Maryland Behavioral Health Integration in Pediatric Primary Care (MD BHIPP)

Diagnosing and Managing Seasonal Depression in Primary Care

BHIPP Resilience Break
January 20th, 2022, 12:30 PM

Alden Littlewood, MD
Assistant Professor of Psychiatry
University of Maryland School of Medicine

Kelly Coble, LCSW-C
Program Director, MD BHIPP

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

1-855-MD-BHIPP (632-4477)

www.mdbhipp.org

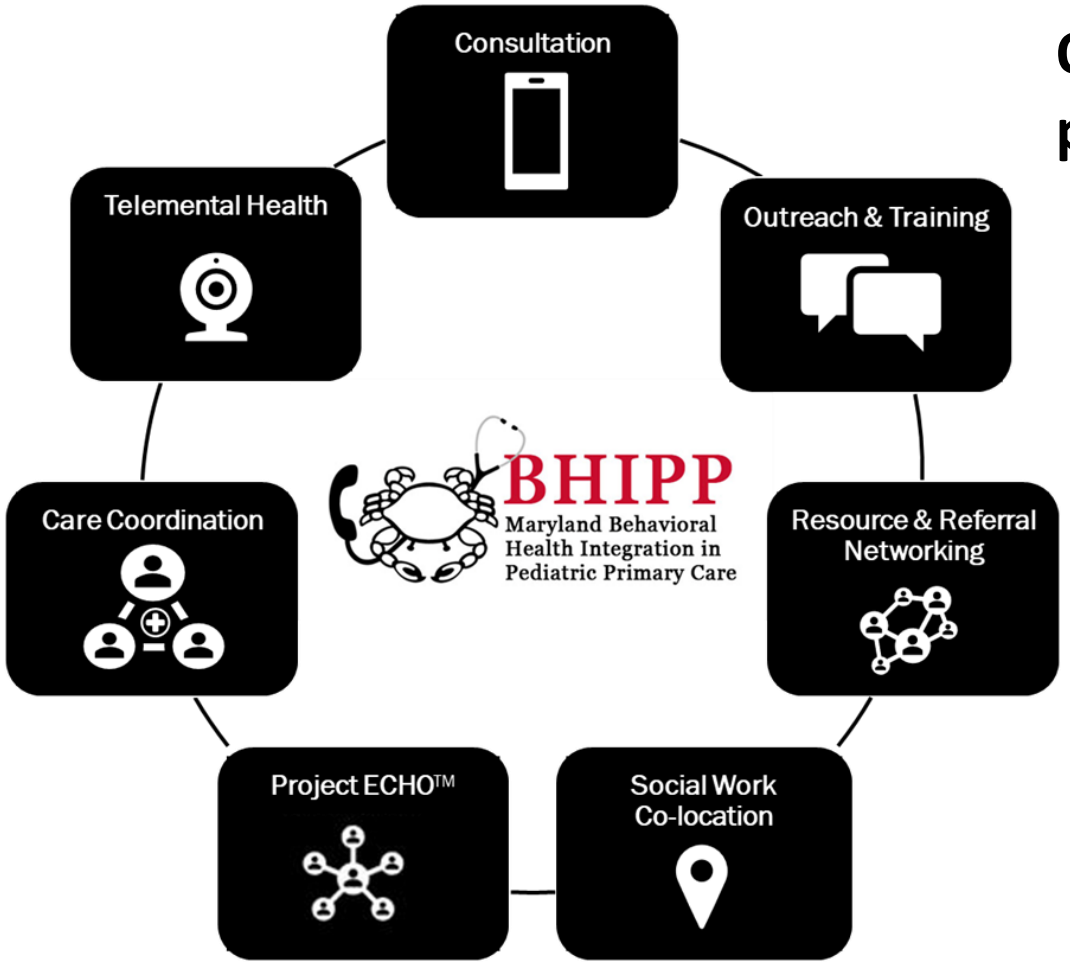
Follow us on Facebook, LinkedIn, and Twitter! @MDBHIPP

Conflicts and Off-Label Prescribing

- No Conflicts of Interest
- Some Off-Label Prescribing May be Discussed

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Who We Are – Maryland BHIPP



Offering support to pediatric primary care providers through free:

- Telephone consultation (855-MD-BHIPP)
- Resource & referral support
- Training & education
- Regionally specific social work co-location (Salisbury University and Morgan State University)
- Project ECHO®
- Direct Telepsychiatry & Telecounseling Services
- Care coordination

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Partners & Funding

- BHIPP is supported by funding from the **Maryland Department of Health, Behavioral Health Administration** and operates as a collaboration between the **University of Maryland School of Medicine**, the **Johns Hopkins University School of Medicine**, **Salisbury University** and **Morgan State University**.

- *This program is supported by the **Health Resources and Services Administration (HRSA)** of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $433,296 with approximately 20% financed by non-governmental sources. The contents of this presentation are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government. For more information, visit www.hrsa.gov.*

UNIVERSITY of MARYLAND SCHOOL OF MEDICINE

JOHNS HOPKINS SCHOOL of MEDICINE

Salisbury UNIVERSITY

MORGAN STATE UNIVERSITY
GROWING THE FUTURE LEADING THE WORLD

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Learning Objectives

Participants will be able to:

- Understand how to screen and diagnose depression in pediatric primary care
- Differentiate between Seasonal Affective Disorder vs. MDD vs. situational depression
- Understand basic principles of non-pharmacologic therapy for depression, including the seasonal subtype, in children and adolescents
- Understand how to implement and monitor medications to treat depression in children and adolescents

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Outline

- **What is SAD/Seasonal Depression?**
- Clinical Assessment/Diagnosis
- Treatment Overview
  - Nonpharmacological
  - Pharmacological

Case Example: December 2021

- 15 year old female BIB parent, “not herself” for the past month
- Refusing family dinner and sports practice
- Isolating to room
- Failed 2 tests, low motivation
- Irritable
- Difficulty sleeping
- “Something similar” happened last year but went away

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Major Depressive Disorder

- 5+ symptoms, 2+ weeks:
  - Depressed/irritable mood*
  - Markedly diminished interest or pleasure*
  - Appetite or weight change
  - Insomnia or hypersomnia
  - Psychomotor retardation or agitation (observable by others)
  - Fatigue or energy drop
  - Worthlessness or excessive/inappropriate guilt
  - Impaired concentration, indecision
  - Recurrent thoughts of death, suicidal ideation, suicide attempt
- Distress or functional impairment
- Not due to substance use or another medical condition

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Seasonal Affective Disorder

Depressive OR bipolar spectrum disorder **with seasonal pattern**

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Major Depressive Disorder, Recurrent, with Seasonal Pattern

- Pattern of depressive episodes occurring during a particular time of year
  - Doesn't count if mood change is due to a different seasonally-related stressor (eg. School schedule)
- Full remissions also occur at a characteristic time of year
- For past 2 years, 2+ seasonal episodes, no non-seasonal episodes
- Lifetime: seasonal mood episodes >>> non-seasonal ones

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Major Depressive Disorder, Recurrent, with Seasonal Pattern

- Typically, episodes start in fall/winter, remit in the spring
  - Decreased light, effects on circadian rhythm
- Spring/summer recurrence pattern possible too (less common)
- Sleep and appetite: strongest seasonal pattern (Lukmanji et al 2020)

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Epidemiology of Seasonal Depression

- Affects between 1.7% and 5.5% of children (Glod et. Al 1997)
- Childhood prevalence increases with age (Swedo et. Al 1997)
- More symptoms seen in northern latitudes (Carskadon and Acedo 1993)
- More common in females than males (Childmind)

- MDD generally more common after puberty

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Demoralization, situational depression

Understandable reaction to troubling circumstances

Diminished interest or pleasure is not present

Useful concept for most preteens with low mood/irritability

Not a DSM-5 diagnosis, but is an ICD-10 diagnosis

Explanation for placebo response of 50% in depression studies?

Think COVID-19 pandemic (and low motivation)

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Winter Blues

- Less severe form of seasonal mood change
- Look for:
  - Decreased energy, increased appetite, low enthusiasm, low productivity
  - NO severely depressed mood, NO loss of interest/pleasure

(Targum and Rosenthal 2008)

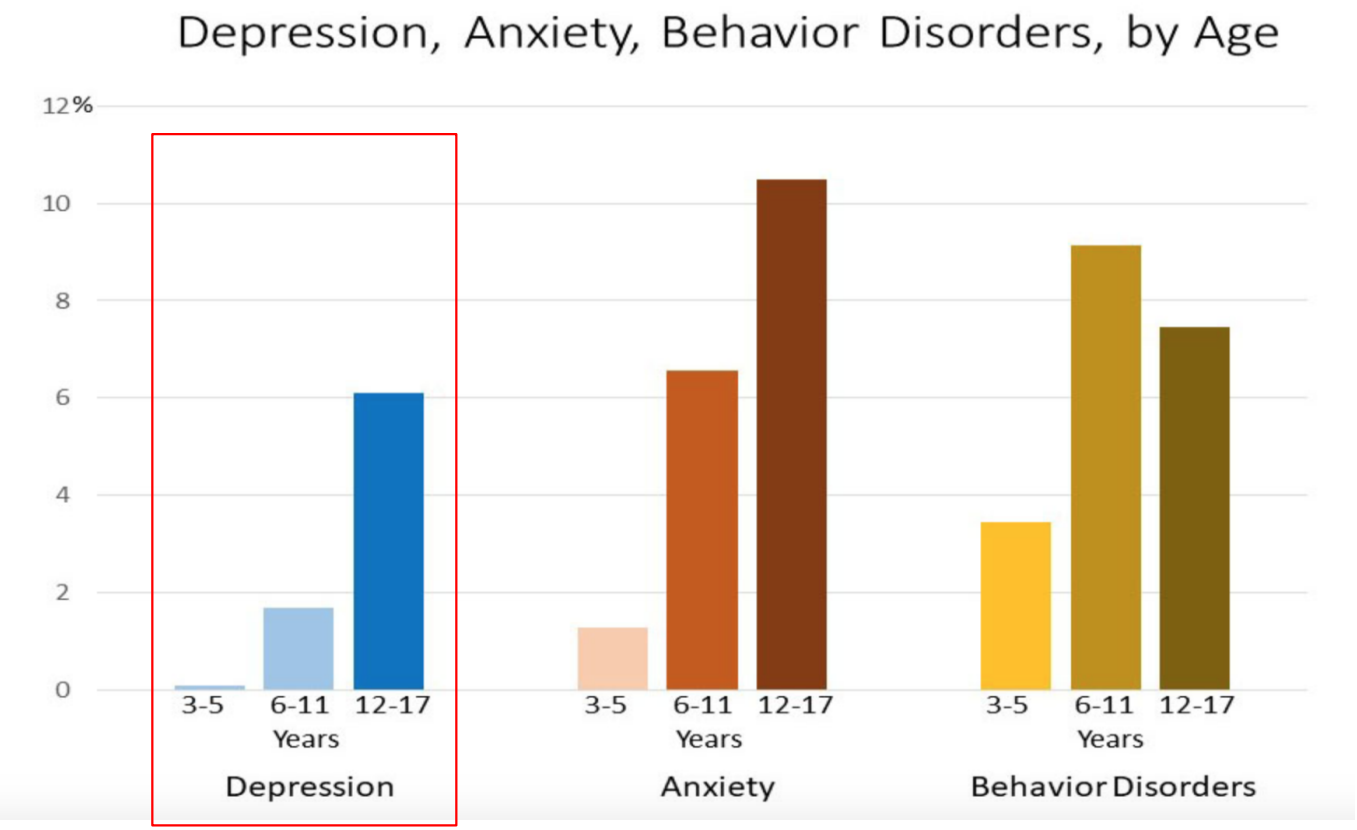
- Not a DSM diagnosis

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Outline

- What is SAD/Seasonal Depression?
- **Clinical Assessment/Diagnosis**
- Treatment Overview
  - Nonpharmacological
  - Pharmacological

Screening for Depression – When to start?



- Begin at age 12
- USPTF and GLAD-PC recommend **annual** universal depression screening among adolescents, 12-18
- High prevalence of depression by age 20 – 20%

Siu, AL., Screening for Depression in Children and Adolescents: US Preventative Services Task Force Recommendation Statement. (2016). *Pediatrics. 137(3): e20154467.*

Zuckerbrot RA, Cheung A, Jensen PS, et al. (2018). Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part I. Practice Preparation, Identification, Assessment, and Initial Management. *Pediatrics.* 141(3):e20174081

BHIPP Maryland Behavioral Health Integration in Pediatric Primary Care

Screening for Depression – What to use?

- PHQ-9: Patient Health Questionnaire 9 Depression Screening Tool: http://www.pedpsychiatry.org/pdf/depression/PHQ-9%20Modified%20for%20Teens.pdf

- CES-DC: The Center for Epidemiological Studies Depression Scale for Children: https://www.brightfutures.org/mentalhealth/pdf/professionals/bridges/ces_dc.pdf

DEPRESSION Screening Tools: PHQ-9: Modified for Teens

- For ages 11-17
- Past two weeks
- 13 Items, self-report (from DSM)
- Scored--0, 1, 2, 3-- based on days per week symptoms occur
- Evidence that tool has good sensitivity and specificity
- Past year (persistent depressive disorder)
- Function: work (school), home, relationships
- Suicidal thoughts past month; Suicide attempt ever

DEPRESSION Screening Tools: Scoring the PHQ-9

PHQ-9 Adolescent Report

For Youth at least 11 years old to complete

Name:_____ Date of Birth:_____ Today's Date:_____

*How often have you been bothered by each of the following symptoms during **the past 2 weeks**. For each symptom, put an "**X**" in the box beneath the answer that bests 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?	0	1	2	3
2	Little interest or pleasure in doing things?	0	1	2	3
3	Trouble falling asleep, staying asleep, or sleeping too much?	0	1	2	3
4	Poor appetite, weight loss, or over-eating?	0	1	2	3
5	Feeling tired, or having little energy?	0	1	2	3
6	Feeling bad about yourself - or feeling that you are a failure, or that you have let yourself or your family down?	0	1	2	3
7	Trouble concentrating on things like school work, reading, or watching TV?	0	1	2	3
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?	0	1	2	3
9	Thoughts that you would be better off dead, or of hurting yourself in some way?	0	1	2	3
10	In the **past year**, have you felt depressed or sad most days, even if you felt okay sometimes? [ ] Yes [ ] No				
11	If you are experiencing any of the problems on this form, **how difficult** have these problems made it for you to do work, take care of things at home, or get along with other people? [ ] Not difficult at all [ ] Somewhat difficult [ ] Very Difficult [ ] Extremely Difficult				
12	Has there been a time in the **past month** when you have had serious thoughts about ending your life? [ ] Yes [ ] No				
13	Have you **EVER**, in your WHOLE LIFE, tried to kill yourself or made a suicide attempt? [ ] Yes [ ] No				

Total Score	Depression Severity
• 0 – 4	No or minimal
• 5 – 9	Mild
• ----------	
• 10 – 14	Moderate
• 15 – 19	Moderately severe
• 20 – 27	Severe

Salisbury UNIVERSITY

BHIPP Maryland Behavioral Health Integration in Pediatric Primary Care

DEPRESSION Screening Tools: CES-DC

- For ages 8-17
- 20-item self-report form
- Focus on past week
- Scored:
  - 0 = Not at all
  - 1 = A little
  - 2 = some
  - 3 = a lot
- Scores range from 0-60
- >=15 significant levels of depressive symptoms

DURING THE PAST WEEK	Not At All	A Little	Some	A Lot
1. I was bothered by things that usually don't bother me.	____	____	____	____
2. I did not feel like eating, I wasn't very hungry.	____	____	____	____
3. I wasn't able to feel happy, even when my family or friends tried to help me feel better.	____	____	____	____
4. I felt like I was just as good as other kids.	____	____	____	____
5. I felt like I couldn't pay attention to what I was doing.	____	____	____	____

DURING THE PAST WEEK	Not At All	A Little	Some	A Lot
6. I felt down and unhappy.	____	____	____	____
7. I felt like I was too tired to do things.	____	____	____	____
8. I felt like something good was going to happen.	____	____	____	____
9. I felt like things I did before didn't work out right.	____	____	____	____
10. I felt scared.	____	____	____	____

DURING THE PAST WEEK	Not At All	A Little	Some	A Lot
11. I didn't sleep as well as I usually sleep.	____	____	____	____
12. I was happy.	____	____	____	____
13. I was more quiet than usual.	____	____	____	____
14. I felt lonely, like I didn't have any friends.	____	____	____	____
15. I felt like kids I know were not friendly or that they didn't want to be with me.	____	____	____	____

DURING THE PAST WEEK	Not At All	A Little	Some	A Lot
16. I had a good time.	____	____	____	____
17. I felt like crying.	____	____	____	____
18. I felt sad.	____	____	____	____
19. I felt people didn't like me.	____	____	____	____
20. It was hard to get started doing things.	____	____	____	____

DEPRESSION Screening Tools: Preschool Feelings Checklist

- For ages 3-6
- 16-item parent report form
- Score by summing all items answered with yes
- >=3 indicates need for more mental health evaluation

MY CHILD:		
Is almost always interested in playing with other kids.	Y	N
Frequently appears sad or says he/she feels sad.	Y	N
Has a lot of trouble following simple directions or rules.	Y	N
Seems not to be as excited about play or activities as much as other kids.	Y	N
Whines or cries a lot.	Y	N
Can't pay attention to games or tasks for very long.	Y	N
Keeps to him/herself.	Y	N
Pretend plays about scary or sad things.	Y	N
Blames him/herself for things.	Y	N
Seems to lack confidence.	Y	N
Doesn't react to things that other children his/her age find exciting or upsetting.	Y	N
Often seems to be very tired and has low energy.	Y	N
Seems to feel overly guilty.	Y	N
Failed to gain weight or has lost weight (without being on a diet).	Y	N
Used to behave his/her age but now seems to act younger (for example, used to be potty trained but now soiling clothes).	Y	N
Seems more irritable or grouchy than other children his/her age.	Y	N

Seasonal Depression: What to ask?

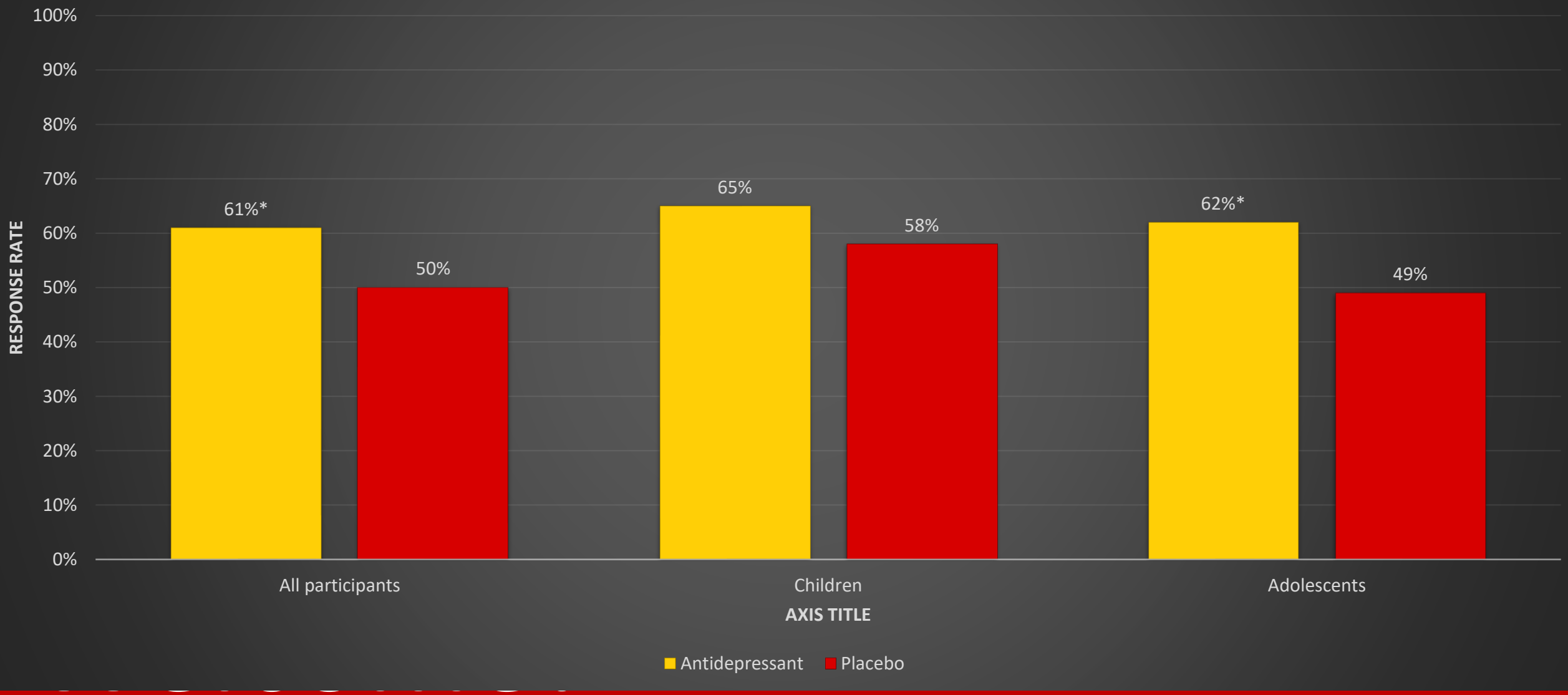
- In the Winter, do you…
  - Feel worse (more sad) ?
  - Eat more?
  - Gain weight?
  - Sleep more?
  - Have less energy?
  - Socialize less with others?
  - Feel better on sunnier days?

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Outline

- What is SAD/Seasonal Depression?
- Clinical Assessment/Diagnosis
- **Treatment Overview**
  - Nonpharmacological
  - Pharmacological

JAMA Meta-Analysis of Pediatric Antidepressant Response



Bridge, J. A., Iyengar, S., Salary, C. B., Barbe, R. P., Birmaher, B., Pincus, H. A., ... & Brent, D. A. (2007). Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment: a meta-analysis of randomized controlled trials. *Jama*, *297*(15), 1683-1696.

The point is:

Just do something!

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Non-Pharmacological Management

- Active Monitoring
- Sleep improvement
- Exercise
- Bright Light Therapy, Dawn Simulation?
- Psychotherapy

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Seasonal Depression: Prevention tips

- Routines: keep consistent!
- Make time for healthy habits
- Keep expectations realistic
- Team effort!

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Guidelines for Adolescent Depression in Primary Care (GLAD-PC)

1) Organize clinical settings to include integrated or collaborative care models
2) For mild depression, PCP should consider active support & monitoring first (6 – 8 weeks)
3) For moderate - severe depression or presence of comorbidities, consultation w/ mental health specialist recommended
   - Moderate: consider treatment in or outside of primary care
   - Severe: consider referral to specialist for treatment
4) When treatment needed, recommend EBTs

Psychosocial Treatments for Depression – Active Monitoring

Active Monitoring (mild to moderate depression):

- Frequent visits w/ PCP
- Phone follow-up in between visits
- Provide educational materials to youth and families
- Prescribe:
  - Behavioral Activation - Exercise and fun activities
  - Peer support group

Probably sufficient for many w/ mild depression

Sleep

- Sleep disturbances can have a seasonal pattern
- There is a ***simple brief psychotherapy (CBT)* for insomnia** in adults; it has been adapted for use in adolescents
- ***Sleep hygiene counseling*** works but requires persistence!
  - *Scheduled regular awakening*
  - Daytime sleep restriction (no naps) and caffeine restriction
  - Bedtime stimulus control (lights, electronics, music, etc.)
- Melatonin, a sedative at higher doses, is a popular sleep aid, but……

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Sleep: Melatonin

- Pineal gland hormone regulates 24-hour sleep-wake cycle and other circadian rhythms
- Peak levels during night
- Daytime dose in young adults of 0.1-0.3 mg increased plasma melatonin to normal night range
- Melatonin has **sedative** effect at higher doses
- Adult data: sleep onset about 30 minutes earlier; this effect wears off in about 4 weeks
- OTC melatonin preparations range from 1 to 10 mg
- In a study of 31 melatonin preparations, melatonin varied from -83% to + 478% of labeled content
- *USP verified* preps are accurate, but cost more and only available in 3 and 5 mgs dosages

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Sleep: Melatonin and Children

- Used by lots of parents with or without recommendation of PCP
- Best efficacy data for autism, some for ADHD
- "Data supporting use of melatonin in developmentally normal children are limited and its long-term safety is unknown." (*Medical Letter*, June 29, 2020)
- Long-term melatonin supplementation can suppress the hypothalamic-gonadal axis and may be associated with delayed onset of puberty, possibly by preventing the decline in nocturnal levels of melatonin that occur during the onset of puberty
- Melatonin may be the most benign sedative for sleep onset, with above caveats, although no meds preferred, if possible

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Exercise

- Exercise is associated with improvement in depression
- It is not easy to get someone who is depressed to exercise
- Type of exercise probably doesn't matter
- Encourage participation in whatever the patient prefers

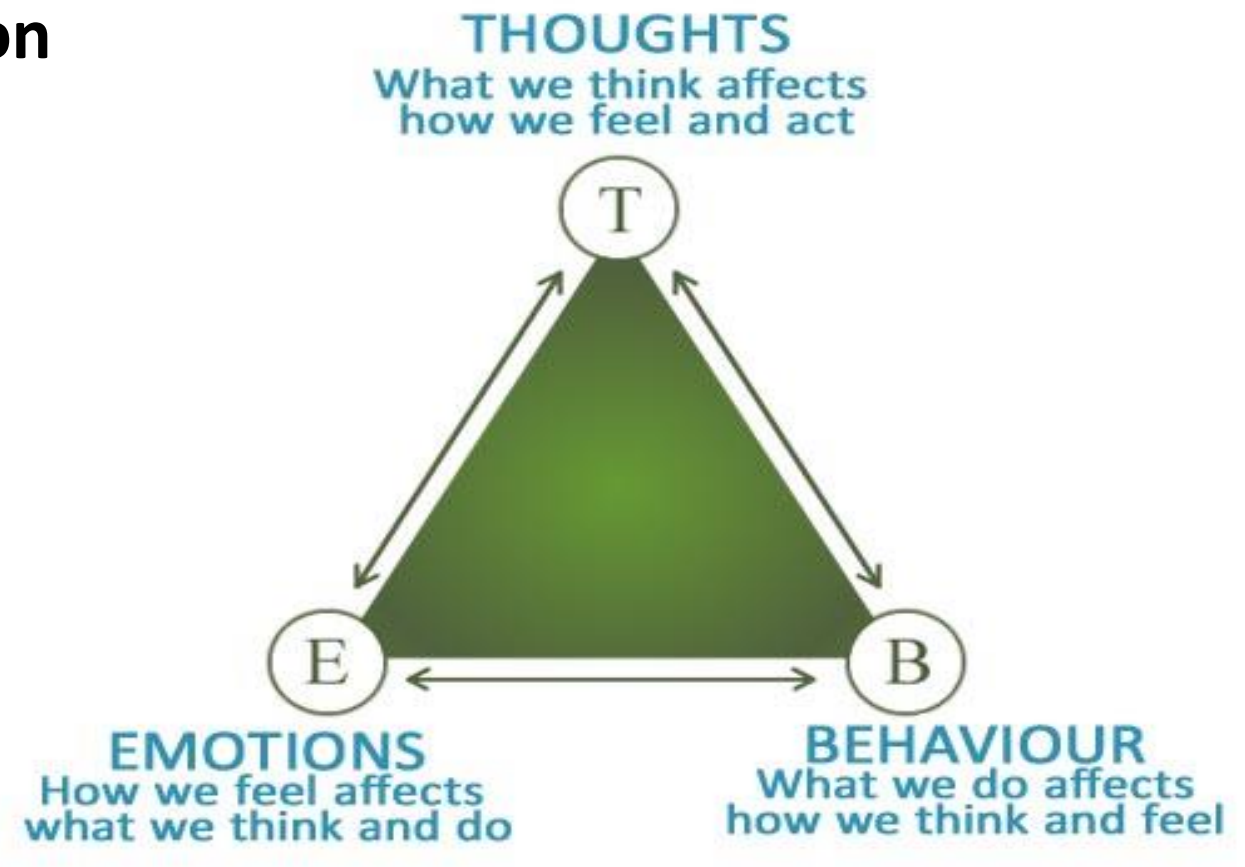
Light therapy, Dawn Simulation

- Adults:
  - Fluorescent light box, 10,000 lux of white light (Schwartz and Olds 2015)
    - For reference, sunny outdoor day = 50,000-100,000. Indoor light (even near a window) </=2500 lux
  - Recommended distance from face varies by device
  - Start 30 minutes exposure daily, early morning, as close to awakening as possible
- Children: limited data
  - May help modestly, more in seasonal depression than non-seasonal?
  - Time commitment may be prohibitive
  - Well tolerated*
  - Dawn simulation may help morning awakening (Fromm et al 2011)

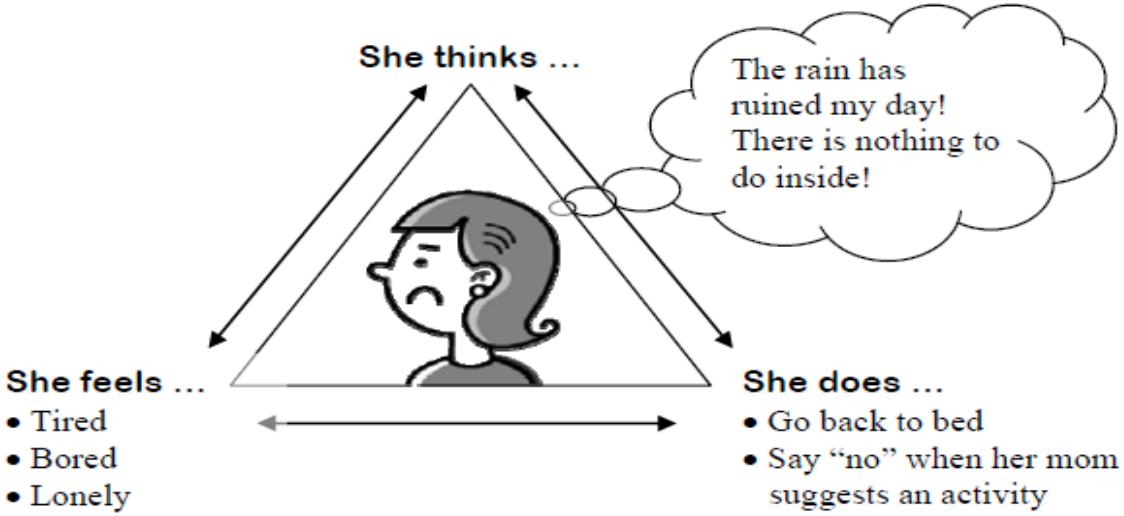
BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

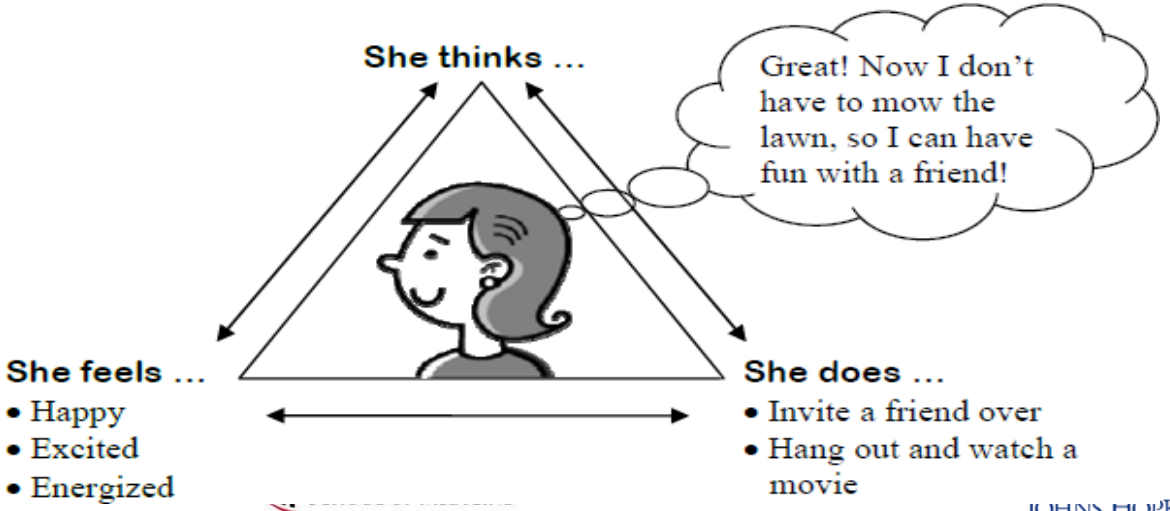
CBT for Depression Components

- **Psychoeducation about depression**
- Mood monitoring
- **Behavioral activation**
- Problem-solving skills
- Cognitive Restructuring
- Social Skills training
- **Relaxation ~ as appropriate**
- Homework Assignments



Psychoeducation on Depression Continued –Cognitive Triangle





What Do YOU Think, Feel, and Do?

What about YOU? Think of a time recently when you got stuck in a bad mood. What did you THINK, FEEL, and DO? If you had different thoughts or took different actions, would you have felt differently?

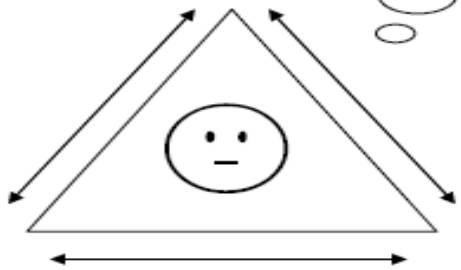
What was happening?

_____
_____
_____

What could you have thought instead?

_____
_____

You thought …



You felt …

_____
_____
_____

How might you have felt instead?

_____
_____
_____

You did …

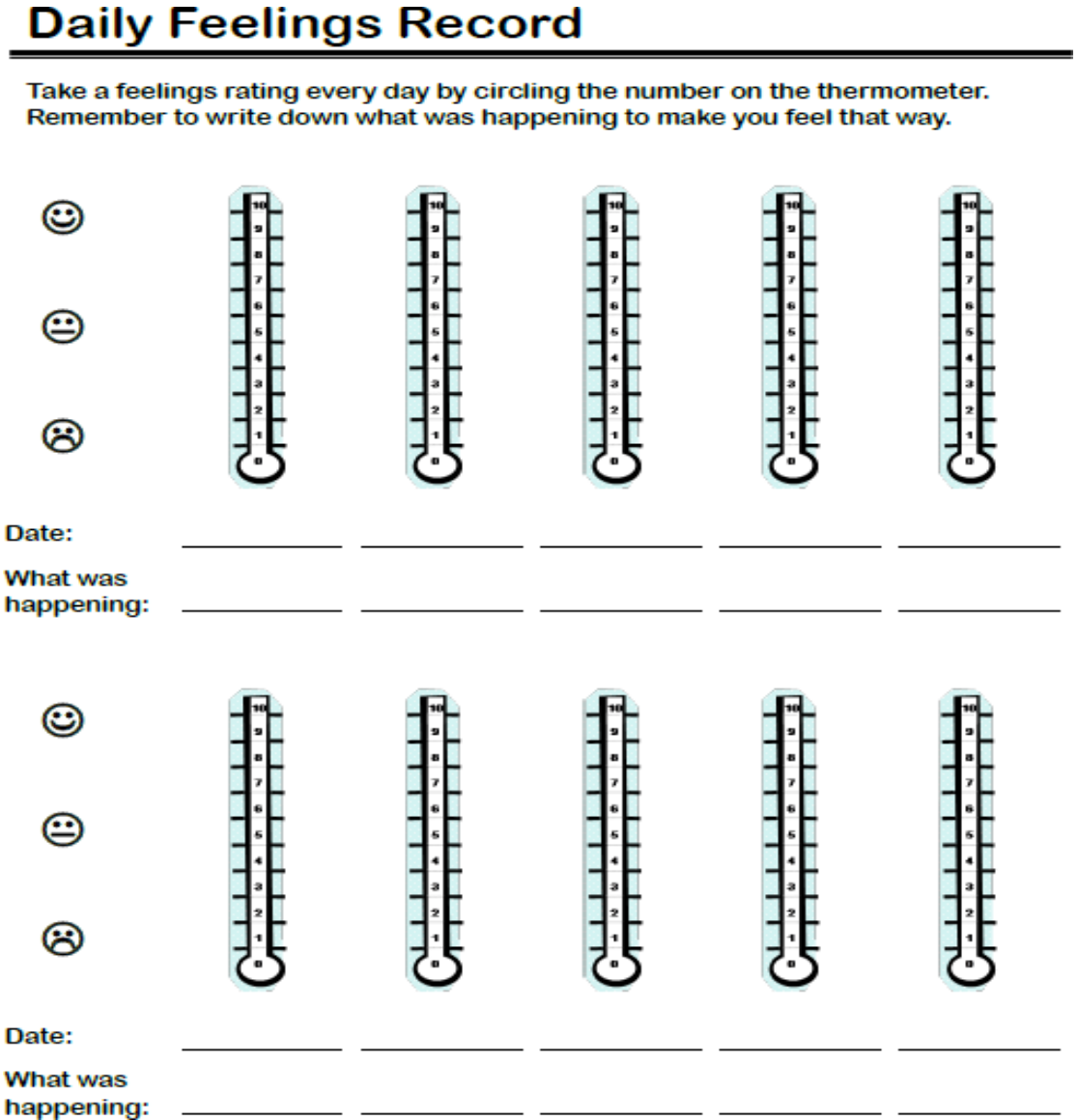
_____
_____
_____

What could you have done instead?

_____
_____
_____

CBT for Depression Components – Mood Monitoring

- Mood monitoring = paying attention to how we feel so we can learn what situations lead to feeling more or less depressed and identify thoughts connected with those situations and feelings
- Ask youth about specific times when:
  - Felt bad and get details about situations – what happened, what were they thinking about, how were they feeling
  - Felt good or happy and get details about those situations
- Practice ratings together in session, then encourage daily tracking/rating at home
- Review mood tracking at each session



CBT for Depression Components – Behavioral Activation

Engaging in activities improves mood

4 types of activities improve mood:

- youth enjoyed it before
- w/ someone they enjoy spending time with
- that keep youth busy
- that help someone else

Help patient:

- Generate a list of pleasant activities
- Schedule time for these activities during the week

Day and Plan 	How I Felt Before (0-10) 	Activity I Did 	How I Felt After (0-10) 
EXAMPLE **SATURDAY:** Play soccer with my friend after lunch	5	Played soccer with my friend after lunch	8
SUNDAY:			
MONDAY:			
TUESDAY:			
WEDNESDAY:			
THURSDAY:			
FRIDAY:			
SATURDAY:			

CBT for Depression Components – Problem-Solving Skills

- Solving problems can improve mood while not solving them contributes to low mood

Say what the problem is.

Think of possible solutions. (Try to think of several here. Don't worry yet whether they are "good" or "bad" solutions.)

Examine each possible solution, looking at the good and bad aspects of each one.

Pick one solution to try out.

See if it worked. If it worked, great! If it did not work, then go back to your list of solutions and try another one.

UNIVERSITY of MARYLAND SCHOOL OF MEDICINE

JOHNS HOPKINS SCHOOL of MEDICINE

CBT for Depression Components – Cognitive Restructuring

- Identify and change automatic negative thoughts to more realistic thoughts by asking:
  - What's the evidence?
  - Is there another way to look at the situation?
  - What would you tell a friend who had that thought?
  - If it is true, would that really be so bad?

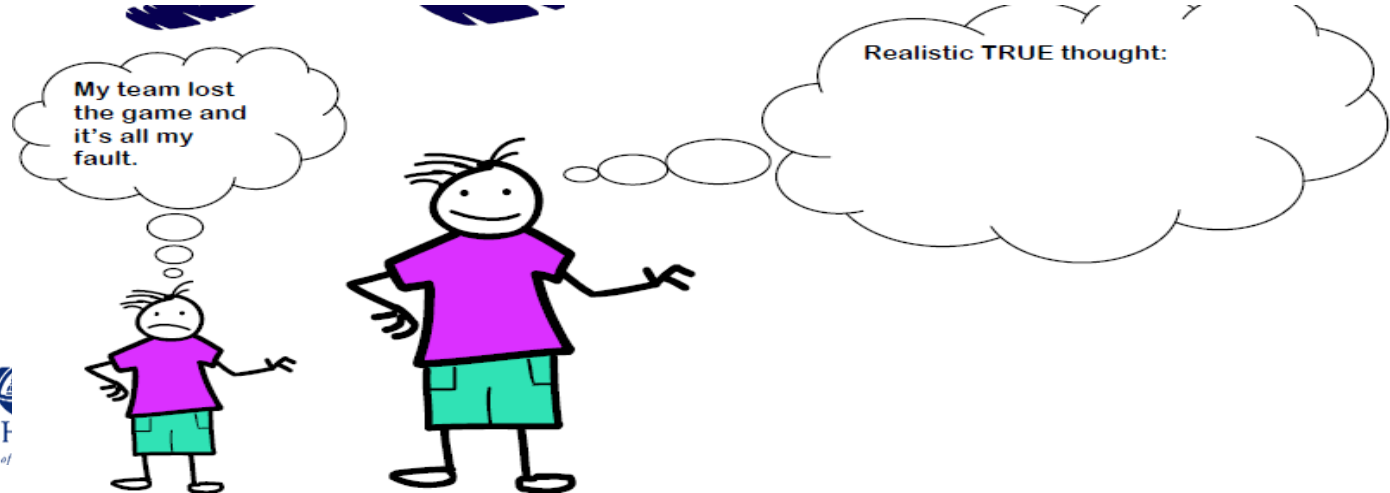
B-L-U-E thoughts are thoughts that are too negative to be true. B-L-U-E thoughts make us feel bad.

B laming myself

L ooking for bad news

U nhappy guessing

E xaggerating



UNIVERSITY of MARYLAND SCHOOL OF MEDICINE

JOHNS H SCHOOL of

Examples of negative/unhelpful thoughts

- It’s all my fault that we lost the soccer game”
- “I got 2 answers wrong on my test. This day is ruined”
- “I’m definitely going to fail the test”
- “No one is going to come to my birthday party”
- “I’m not allowed to see my friends because of COVID – my life is horrible”
- “I’ll never be as good as my sister at math”
- “My parents are fighting and its all my fault”

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Umm…what about the meds?!

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

SSRI'S

Generic	Brand Name
Fluoxetine (MDD 8+; OCD 6+)	**Prozac**
Escitalopram (MDD 12+)	**Lexapro**
Sertraline (OCD 7+)	**Zoloft**
Fluvoxamine (sigma1)	Rarely used in USA
Citalopram	*Less safe than Lexa*
Paroxetine	*Nonlinear kinetics*

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

SSRI Differences

Escitalopram (Lexapro)

- *No major isoenzyme interactions*
- *Generic scored 10 & 20 mg tablets (only one prescription for dose range)*
- *Least activating (better for sleep)*

Sertraline (Zoloft)

- *Moderate inhibitor of CYP450 2D6, 2B6*
- *Wider dosing range (max is 200 mg/day)*

Fluoxetine (Prozac)

- *Very long half-life*
- Strong inhibitor of CYP450 2D6
- Most activating

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

General Principles

START LOW, GO SLOW…….BUT not too slow…….

Antidepressant effect size* (for comparison, stimulants for ADHD = 1.0)

- 0.7 for anxiety
- 0.2 for depression (2/2 high placebo response rate)

Side effects generally minimal and *reversible* if SSRI discontinued

4-8 weeks to reach therapeutic dose and maximum benefit

Screening lab: TSH

*Locher C et al, JAMA Psychiatry, 74: 1011-1020; 2017

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Doses (mg)

Agent	Start Adult—Teen--Child	Maximum Adult	Increments Adult-Teen-Child
Sertraline	50 25-50 ≤25	200	50 25-50 ≤25
Fluoxetine	20 10 5	20*	20 10 5
Escitalopram	10 5-10 5	20**	10 5-10 5

* 60 mg/day for bulimia nervosa

** 10 mg/day for adults with GAD

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

SSRI Dose Equivalencies

- Fluoxetine 20 mg
- Escitalopram 10 mg
- Sertraline 50 mg*

*Least valid or the 3 equivalencies; much larger range of values across studies.

NOTE: Adult data; increases to fluoxetine 40 mg equivalent can increase response, higher dose yields only more side effects

Furukawa TA et al. Optimal dose of selective serotonin…..*Lancet Psychiatry*: 6, 601-609, 2019.

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Reversible Side Effects of SSRIs

None (most common)

GI discomfort, nausea

Behavioral activation……suicidality (1 per 100)
- more common in younger children
- agitation, restlessness, insomnia, impulsivity
- behavioral disinhibition

Sexual
- diminished libido
- delayed orgasm or anorgasmia
- erectile dysfunction

Pregnancy

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Serotonin syndrome*

GI: nausea, vomiting, diarrhea

Mental Status: agitation, delirium, hallucinations, coma

Autonomic Instability: tachycardia, labile blood pressure, diaphoresis, hyperthermia, flushing, dizziness

Neuromuscular: tremor, hyperreflexia, rigidity, myoclonus, incoordination

*5HTP supplements and tryptans for migraines common causative agents

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Discontinuation Syndrome

- Flu-like symptoms
- GI symptoms – nausea, vomiting, diarrhea
- ----------
- Dizziness, vertigo
- Tingling/numbness
- ----------
- Sleep disruption
- Anxiety, agitation
- Irritability, low mood

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Other “Antidepressants”

• Duloxetine (Cymbalta)	SNRI	FDA indication for C&A GAD, milder sexual AEs
• Bupropion (Wellbutrin)	similar to amphetamine, no serotonin effect, seizures	
• Venlafaxine (Effexor)	SNRI	more side effects than duloxetine
• Mirtazapine (Remeron)	serotonergic; sedating and appetite inducing	
• Lamotrigine (Lamictal)	rare fatal rash; used for bipolar depression	

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Medication Monitoring

- Assess clinical response at 4-week intervals
- If minimal or no response at 8 weeks (at therapeutic dose), may need alternative treatment
- Goal should be remission at 12 weeks
- FDA recommendation:
  - See every week for the first 4 weeks, biweekly thereafter
    - Telephone if not in person
    - HOWEVER: no data about impact on suicide risk

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Sources

- https://childmind.org/article/seasonal-affective-disorder/
- Swedo, S., Allen, A., Glod, C., Clark, C., Teicher, M., Richter, D., Hoffman, C., Hamburger, S., & Dow, S. (1997). A controlled trial of light therapy for the treatment of pediatric seasonal affective disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*(6), 816–821. https://doi.org/10.1097/00004583-199706000-00019
- Nillni, Y. I., Rohan, K. J., Rettew, D., & Achenbach, T. M. (2009). Seasonal trends in depressive problems among United States children and adolescents: A representative population survey. *Psychiatry Research*, *170*(2-3), 224–228. https://doi.org/10.1016/j.psychres.2008.07.011
- Glod, C. A., Teicher, M. H., Polcari, A., McGreenery, C. E., & Ito, T. (1997). Circadian rest-activity disturbances in children with seasonal affective disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*(2), 188–195. https://doi.org/10.1097/00004583-199702000-00009
- Carskadon, M.A. , & Acebo, C. (1993). Parental reports of seasonal mood and behavior changes in children. Journal of the American Academy of Cbild & Adolescent Psychiatry, 32, 264-269.
- Swedo, S.E. , Pleeter, J.D. , Richter, D.M. , Hoffman, C.L. , Allen, Aj. , Hamburger, S.D. , Turner, E.H. , Yamada, E.M. , & Rosenthal, N.E. (1995). Rates of seasonal affective disorder in children and adolescents. American Journal of Psychiatry, 152, 1016-1019.
- Sonis WA, Yellin AM, Garfinkel BD, Hoberman HH. The antidepressant effect of light in seasonal affective disorder of childhood and adolescence. *Psychopharmacol Bull* 1987; 23: 360-363.
- Schwartz, R. S., & Olds, J. (2015). The Psychiatry of Light. *Harvard Review of Psychiatry*, *23*(3), 188–194. https://doi.org/10.1097/hrp.0000000000000078

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care

Thank you!

Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP)

1-855-MD-BHIPP (632-4477)
www.mdbhipp.org
Follow us on Facebook, LinkedIn, and Twitter! @MDBHIPP

For resources related to the COVID-19 pandemic,
please visit us at BHIPP Covid-19 Resources.

BHIPP
Maryland Behavioral Health Integration in Pediatric Primary Care