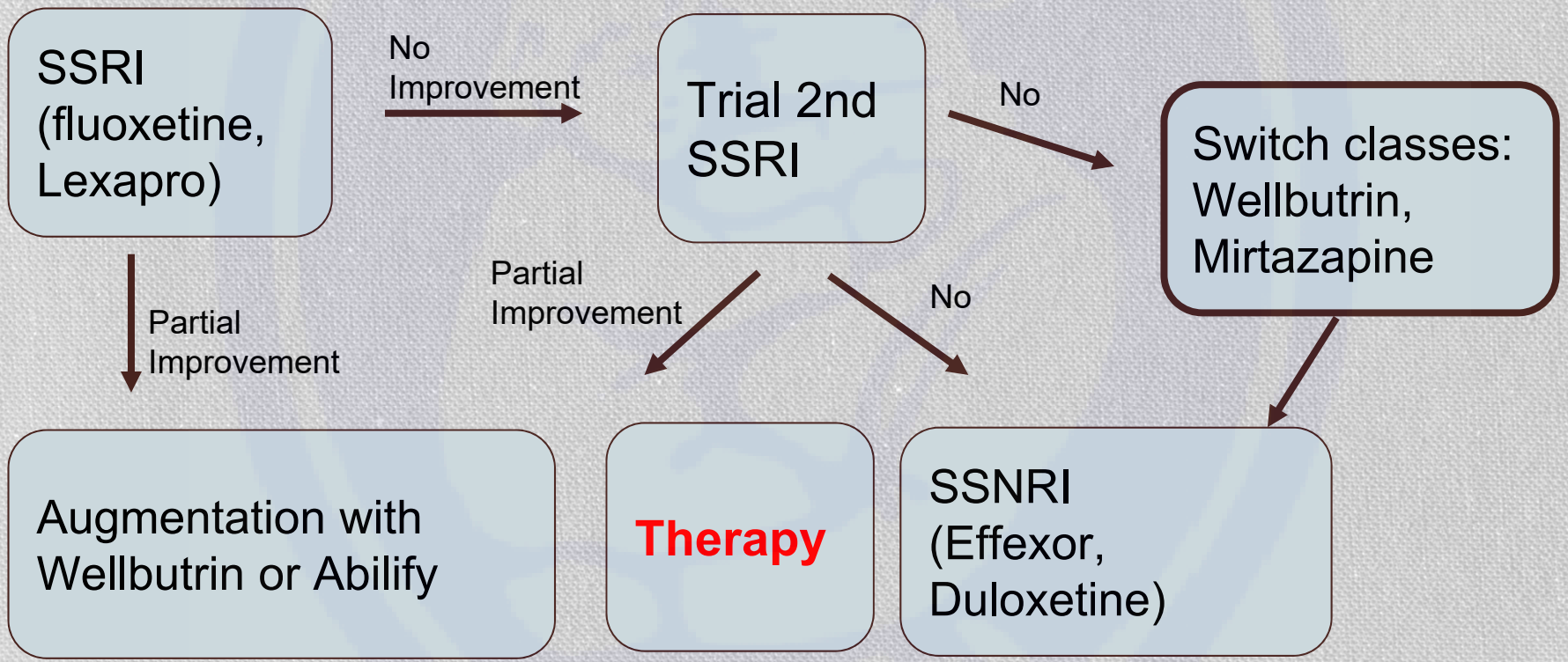
March et al., JAMA 2004

Level of Functioning in TADS



March et al., JAMA 2004

Basic Treatment Protocol



Mood Stabilizers

RTCs have not consistently shown efficacy of mood stabilizers in children

Anecdotally can be helpful off label

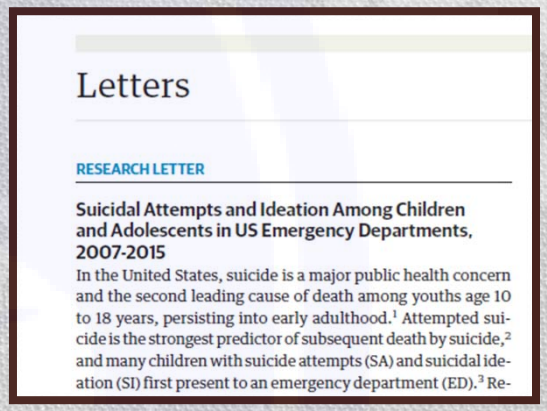
Co-morbid seizure disorders

Risperidone and Abilify FDA Approved for aggression

Prevalence and Management of Suicidality

Suicidality Trends

- Age 5-18 yrs
- ED discharge dx of SI or suicide attempt



Letters

RESEARCH LETTER

Suicidal Attempts and Ideation Among Children and Adolescents in US Emergency Departments, 2007-2015

In the United States, suicide is a major public health concern and the second leading cause of death among youths age 10 to 18 years, persisting into early adulthood.[1] Attempted suicide is the strongest predictor of subsequent death by suicide,[2] and many children with suicide attempts (SA) and suicidal ideation (SI) first present to an emergency department (ED).[3] Re-

Results:

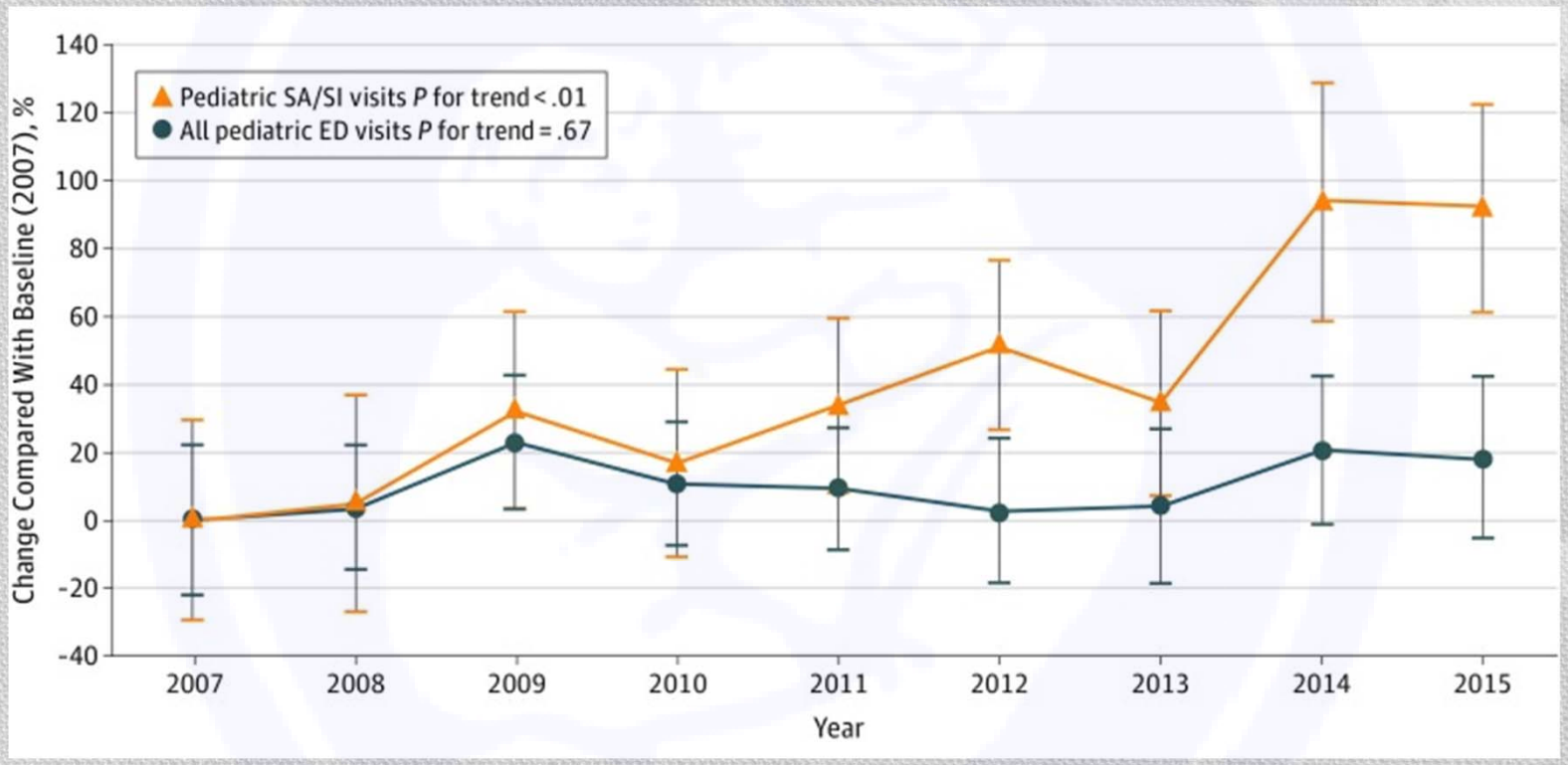
- Quantitative increase over time:

  580,000 (2007) → 1.12 million (2015); p = 0.004

- Percentage visits for SI/SA:

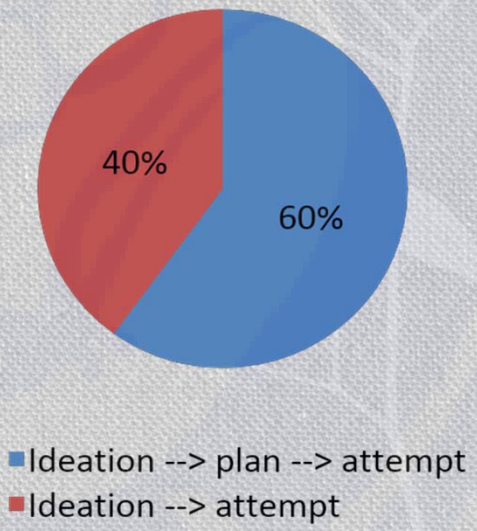
  2.17% (2007) → 3.5% (2015)

Burstein, Agostino, Greenfield, JAMA Pediatrics June 2019



Suicidality Data

- Suicide – 2nd leading cause of death
- Lifetime Prevalence:
  - Suicidal ideation- 12.1%
  - Suicide plan- 4.0%
  - Suicide attempt- 4.1%
- Changes over time:

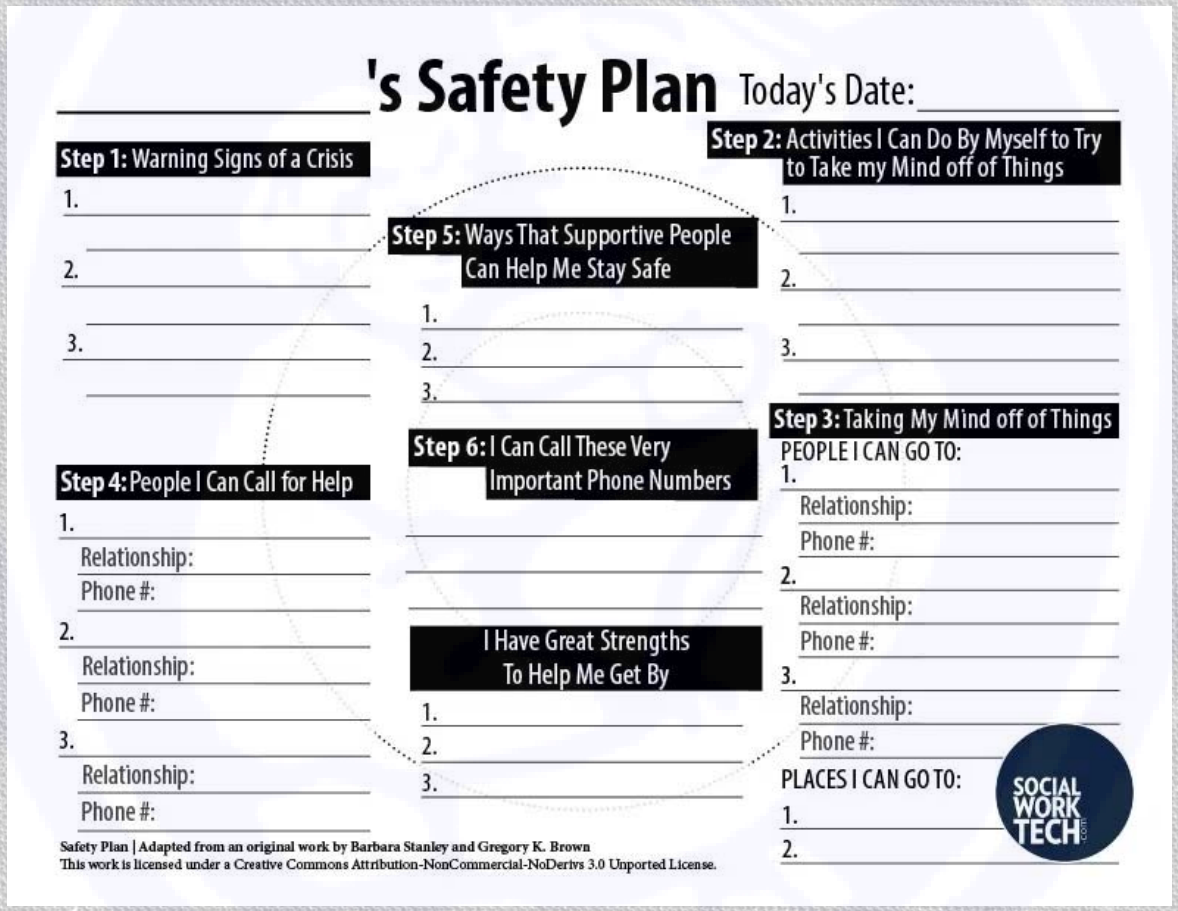


Nock et al., JAMA Psych 2013
Courtesy of Paige Partain, MD

Risk Factors for Suicide

- Known Family History/Exposure to suicide attempts
- Family history of mental illness (first generation, mothers with depression)
- Personal history of Prior Suicide attempts
- ? Self injurious behavior
- Psychosocial stressors: bullying, financial instability, cultural differences, sexuality, academic pressures
- Recent Psychiatric Hospitalization (6-12 months post discharge)
- Means and **ACCESS**

How to create a safety plan



_____'s Safety Plan Today's Date: _____

Step 1: Warning Signs of a Crisis

1.
2.
3.

Step 2: Activities I Can Do By Myself to Try to Take my Mind off of Things

1.
2.
3.

Step 3: Taking My Mind off of Things

PEOPLE I CAN GO TO:

1. Relationship: Phone #:
2. Relationship: Phone #:
3. Relationship: Phone #:

PLACES I CAN GO TO:

1.
2.

Step 4: People I Can Call for Help

1. Relationship: Phone #:
2. Relationship: Phone #:
3. Relationship: Phone #:

Step 5: Ways That Supportive People Can Help Me Stay Safe

1.
2.
3.

Step 6: I Can Call These Very Important Phone Numbers

I Have Great Strengths To Help Me Get By

1.
2.
3.

SOCIAL WORK TECH .com

Safety Plan | Adapted from an original work by Barbara Stanley and Gregory K. Brown

Socialworktech.com

Develop and Plan and a Team

- Understand and follow up with local services/ supports -- **clinic plan**
  - Parents (+/-)
  - Identify other supportive adults (teachers, clinicians, neighbors, aunts/uncles)
  - Therapists
  - Counseling Centers
  - Crisis centers/Boston Emergency Services (BEST)
  - Intensive outpatient programs
  - Schools
- Consider bridge medications
- Don't underestimate the value of a committed, consistent involved adult (can be a clinician!)

Helpful References

- GLAD- PC (Guidelines for Management of Adolescent Depression in Primary care) Toolkit from AAP:
  - Zuckerbrot RA, Cheung AH, Jensen PS, et al. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): I. Identification, assessment, and initial management. Pediatrics 2007; 120:e1299.
  - Cheung AH, Zuckerbrot RA, Jensen PS, et al. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): II. Treatment and ongoing management. Pediatrics 2007; 120:e1313.
- TADS (Treatment of Adolescent Depression Study):
  - March J, Silva S, Petrycki S, et al. Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents With Depression Study (TADS) randomized controlled trial. JAMA 2004; 292:807.
  - March JS, Vitiello B. Clinical messages from the Treatment for Adolescents With Depression Study (TADS). Am J Psychiatry 2009; 166:1118.
- JAACAP Practice Parameter for Suicidality:
  - https://www.jaacap.org/article/S0890-8567(09)60404-4/pdf
- Psychology Today: www.psychologytoday.com
- Crisis Text line: https://www.crisistextline.org
- National Suicide Hotline: https://suicidepreventionlifeline.org

Slide courtesy of Dr. Paige Partain, MD

Summary

The prevalence of depression and SI is increasing among adolescents

Aggression and irritability are more highly associated with pediatric depression than with bipolar disorder

Treatment protocols are available to help guide non mental health clinicians to initiate anti-depressant medications

All clinicians can and should discuss safety planning with depressed patients

Thank you

- Thank you for your attention
- Thank you to Dr. Paige Partain, MD for her suggestions and contributions to these slides

Please feel free to reach out with questions

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