Adolescent Depression: Diagnosis, Management and Suicide Risk

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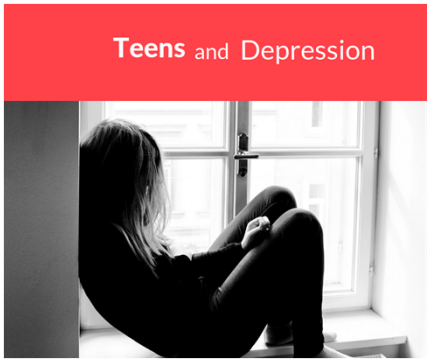
- Statements and opinions expressed are those of the presenter and not necessarily those of the American Academy of Pediatrics
- Some of the handouts shown from Dr. Bauer's blog are free or available for purchase

Acknowledgements

- Special Thanks to Dr. Rachel Zuckerbrot

Learning Objectives

- Describe the **diagnostic criteria and initial assessment** of adolescent depression
- Discuss **medical guidelines, screening and management strategies** for adolescent depression
- **Identify risk factors** for adolescent depression and suicide
- Determine the **acute management and secondary prevention of suicide**
- State the **role of pharmcogenomics** in adolescent depression



Don't let them suffer silently

Adolescent Depression RESOURCE ALERT

GLAD-PC TOOLKIT: FREE TO DOWNLOAD at www.glad-pc.org

Let's Start at the Beginning

- Adolescent Depression Guidelines were first released in 2007 secondary to:
  - Shortage of mental health (MH) clinicians
  - Access barriers for timely identification & treatment
  - Increasing evidence-base for a multifaceted approach in primary care with MH consultation

- Equip those on the front lines to feel ready to respond
- **Primary care providers are ideal,** given:
  - Therapeutic relationship
  - Ability to conduct surveillance & screening
  - Help to refer & ensure follow-up if provider does not feel comfortable starting treatment

Updated guidelines released March 2018

Updated guidelines were released in March 2018: two parts

Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part I. Practice Preparation, Identification, Assessment, and Initial Management

Rachel A. Zuckerbrot, Amy Cheung, Peter S. Jensen, Ruth E.K. Stein, Danielle Laraque, GLAD-PC STEERING GROUP

Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part II. Treatment and Ongoing Management

Amy H. Cheung, Rachel A. Zuckerbrot, Peter S. Jensen, Danielle Laraque, Ruth E.K. Stein, GLAD-PC STEERING GROUP

PEDIATRICS
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Adolescent Depression: Why now?

- Depression is common
  - **Major Depressive Disorder** 1-2% for children (boys: girls - 1:1)
  - Increases to 4-8% in adolescence with girls at higher risk (2:1)
  - 11-20% over lifetime risk

There is HOPE

Related Disorders

- Dysthmia: 1% of children, 5% of adolescents
- Sub-syndromal depressive symptoms: 5-10%
- Anxiety: 31.9% of adolescents had ANY disorder
  - 8.3% with severe impairment
  - Slightly higher female prevalence

NIMH, November 2017

Impacts of Depression

- There are many reasons we want to identify depression as early as possible:
  - Self image (feelings of hopelessness, guilt —>suicide)
  - School output failure (problems concentrating, lack of motivation, poor energy can lead to cascade of poor academic output)
  - Impaired family & peer relationships (irritable mood & decreased motivation can lead to conflict, isolation & further despair)

- High likelihood of recurrence into adulthood (especially with adolescent onset)
- Early onset of anxiety & depression correlated with social impairment
- Later incidence of substance use, poor employment, hospitalizations & suicidality
- Risk for early pregnancy & parenthood
- Genetics play a role (2-4x as likely if parent +); however context is also important
  - Social Media
  - Trauma & world events
  - Bullying

Evidence-based treatments doesn't mean those needing will access

- Up to 80% of affected adolescents with depression will not access appropriate treatment
  (Merikangas KR et al, JAACAP, 2011)
- If untreated, symptoms can worsen & have lifelong effects
- In a later study examining secondary claims data, 79% identified with major depressive disorder (MDD) started Rx (therapy +/-med).
  BUT 3 months later: 36% received NO treatment; 68% lacked any follow up assessment; 19% received no follow up care & 40% started on medications did not have a follow up visit documented
  (O'Connor et al, JAMA Pediatrics 2016)
- **This is where primary care providers are KEY!** Communication at the time of identification can be the driver for getting buy in and ultimately adherence to treatment

Pay attention to these adolescents

- Recurrence is LIKELY (40% within 2 years regardless of treatment)
- Treatment of Adolescent Depression Study (TADS): over 90% recovered from initial episode, within 5 years almost half had recurrence
  - Severity
  - Prior episodes & co-morbidity
  - Negative coping style
  - Trauma
  - Family conflict

Diagnostic Criteria (MDD)

- If you download the GLAD-PC toolkit, you can review the DSM-V criteria
  - Episodic, recurring disorder with significant & pervasive sad or irritable mood
  - Inability to feel joy in everyday activities
  - Symptoms last for **at least 2 weeks**
  - Different from sadness which is experienced by many but described as "depressed"

—>assess for impairment in functioning

Additional Signs & Symptoms

- Poor appetite or weight loss/gain
- Change in sleep patterns
- Change in level of activity (observable by others)
- Fatigue or loss of energy
- Feeling of worthlessness or excess/inappropriate guilt
- Change in concentration or indecisiveness
- Suicidal ideation

Differential Diagnosis

- Adjustment disorders
- Bereavement
- Medications
- Trauma/Abuse
- Substance Use (e.g. corticosteroids, stimulants)
- Medical conditions (e.g. thyroid, traumatic brain injury)

Co-morbidity

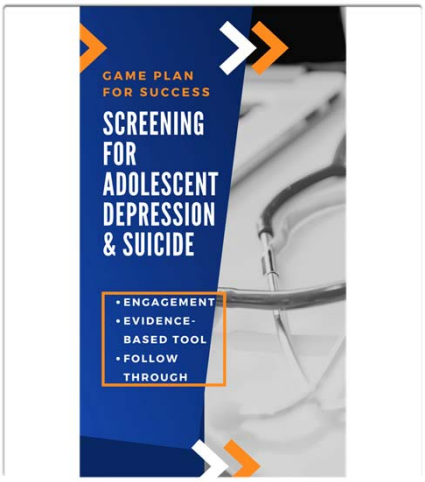
- Anxiety
- Attention deficit hyperactivity disorder
- Post-traumatic stress disorder
- Oppositional defiant disorder
- Substance abuse

Comfort with handling adolescent depression

- National survey found 90% of pediatricians felt responsible for identification of depression BUT 46% lacked confidence to do so
- 56% felt appointment times too short
- Focus on both implementation procedures and review of clinical guidelines

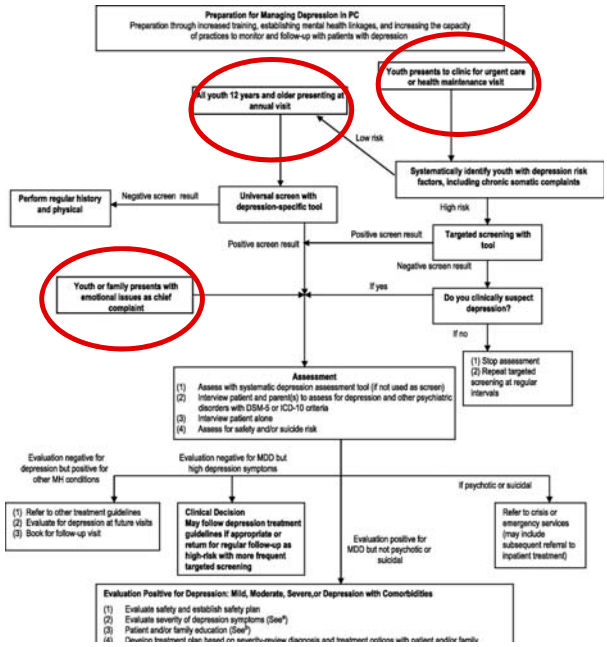
Before you begin

- Implementation can make or break the screening & follow up process
- Make sure to talk to EVERYONE in the clinic—> not just select people as everyone plays a role
- Look at workflow and select the most appropriate tool
- Have plans for follow up & documentation in EMR
- Make sure to identify referral resources
- Once started, check in with staff about process at periodic intervals to keep momentum moving forward



From Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part I. Practice Preparation, Identification, Assessment, and Initial Management

Zuckerbrot RA et al, Pediatrics, 2018



Surveillance & Screening are first steps

- AAP advocates that ALL adolescents starting at age 12 are screened ANNUALLY using a validated screening tool
- Surveillance: Longitudinal & continuous process based on clinical judgement & relationships with families

Need to interview adolescent privately

- Since depression is an "internalizing disorder" it can be overlooked or symptoms may be underreported by parents or teachers
- Adolescent may suffer silently

Obtain a Thorough History during a Split Visit

- Split visits have been shown to increase adolescent disclosure
- Explain limits of confidentiality beforehand
- Determine timeline of symptoms & impact on functioning in multiple settings, on relationships & academics
- ALWAYS confirm strengths & positives
- Look for co-morbidity
- Screen for suicidality

Case Illustration

- Almost 11-year-old patient comes in for complaints of anger and need to “get him out of a funk”
- Patient and his family just relocated to the area 6 months prior
- First residence in area with limited children, constantly getting into fights with older brother who had attention-deficit/hyperactivity disorder (ADHD)
- Begun to show signs of withdrawal, anger and hostility especially towards mother
- Used the word “hate”, stopped participating in activities he previously enjoyed

Case, Continued

- Left behind a nanny who had been an another maternal figure
- Had left after having “best year of his life” in school & soccer
- Visited old home and friends and even still had problems—often getting into fights or choosing to not participate
- Months later, school started reporting behaviors of concern
- History of dyslexia but grades to date have been adequate

Additional Details

- Wax and wane appetite but lately less and less
- Holes himself in room and refuses to socialize with family or friends
- Reports difficulty sleeping, often staying up until midnight or 1am
- When asked about his three wishes: have money and move to Australia to be away from my family, a ferret and "that I could be erased from existence."
- Depression screen & suicide screen positive

Assess Functioning

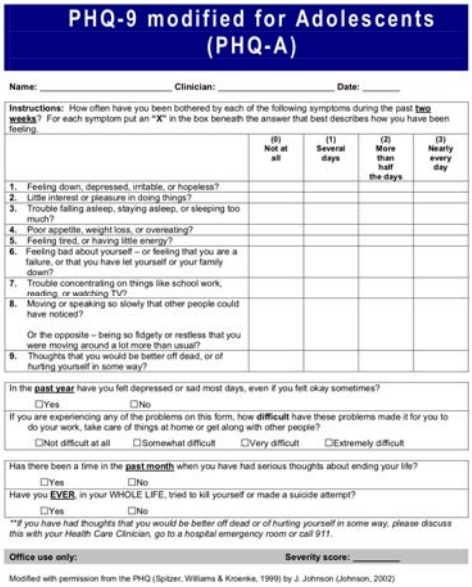
- How impaired is the adolescent day to day? "When was the last time you had fun?"
- Does it impact activities, hobbies, relationships, academics?
  - Grades
  - Absenteeism
  - Friendships & social life
  - Family life
- Important to get this perspective from the parent as well to understand HOW to support family (effect on job, self, family) for counseling

Screening

- Use a validated evidence-based screening tool such as Patient Health Questionnaire (PHQ)-A; Beck Depression Inventory; Center for Epidemiological Studies Depression Scale for Children (CES-DC); Kutcher Adolescent Depression Scale (KADS); Mood and Feelings Questionnaire (MFQ); Depression Self-Rating Scale (DSRS)
- Consider Cost, Time to administer, Language available
- For help selecting the right tool and overall guidance for your practice, check out: AAP Screening Technical Assistance and Resource (STAR) Center
- Use 96127 for screening tool administration

PHQ-A

- Modified scoring from PHQ (MDD: PHQ2 must be 2 or 3 + 5 or greater positive symptoms PLUS functional impairment)
- 5-9 Mild
- 10-14 Moderate
- 15-19 Moderately severe
- 20-27 Severe
- For Dysthmia: item—> YES



PHQ-9 modified for Adolescents (PHQ-A)

Name: _____ Clinician: _____ Date: _____

Instructions: How often have you been bothered by each of the following symptoms during the past **two weeks**? For each symptom put an "**X**" in the box beneath the answer that best describes how you have been feeling.

	(0) Not at all	(1) Several days	(2) More than half the days	(3) 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 hurting yourself in some way?				

In the **past year** have you felt depressed or sad most days, even if you felt okay sometimes?
☐Yes ☐No

If you are experiencing any of the problems on this form, 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

Has there been a time in the **past month** when you have had serious thoughts about ending your life?
☐Yes ☐No

Have you **EVER**, in your WHOLE LIFE, tried to kill yourself or made a suicide attempt?
☐Yes ☐No

***If you have had thoughts that you would be better off dead or of hurting yourself in some way, please discuss this with your Health Care Clinician, go to a hospital emergency room or call 911.*

Office use only: **Severity score:** _____

Modified with permission from the PHQ (Spitzer, Williams & Kroenke, 1999) by J. Johnson (Johnson, 2002)

Other things to consider

- Targeted physical exam (PE)
- Labs if indicated by PE (e.g. anemia, mononucleosis, thyroid, eating disorder, substance use/abuse)
- The TOOLKIT provides guidance on thinking through MDD, dysthmia, adjustment disorder, manic, hypomania, bipolar

SUICIDE Assessment

- Asking adolescent directly does NOT increase probability of harm
- Ideation, impulses & acts
- Admission with intent or plan MUST be taken seriously
- Ask parents about access to unsecured firearms, medications, other implements that can be utilized (e.g. knives, ropes, belts) as well as alcohol
- Ask about family history of suicide, past attempts, presence of co-morbid psychiatric disorders, ACES

SUICIDE & Adolescents

- Suicidality often goes undetected
- ~20% of suicidal behavior occurs in individuals without diagnosable depression (Brent DA et al, JAACAP, 1993)
- Over 1 million children & adolescents attempt suicide, more have ideation that goes undetected (Bridge JA et al, J Child Psychol Psychiatry, 2006)
- Early identification & follow up is CRITICAL
- Inquire about non-suicidal self-harm attempts as well
- Suicidal ideation is key predictor of attempts & completed suicide (Nock MK et al, JAMA Psychiatry, 2013)

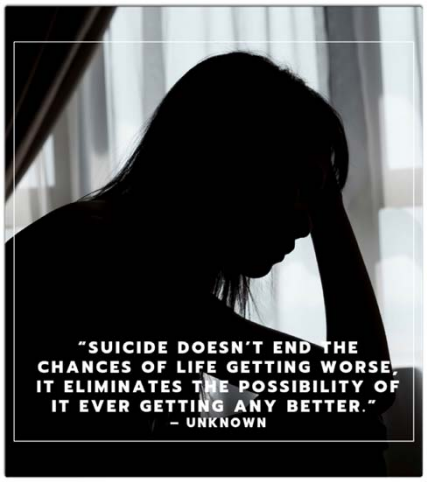
Risk factors for suicide

- Family history of suicide & parental mental health
- History of abuse, substance use, being bullied
- Adolescent boys 15-19 complete suicides at higher rates than female counterparts
- Attempts higher among females
- American Indian/Alaska Native males have highest suicide rate
- Sexual minority youth (LGBTQ) more than twice rate of suicidal ideation (Pediatrics, 2013)

Lessons learned from Suicide screening in the ER

- Recent study by Hengehold T et al, Annals of Emergency Medicine, 2017 showed teens who responded YES or NO RESPONSE to tablet screening suicide assessments were at elevated risk

Don't overlook those skipped items



Suicide

- Leading methods of suicide (2013)
  - Suffocation (43%)
  - Firearms (42%)
  - Poisoning (6%)
  - Falling (3%)

(CDC, 2015)

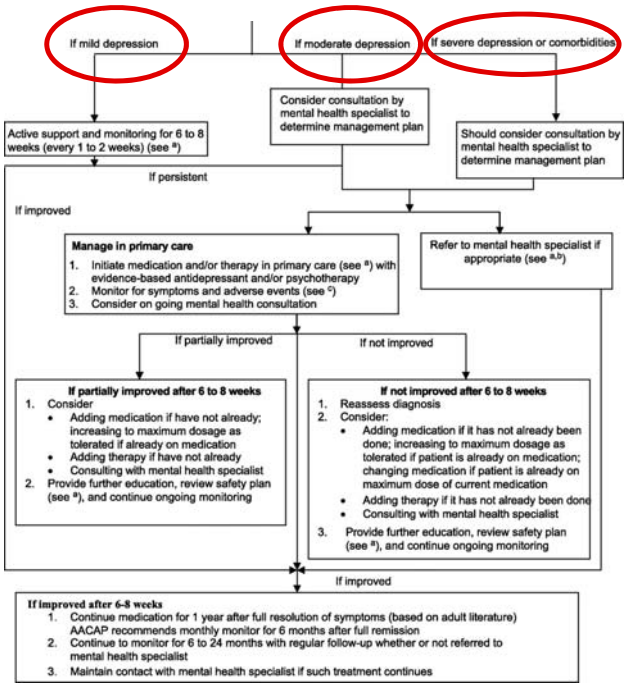
Safety Planning

- Assess CURRENT risk
- If safe to go home, MUST have a safety plan in place
  - Do a safety sweep of the home to remove easy access to lethal means
  - Make a behavioral contract with steps agreed upon by ALL
    - Know when to contact: Friends? Parents? Provider? 9-1-1? Suicide hotline?

Initial Management

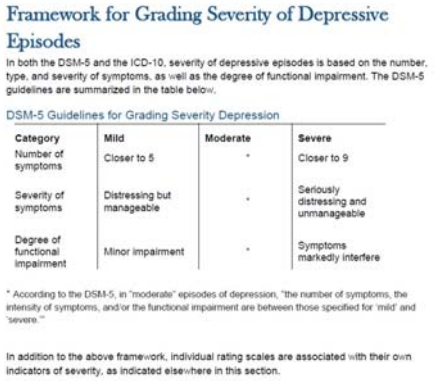
1. Evaluate safety & establish a safety plan
2. Decide if depression mild, moderate or severe
3. Provide education to patient & family
4. Develop a treatment plan WITH the family

- From Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part II. Treatment and Ongoing Management
- Cheung AH et al, Pediatrics, 2018.



Level of Severity

- Mild, Moderate or Severe
  - Clinical impression from interview
  - Standardized rating scales
  - Number of DSM-5 criteria
  - Impairment, safety issues



Framework for Grading Severity of Depressive Episodes

In both the DSM-5 and the ICD-10, severity of depressive episodes is based on the number, type, and severity of symptoms, as well as the degree of functional impairment. The DSM-5 guidelines are summarized in the table below.

DSM-5 Guidelines for Grading Severity Depression

Category	Mild	Moderate	Severe
Number of symptoms	Closer to 5	*	Closer to 9
Severity of symptoms	Distressing but manageable	*	Seriously distressing and unmanageable
Degree of functional impairment	Minor impairment	*	Symptoms markedly interfere

* According to the DSM-5, in "moderate" episodes of depression, "the number of symptoms, the intensity of symptoms, and/or the functional impairment are between those specified for 'mild' and 'severe.'"

In addition to the above framework, individual rating scales are associated with their own indicators of severity, as indicated elsewhere in this section.

For ALL FAMILIES: Educate parents what to look for

- Expression of not wanting to be here, better off without me
- Drawing death-related pictures or posting on social media
- Listening to songs about death
- Playing video games with self-destructive themes
- Giving away possessions
- Signs of drinking or drugs
- Withdrawal from relationships
- School absenteeism

For ALL FAMILIES: Patient and Family Education

- Provide psychoeducation and support
- Facilitate referrals (if needed)
- Regularly monitor symptoms of depression and suicide
- Counsel on healthy habits to boost mood including regular sleep habits, diet and exercise. Promote connection with support system

Possible messages to patient & family

- Normalize condition
- Give HOPE
- Discuss prevention strategies
- Explain options for treatment & whether referral indicated

Mild Depression

- Active support and monitoring for 6-8 weeks
- Every 1-2 weeks:
  - Psychoeducation
  - Facilitate parental and self-management (guided self-help)
  - Supportive counseling (focus on positive self talk, effective problem solving, teach relaxation techniques, increase physical activity)
  - Referral for peer support
  - Regular monitoring for depressive symptoms & suicide
  - Family therapy can also be helpful

Mild Depression Course

- May remit after a few sessions of non directive support counseling
  (Renaud J et al, JAACAP, 1998)
- No definitive treatment protocol for youth but problem solving and psychoeducation are KEY ELEMENTS
  (Chorpita BF & Daleiden EL, J Consult Clin Psych, 2009)
- Brief interview & technology based tools show promise
  (Van Voorhees BW et al, JDBP, 2009)

Review Treatment Options

- Do not leave the adolescent out of the discussion, in fact…it will be best to keep them at the center
- Set expectations for treatment course (up to 12 months ONCE symptoms improve with check in every 6 months, up to 24 months)
- Provide written materials for review after the encounter
- Make sure to review options along with pros and cons

In the GLAD-PC toolkit

- There are a variety of handouts and tools for primary care providers to utilize
- Self-care tools to use with patient
- Depression monitoring flow sheet (clinician)


Self-Care Success!

Things you can do to help yourself

Name: _____ Date: _____

Instructions: When people are depressed they often forget to take care of themselves. By setting self-care goals you can take an active role in helping yourself feel better more quickly. Choose one or two of the areas below and set a goal. Make sure the goal is clear and reasonable. In the space below the boxes rate how likely you are to follow through on the goal(s) you set. If you are not very sure you can follow through on your goal you may want to find alternatives or make some adjustments.

Stay Physically Active

Each week during the next month I will spend at least ____ days doing the following physical activity for _____ minutes.

_____

_____

(Pick a specific date and time and make it reasonable!)

Schedule Pleasant Activities

Even though I may not feel motivated I will commit to scheduling ___fun activities each week for the next month. They are__

_____

_____

(Specify when and with whom.)

Eat Balanced Meals

Even if I don't feel like it, I will eat ____ balanced meals per day to include

_____

_____

_____

(Choose healthy foods.)

Spend Time With People Who Can Support You

During the next month I will spend at least ___ days for at least ___ minutes at a time with

_____ doing _____

_____ doing _____

_____ doing _____

(Who?) (What?)

(e.g. talking, eating, playing)

Spend Time Relaxing

Each week I will spend at least ____ days relaxing for ___ minutes by participating in the following activities: _____

_____

_____

(e.g. reading, writing in a journal, deep breathing, muscle relaxation)

Small Goals & Simple Steps

The problem is:_____

_____

My goal is:_____

_____

Step 1: _____

_____

Step 2: _____

_____

Step 3: _____

_____

How likely are you to follow through with these activities prior to your next visit?

Not Likely 1 2 3 4 5 6 7 8 9 10 Very Likely

What might get in the way of your completing these activities prior to your next visit?

_____

Solution(s) to the above barriers

_____

_____

_____

Moderate to Severe Depression

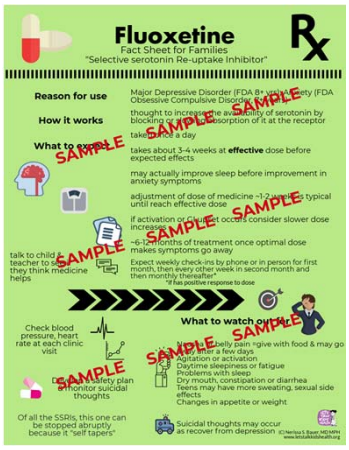
- Consider consultation with mental health specialist (moderate); definitely collaborate if severe to develop treatment plan
- Medication management by primary care physician (PCP) (if comfortable, otherwise refer)
- Every 6-8 weeks continue to layer treatment options (add therapy if only on medication, titrate medication as long as tolerating, reassess diagnosis) and re-review symptoms & suicide risk

Treatment of Adolescent Depression STUDY (TADS)

- 439 adolescents , 12-17 years old, 13 sites, 12 weeks
- Arms: Medication only (Fluoxetine), cognitive behavioral therapy (CBT) only, CBT + fluoxetine, placebo
- Response rates: Fluoxetine alone 62%, CBT alone 48%, combination 73%, placebo 35%
- 18 and 36 weeks follow up: Combination remained high at 85%, 86% response; fluoxetine 69%, 81%
- Suicidal ideation decreased over time much more with combination than medication alone

Medications

- FDA approval in adolescents
  - Fluoxetine
  - Escitalopram
- Evidence-based for MDD in adolescents
  - Fluoxetine, Escitalopram
  - Sertraline, Citalopram (Off-label)



Available at Let's Talk Kids Health

Medication: How do you choose?

- FDA Approval for other disorders
  - Fluoxetine
  - Sertraline
  - Fluvoxamine
- Other considerations
  - Prior treatment history
  - Comorbidity
  - Family member experience/response
  - Family preference
  - Clinician experience

Response Rates in RCTs of Antidepressants Based on Clinical Global Impression

- NS, not significant.
- [a] Fluoxetine alone compared with placebo.
- [b] Paroxetine compared with placebo.

Medication	Drug, %	Placebo, %	*P*
Fluoxetine[45,a]	56	33	.02
Fluoxetine[46]	52	37	.03
Fluoxetine[47]	61	35	.001
Paroxetine[48,b]	66	48	.02
Paroxetine[49]	69	57	NS
Paroxetine[49]	65	46	.005
Citalopram[50]	47	45	NS
Citalopram[51]	51	53	NS
Sertraline[52]	63	53	.05
Escitalopram[53]	63	52	.14
Escitalopram[54]	64	53	.03

Used with permission, from Cheung AH et al, Pediatrics, 2018

Medication Titration

SSRI Titration Schedule

- MAOI, monoamine oxidase inhibitor; qd/od, every day once daily.
- [a] Not recommended to be started in PC.

Medication	Starting Dose (qd/od), mg	Increments, mg	Effective Dose, mg	Maximum Dosage, mg	Contraindicated
Citalopram	10	10	20	60	MAOIs
Fluoxetine	10	10–20	20	60	MAOIs
Fluvoxamine	50	50	150	300	MAOIs
Paroxetine[a]	10	10	20	60	MAOIs
Sertraline	25	12.5–25	50	200	MAOIs
Escitalopram	10	5	10	20	MAOIs

Used with permission, from Cheung AH et al, Pediatrics, 2018

Let's get back to the case

- Started Fluoxetine 10mg daily, reviewed expectations and talked with patient to get buy-in when separated from family
- Scheduled to see therapist for individual and family therapy
- Discussed safety plan with family

SSRI Medication Guidance

- Start with FDA approved 1st line (selective serotonin reuptake inhibitors) SSRI whenever possible (FLUOXETINE)
- Start low (can consider half dose)
  —> tell parents also not to expect dramatic recovery
- Get to therapeutic dose within 2-4 weeks
- Response should be seen within 2-3 weeks on therapeutic dose
  - If NO response, increase
  - If partial, can wait another 4-6 weeks to determine if titration needed

Remember to call Child Psychiatry for help

- At any point provider does not feel comfortable
- If need to change medications, get advice on how to taper, cross-taper
- Side effects: GI usually transient as start or titrate, talk to adolescent alone about sexual side effects
- If MILD effects, consider waiting 2-7 days to see if transient
- Don't rule out stopping medicine for "side effects" that are actually part of depression
- Recurrence is possible especially if dose too low or too short duration
- If moderate effects, decrease or change dosing schedule

Follow-up Visits

- Continue to provide psychoeducation and review expectations for treatment and monitoring
- Celebrate improvements and praise family for collaboration & communication
- Partial response: increase dose
- If no response/continued symptoms:
  - Re-assess diagnosis
  - Change medication + add CBT
  - Consult Psychiatry (Child Psychiatry Access programs/CPAP) http://web.jhu.edu/pedmentalhealth/nncpap_members.html

Common Side Effects of SSRIs

- Dry mouth
- Constipation
- Diarrhea
- Sweating
- Sleep disturbance
- Irritability
- "Disinhibition"
- Headache
- Appetite changes
- Rashes
- Sexual dysfunction

Let's check in with our case

<u>Second follow up visit</u>

- Still no improvement and still very angry
- Had gone on vacation with family but did not want to participate in outings or meals out
- When asked about summer said, good that school is out, but also means he has to see his mother all the time
- Scores still elevated with slight decrease —> increased Fluoxetine to 20mg, continued safety plan and therapy

Medication Non-responders

- TORDIA STUDY: Combination therapy evaluated among adolescents with treatment-resistant depression (no adequate response after adequate trial on 1 SSRI)
- 4 arms: switch to another SSRI, start CBT & switch to another SSRI or venlafaxine, switch to venlafaxine
  - Venlafaxine is an SSNRI (selective serotonin & norepinephrine re-uptake inhibitor)

Brent DA et al, JAMA 2008

A word about black box & medications

- FDA review in 2004 showed most significant side effect while on treatment with SSRI is worsening suicidality
  (Hammad TA et al, Arch Get Psych, 2006)
- Risk of suicidality while on medication 4% compared to 2% without medication; however majority of those treated had improvements in suicidality (particularly on paroxetine & venlafaxine)
  (Emslie G et al, JAACAP, 2006)

Black Box, Continued

- Almost all post-mortem of adolescents who die by suicide do not test positive for antidepressants despite being prescribed (Leon AC et al, JAACAP, 2006)
- NOT treating depression can cause more harm

Evidence-based Psychotherapy Options

- Cognitive Behavioral Therapy (CBT)
- Interpersonal Psychotherapy-Adolescent (IPT-A)

CBT

- Most evidence for adolescent depression (even in pre-pubertal children)
- Helps adolescents connect cognitive thoughts with bodily sensations and expectations
- Behavioral activation (helping them to take steps towards doing an action even if not feeling it)
- Cognitive restructuring (recognizing catastrophic thoughts and reframe)
- Coping skills (what can you do when your body or brain is feeling/saying this)
- Stress management

IPT-A

- Interpersonal problems may affect depressive symptoms and depressive symptoms may worsen interpersonal problems
- Therapist works to identify patient's problem areas, teaches and assists in interpersonal problem solving & communication strategies
- Good evidence for use in setting of mild —>moderate depression
- No evidence for its use in pre-pubertal children

PARENT INVOLVEMENT

- As providers, we should EMPOWER families to know they are always front and center and their involvement with each other and together with medical team is ESSENTIAL
- Parents should feel free to "push back" in non-threatening way to:
  - Ask questions,
  - Clarify treatment expectations, and
  - Ask about monitoring response to treatments

Pharmacogenomics in Adolescent Depression

- Pharmacogenetics tests are available and growing in use
- Systematic review and meta-analysis of prospective, randomized controlled trials (RCTs) examined utility of pharmacogenetic decision support tools and depression symptom remission of MDD
  (Bousman CA et al, Pharmacogenomics, 2018)
- Included 1737 eligible subjects from 5 RCTs
- Those who receive pharmacogenetic decision support were 1.71 times more likely to achieve symptom remission relative to treatment as usual (TAU)
- Another meta-analysis by Rosenblat et al, Journal of Affective Disorders, 2018 included 4 RCTs & 2 open labeled, controlled cohort studies: again in favor of guided treatment (1.36 times)

Pharmacogenetics

- Decision to use ultimately up to clinician & family
- May be helpful for treatment-hesitant families or who tried medication and failed
- Report will NOT TELL YOU WHICH DRUG TO USE
- Certain populations may request, especially have ability to pay out of pocket ($325 max out of pocket)
- However, recent changes in how reports are provided may limit utility for now

Case Conclusion: Third visit—seeing a light

- At the third visit, the patient walked in with a smile, was jovial and talkative
- Talked openly about his feelings and mood, talked about how he just "all of a sudden felt better and was no longer angry"
- Asked whether he could stop taking the medicine but when reminded about the planned 12-month treatment course, he said, "Well, it is helping me feel better, so why not?"
- Continued work connecting with family/peers, re-starting soccer and getting educational supports in place, nurturing parent-child relationship and continuing to support patient coping strategies

Management of adolescent depression is feasible in primary care

- Remember to review clinical care guidelines part 1 & 2
- Download the free GLAD-PC Toolkit for resources
- If you need additional help, check out:
  - AAP STAR Center
  - AAP Implementing Mental Health Priorities in Practice videos (one specifically for depression, another for self-harm and suicide)

    https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Pages/implementing_mental_health_priorities_in_practice.aspx