PSYCHOPHARMACOLOGY

Psychopharmacology and Mood Disorders

PRESENTERS:
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MODULE 4

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Downloadable Tools

To access the downloadable tools, go to: Psychopharmacology's Resources and Tools

1. Mental Health Screening and Assessment Tools for Primary Care
2. SCARED Screening Tool
3. Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS)
4. Self Awareness and Monitoring Teaching and Increasing Flexibility
5. Behavioral Activation Model
6. Article_ABA and Mood Disorders
7. Article summary - ABA and Psychological and Emotional Disorders
8. Article Summary_Irritability
9. Activity Ideas Chart Mood Disorders
10. Activity Rating Chart Mood Disorders
11. Weekly Activity Schedule Mood Disorders
12. CDI2-6-2-21
13. MASC2-6-2-21

Subject Matter Expert
Ronald T. Brown, PhD, ABPP

Professor and Dean
School of Allied Health Sciences
University of Nevada

Dr. Ronald Brown, a noted expert on the topic of ADHD has served as the Associate Vice Chancellor for Academic (Health Affairs) at the University of North Texas System.

Dr. Brown completed his Ph.D. from Georgia State University and has been the past President of the Society of Pediatric Psychology and the Association of Psychologists of Academic Health Centers.

He is a board-certified clinical health psychologist and has been an active clinician, teacher, advocate and investigator. He served as a member of the Behavioral Medicine study section of the NIH and chaired several special panels at NIH. He currently serves as the Editor of Professional Psychology: Research and Practice.

Dr. Ronald Brown's area of specialization includes behavioral sciences, pediatric psychology, attention deficit disorders, neuropsychology, psychopharmacology, learning disabilities and psychosocial oncology.

Subject Matter Expert

Deborah P. Coehlo, PhD, C-PNP, PMHS, CFLE

Founder and Director
Juniper Pediatrics

Dr. Debbie Coehlo is a certified Pediatric Nurse Practitioner and Pediatric Mental Health Specialist with a Doctoral Degree in Family Sciences and Human Development. She is the Founder and Director of Juniper Pediatrics, a clinic modeled after John F Kennedy's multidisciplinary system of care. Using a holistic, integrated care model, Juniper provides counseling, medication management and family therapy for children with ASD, ADHD and other childhood mental health disorders.

Dr. Coehlo completed her Master's in Nursing with a specialty in parent- child nursing. She spent 10 years working at the Child Development Center at the University of Washington in the Genetics Clinic and Multidisciplinary Clinic. In 1999, she complete her Doctorate degree in Human Development and Family Studies.

She continues to teach at the undergraduate and graduate level and had pursued research in the area of social networking, transitioning to out of home care for families, and child development.

Dr. Coehlo is a co- editor for the 4th and 5th edition of Family Health Nursing (F.A. Dais, 2010/2013) and has published several journal articles in the areas of families choosing residential care, families in transition, family health nursing, and care of children with special health care needs.

Panelist

Manya C. Ralkowski, EdS, BCBA, LBA, IBA

Instructional Leadership – Curriculum Specialist
Board Certified Behavior Analyst
Licensed Behavior Analyst
International Behavior Analyst

Ms. Manya Ralkowski has been practicing in the field of applied behavior analysis for over 25 years. Her training began under direct education and training from consultants from the Lovaas Clinic in Los Angeles while completing her bachelor of arts in Communication Disorders with endorsements in special education and psychology at Western Washington University. Ms. Ralkowski continued her education and training with a master's degree in Education from Lesley University and a graduate certificate in Applied Behavior Analysis from the University of Washington while working as an assistant teacher on the Project DATA grant at the Haring Center-Professional Training Unit. She also possesses a doctorate degree in Instructional Leadership.

Her extensive educational and clinical background has afforded her many opportunities to build programs where there were none. Ms. Ralkowski has brought many programs and change to the PNW as a Design Team member for Seattle Public Schools creating the first STEM school for the district, a district consultant creating and replicating inclusion programs across the region, and most recently a Clinical Director, starting up a school and home-based ABA program serving 10+ districts and over 20 communities regionally.

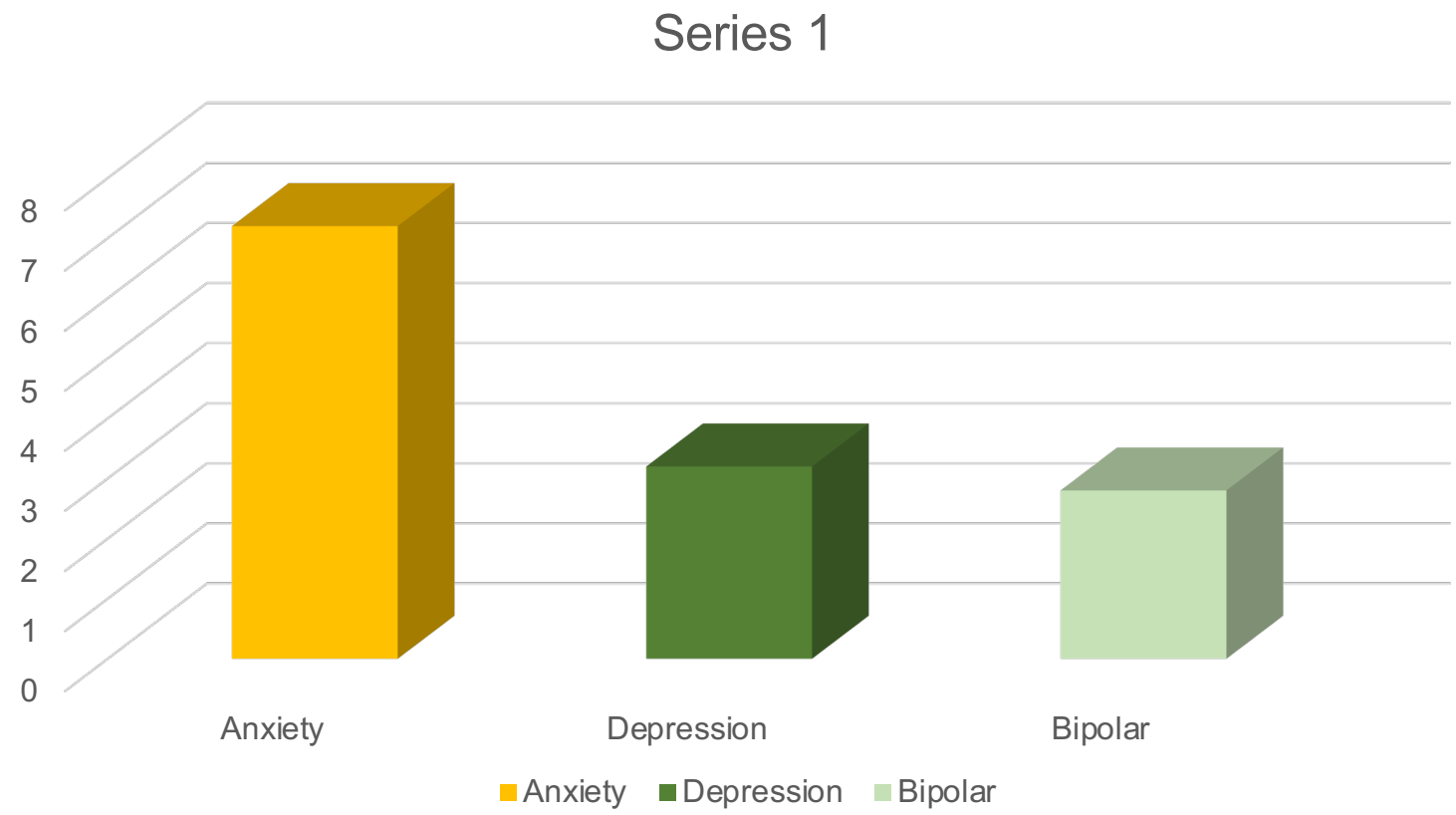
Since 1994, Ms. Ralkowski has been creating and designing ABA programs and educational services from San Diego up the coast and into BC, Canada. She has been trained in many ABA based methodologies including PRT, DTT, NET, Verbal Behavior, Precision Teaching, PECS, and naturalistic ABA. She brings together disciplines such as ABA, special education, speech pathology, psychology, and remedial reading instruction for a comprehensive program for each student, each family, each teacher, and each school to create stronger and more inclusive communities.

Learner Objectives

1. Recognize specific target behaviors associated with the diagnosis of the different forms of anxiety, depression, and bipolar disorders.
2. Explore and discuss the most effective and evidence-based behavior and counseling strategies that are seen throughout various developmental stages of treatment for anxiety, depression, and bipolar disorders.
3. Evaluate environmental factors that may interfere with positive function in a child with anxiety, depression, and bipolar disorders.
4. Identify classes of psychotropic agents which have demonstrated effectiveness in the treatment of anxiety, depression, and bipolar disorders.
5. Discuss common medications used in the treatment of anxiety, depression, and bipolar disorders, including the indication, mechanism of action, adverse and side effects, and monitoring criteria.
6. Apply knowledge to specific case studies including assessment, diagnosis, treatment, and evaluation of outcomes.
7. Analyze ethical issues arising during the treatment of a child with anxiety, depression, or bipolar disorders, and their families.

Mood Disorders in Children Today

Today, 2.8 to 7.1% of children in the United States are diagnosed with a mood disorder



CDC.gov, 2021

Note. 2016 data 2-17 yrs of age.

Mood Disorders in Children Today

- The incidence rates increase with age:
  - 4.1 to 31.9% of adolescents experience anxiety disorders
  - 1.4 to 11.7% of adolescents experience depressive disorders

Pediatrics Volume 144, Number 4; October 2019

Overall Findings and Recommendations

- Mood disorders are considered chronic conditions and should be approached as such.
- The evidence strongly supports the use of appropriate forms of **therapy** first, with medications added if remission is not reached.
- Comparison among medications (mainly antidepressants and mood stabilizers) shows only modest improvements when compared to placebos in large studies. However, smaller studies and case studies show improvement when psychopharmacology is approached carefully.

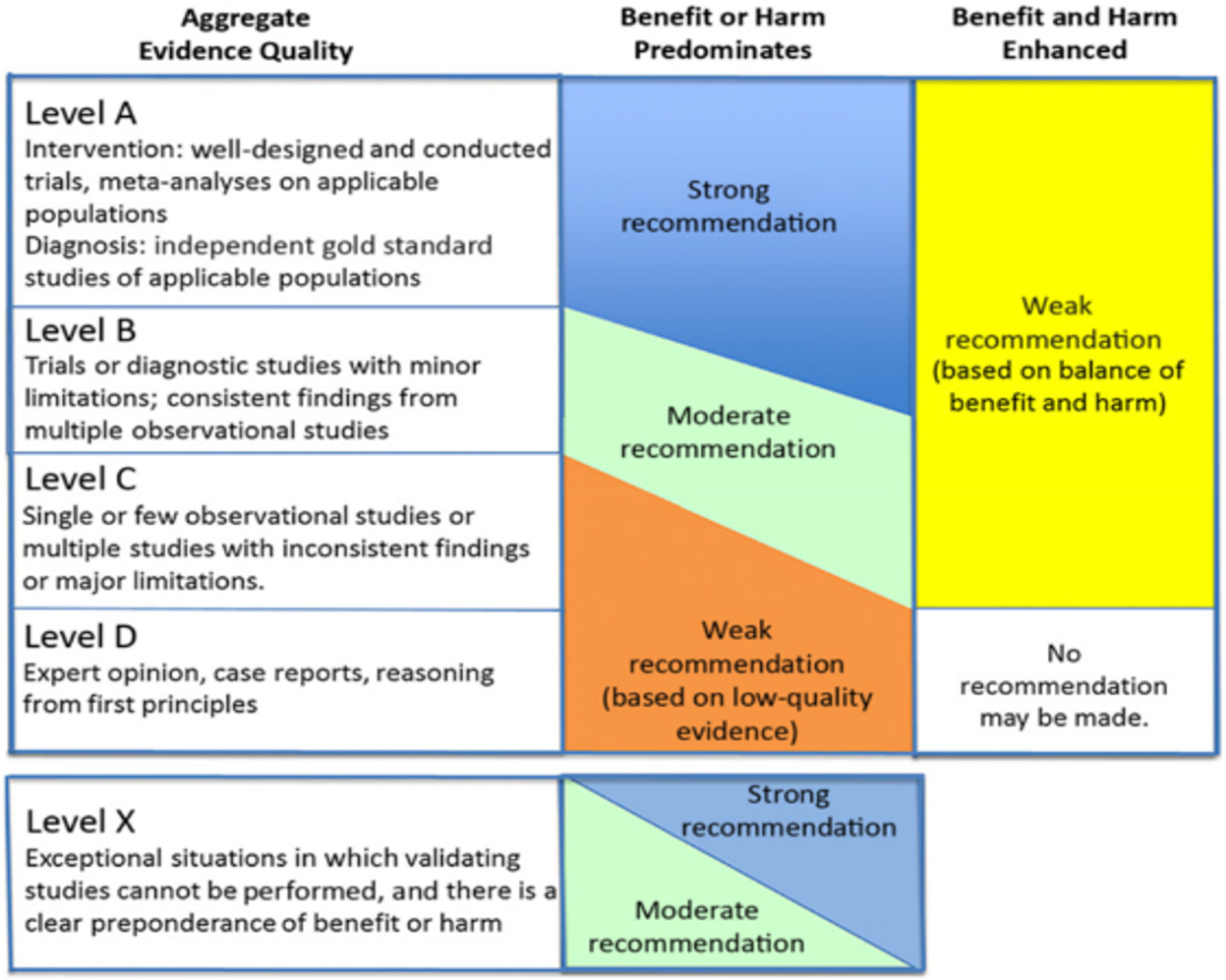


FIGURE 1
AAP rating of evidence and recommendations.

Case Study: Liam

Demographics, background and environments: kindergarten, 5 years old

- New to the district, no school previously, no evaluations
- General education classroom, 28-30 students, one teacher and occasional paraeducators in room
- Rural community
- Divorced family

Education planning and teaming:

Prior to medication

- ***Individual challenges*** – High separation anxiety following 3-month absence of mother secondary to military service. Increased explosive outbursts, ritualistic behavior, and poor sleep.
- ***Classroom challenges*** – Several explosive outbursts during the first week of class resulting in repeated suspensions.
- ***Behavior Interventions*** – Following several meetings with the school, counselor, parents, and medical provider, Liam was diagnosed with severe Separation Anxiety leading to Disruptive Mood Dysregulation Disorder. Through intensive play therapy, parenting counseling, and medication management, with graduated attendance at school, Liam improved.
- ***Recommendations from IEP team*** – Small group instruction, behavior management plan designed to reduce anxiety and increase coping skills, follow medication recommendations

After medication

- ***Individual successes*** – Gradual increase in tolerating the classroom with use of calming strategies. Parent counseling helped parents understand how to support Liam through transitions with preparation.
- ***Classroom community*** – building trust and developing peer relationships and friendships, group participation, classroom community improvements

Assessment: Medical Diagnosis

- **Interview with parents**
- **History of symptoms**
  - Environmental factors
  - Risk factors
    - Genetics/ Prenatal/ Natal
- **Physical Examination/Labs**
- **Screening Tools (see chart)**
- **Developmental and Behavioral Assessment**
  - Conners' Comprehensive Behavioral Rating Scale for children ages 8-18 years
  - Observation of mood and behavior across settings
    - Report from teachers, other relatives
    - Family drawings
- **Cognitive Testing**
- **Functional Testing**
  - Academic
  - Social
  - Environmental
  - Health

ANXIETY: RISK FACTORS

- Familial history
- General negative affect
- Socioeconomic disadvantage
- History of trauma

TYPES OF ANXIETY

- General Anxiety Disorder
- Separation Anxiety Disorder
- Selective Mutism
- Specific Phobias
- Social Anxiety Disorder
- Panic Disorder
- Anxiety due to another medical condition or substance abuse

- Obsessive Compulsive Disorders
- Hoarding
- Trichotillomania
- Excoriation disorder
- Eating disorders
- Body dysmorphic disorder
- Stress and Trauma Related Disorders

DSM-5

Separation Anxiety (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ .9-1.9% of children ▪ More common in girls	▪ Developmentally inappropriate or excessive fear of separation from caregiver ▪ Repeated distress at time of or anticipation of separation ▪ Excessive worry about losing caregiver or being separated from caregiver ▪ Refusal to go places because of fear of separation ▪ Sleep problems ▪ Physical complaints related to separation	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Most commonly diagnosed in children aged 3-6 years; can occur in adulthood	▪ Individual and family/parenting counseling ▪ Individual CBT counseling most effective when compared to group or parent-led CBT counseling ▪ Counseling is more effective than medication

Selective Mutism (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ .3-1% of children ▪ More common in young children	▪ Consistent failure to speak in specific situations ▪ Interferes with function ▪ Symptoms last at least one month ▪ Refusal to speak is not associated with a physical problem or developmental delay ▪ Does not occur because of Autism or Schizophrenia	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Most commonly diagnosed in children aged 3-6 years; can occur in adulthood ▪ Comorbid with anxiety	▪ Individual and family/ parenting counseling ▪ Individual CBT counseling for 3-6 months most effective ▪ Counseling and medication are more effective than either alone ▪ SSRIs were most effective (Sertraline, Fluoxetine, and Citalopram)

Specific Phobias (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ 5% of children and 16% in adolescents ▪ More common in females (2:1) ▪ Blood/injection phobias equal between males and females ▪ 75% of those with phobias have more than one phobia	▪ Marked fear about a specific object of situation ▪ Children show anxiety by crying, clinging, tantrums, or freezing; older adolescents and adults show avoidance ▪ Fear is out of proportion to the true threat ▪ Symptoms last at least six months ▪ Interferes with function ▪ Separated into animal, natural environment, blood/injection, situational, or other	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Most commonly diagnosed in children aged 3-6 years; can occur in adulthood ▪ Comorbid with anxiety	▪ Individual and family/ parenting counseling ▪ Individual CBT counseling for 3-6 months most effective ▪ Counseling and medication are more effective than either alone ▪ SSRIs were most effective (Sertraline, Fluoxetine, and Citalopram)

Social Anxiety Disorder (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ 7% of children and adolescents ▪ Slightly more common in males ▪ Higher rates in Native Americans than other ethnic groups ▪ Median age of onset is 13 years	▪ Marked fear or anxiety about one or more social situations; related to fear of being judged (scrutiny by others) ▪ Fear of humiliation or embarrassment ▪ Social situations are avoided persistently for at least 6 months ▪ Fear or anxiety is out of proportion to the actual threat ▪ Interferes with function ▪ Not better explained by other mental or physical diagnoses (i.e., obesity, disfigurement, ASD)	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Most commonly diagnosed in early adolescents; median age at diagnosis is 8-15 years ▪ Comorbid with anxiety and shyness	▪ Individual and family/ parenting counseling ▪ Individual CBT counseling for 3-6 months most effective ▪ Counseling and medication are more effective than either alone ▪ SSRIs were most effective (Sertraline, Fluoxetine, and Citalopram) ▪ 50% enter remission within 2 years of treatment

Panic Disorders (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ <.4% in children under 14 years of age; increases to 2-3% in adolescents ▪ More common in females (2:1) ▪ Median age of onset is 14 years	▪ Recurrent unexpected panic attack: ▪ Heart palpitations ▪ Sweating ▪ Trembling ▪ Feelings of choking ▪ Chest pain ▪ Nausea/ vomiting ▪ Numbness or tingling ▪ Derealization ▪ Chills ▪ Dizziness or fainting ▪ Fear of losing control or dying ▪ Fear of subsequent attacks ▪ Alters function	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Most commonly diagnosed in early adolescents; median age at diagnosis is 20-24 years ▪ Comorbid with anxiety ▪ Assess for nocturnal attacks	▪ Individual CBT counseling for 3-6 months most effective ▪ Counseling and medication are more effective than either alone ▪ SSRIs and SNRIs most effective ▪ Tends to be chronic with episodic flare-ups

Generalized Anxiety Disorder (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT

▪ .9% in adolescents
▪ More common in females (2:1)
▪ Median age of onset is 30 years [Note. Differentiation between GAD and an anxious temperament is important]
▪ Children and adolescents tend to worry more about performance, whereas adults worry about family and health
	▪ Excessive worry about a number of different events or activities more days than not for at least 6 months
	▪ Difficulty controlling the worry
	▪ One of the following:
	  ▪ Feeling restless
	  ▪ Being tired during the day
	  ▪ Difficulty concentrating
	  ▪ Irritable
	  ▪ Muscle tension
	  ▪ Sleep disturbance
	▪ Interfere with function
	▪ Not better explained by other medical or psychological conditions
		▪ History
		▪ Family history
		▪ Observation
		▪ Evaluation for co-morbidities
		▪ Most commonly diagnosed in adults, but symptoms start in childhood
		▪ Comorbid with other forms of anxiety
		▪ Assess for anxious temperament
			▪ Individual CBT counseling for 3-6 months most effective
			▪ Counseling and medication are not more effective than counseling alone
			▪ SSRIs and SNRIs show modest improvement
			▪ Tends to be chronic with episodic flare-ups

Obsessive Compulsive Disorders (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT

▪ 1.2% of individuals; 25% diagnosed by 14 years of age (25% of males are diagnosed by age 10 years)
▪ More common in females
▪ 40% reach remission with treatment
	▪ Recurrent and persistent thoughts, urges, or images that are intrusive and unwanted and cause anxiety or distress
	▪ Inability to ignore thoughts
	▪ Repetitive behaviors that the individual feels driven to perform and reduce anxiety or dread:
	  ▪ Hand washing
	  ▪ Checking
	  ▪ Counting
	  ▪ Cleaning
	▪ Behaviors are time-consuming
	▪ Interfere with function
	▪ Not better explained by other medical or psychological conditions
	▪ Related: Eating disorders, body dysmorphic disorder, trichotillomania, hoarding
		▪ History
		▪ Family history
		▪ Observation
		▪ Evaluation for co-morbidities
		▪ Most commonly diagnosed in adults, but symptoms start in childhood
		▪ Comorbid with other forms of anxiety
		▪ MASC/ Conners' CBRS
			▪ Individual CBT counseling for 3-6 months most effective
			▪ Counseling and medication are not more effective than counseling alone
			▪ SSRIs and SNRIs show modest improvement
			▪ Tends to be chronic with episodic flare-ups
			▪ **Note**. As many as half of untreated OCD attempt suicide

A Note on Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcus (PANDAS)

Bruce was 3 years old when he started displaying unusual repetitive patterns, including washing his hands, obsession with fish, and an odd walking pattern. Following evaluation for ASD, anxiety, and trauma, his parents remained unsure of what caused their healthy boy to start these unusual behaviors, seemingly overnight. After 4 years of searching from specialist to specialist, it was discovered that his symptoms improved after courses of antibiotics and returned with strep infections.

Once diagnosed and treated, Bruce is now a healthy 13-year-old, with remission in symptoms. Treatment included 6 months of antibiotics, supplements to boost immune system, Sertraline to decrease OCD symptoms, and a tonsillectomy to decrease strep infections.

Trauma (DSM 5)

Trauma and Stress Related Disorders are now placed in their own category rather than part of anxiety disorders. Trauma response leads to more than just anxiety, and alters our fear reactions, trust, mood regulation, sleep, attention and focus, and reaction to relationships.

These diagnoses are separated into acute stress response versus Post Traumatic Stress Disorder, acute vs. Chronic.

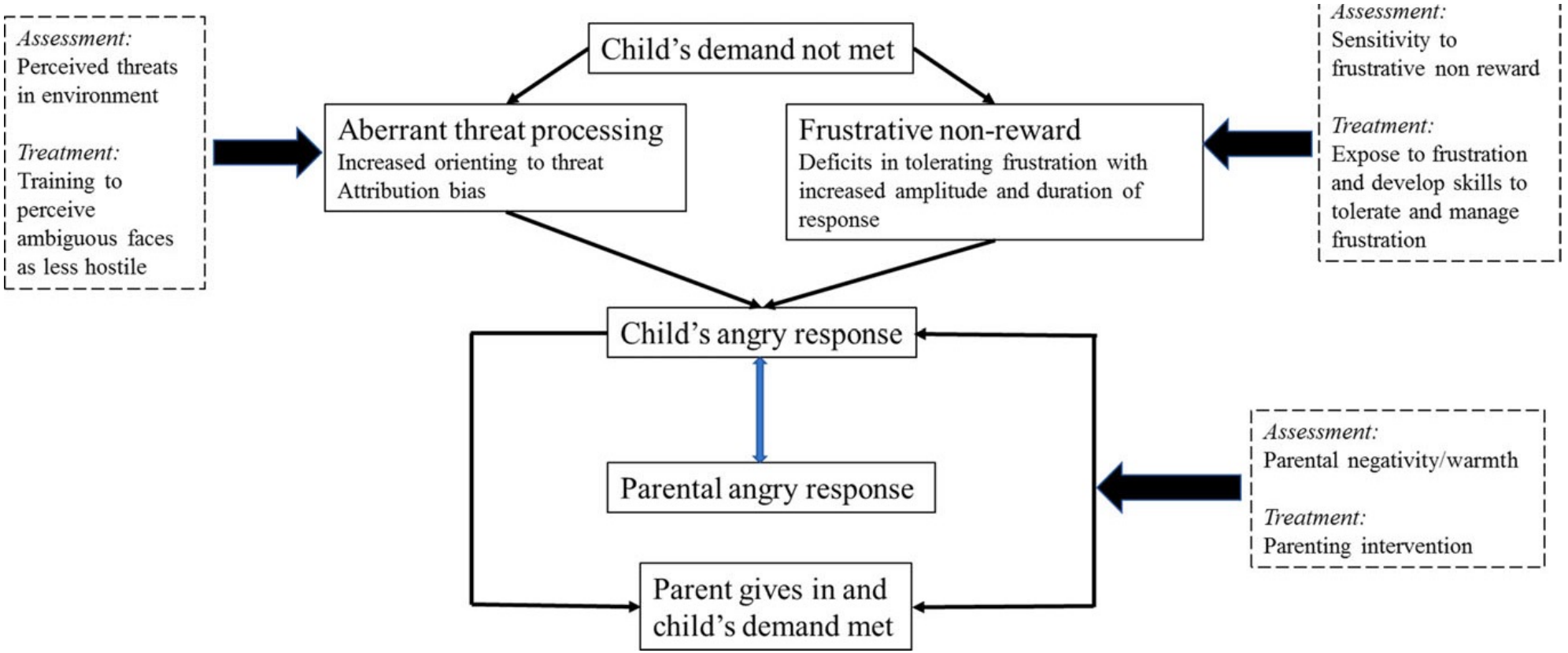
Depression and Anxiety Together

Up to 75% of children diagnosed with anxiety, have a comorbid diagnosis of depression

Disruptive Mood Dysregulation Disorder (DSM 5)

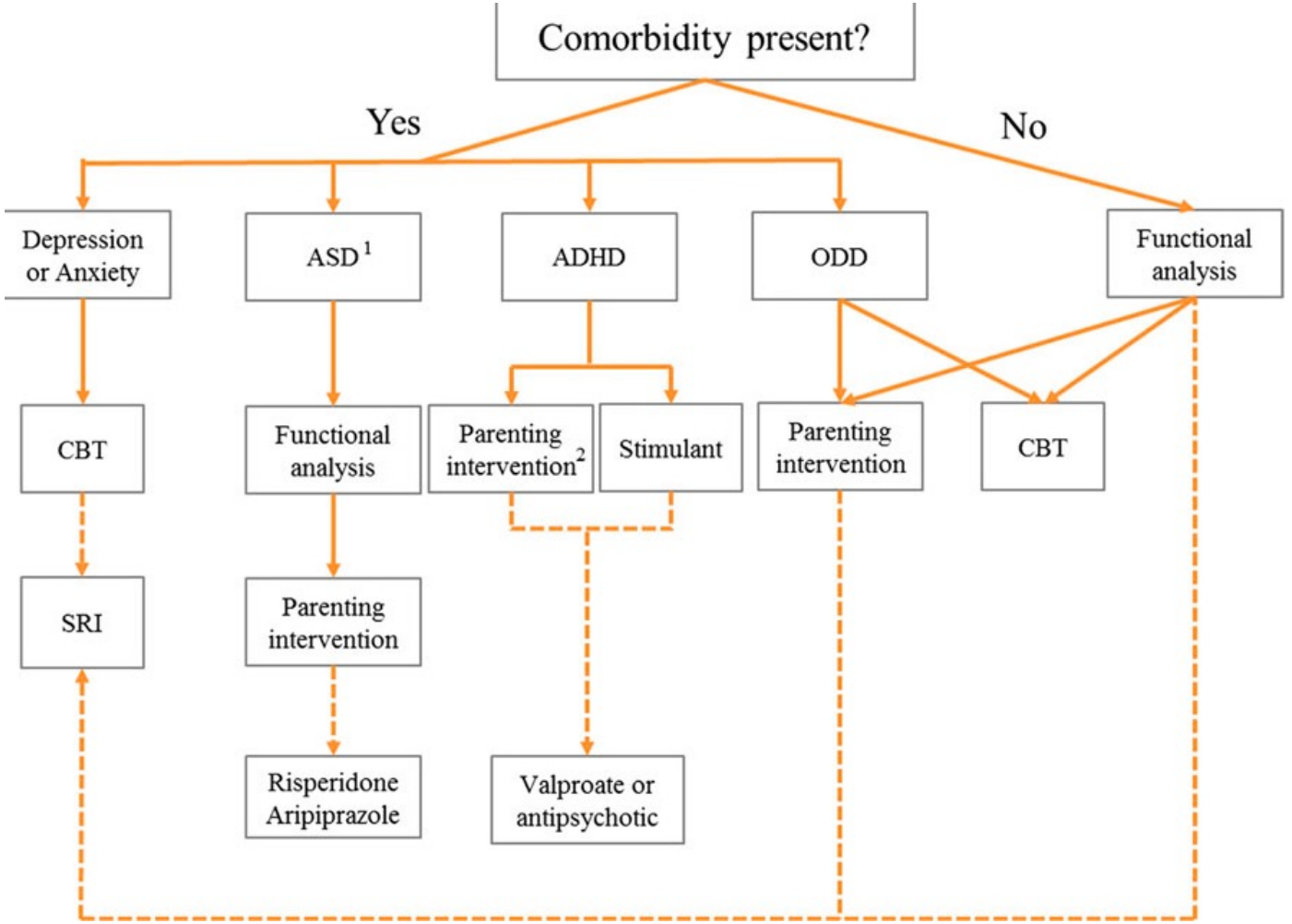
PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ 2-5% of children and adolescents ▪ More common in males and adolescents ▪ Children diagnosed with DMDD are at risk for depression and anxiety as adults	▪ Onset before 10 years of age ▪ Temper tantrums out of proportion in intensity and duration to the situation and inconsistent with developmental level ▪ Occur 3-4 times per week or more ▪ Mood between temper tantrums unusually irritable across settings ▪ Symptoms occurring for 12 months or longer ▪ First diagnosis should be made between 6-18 years	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Should not be confused with intermittent explosive disorders, bipolar, or ODD ▪ Comorbid with other forms of mood disorders, ADHD, ODD, ASD ▪ The Affective Reactivity Index (ARI)	▪ Behavioral treatment to increase frustration tolerance ▪ Parent training ▪ Assess and treat co-morbidity

Disruptive Mood Dysregulation Disorder Behavioral Plan (DSM 5)



Stringaris, A., Vidal, R. P., Brotman, M. A., & Leibenluft, E. (2018). Practitioner Review: Definition, recognition, and treatment challenges of irritability in young people. Journal of Child Psychology & Psychiatry, 59(7), 721–739. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1111/jcpp.12823

Choosing Treatment for an Irritable Child



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Depression (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT

▪ 7% of individuals; highest rate in 18-29-year-olds
▪ More common in females
▪ Remission with treatment achieved within one year for 4 in 5 individuals
▪ If first episode occurs before age 14, higher risk for bipolar
	▪ 5 of the following:
	  ▪ Depressed mood most of the day every day for at least two weeks
	  ▪ Markedly diminished interests
	  ▪ Weight loss or weight gain
	  ▪ Sleep disturbance
	  ▪ Agitation or slowing down
	  ▪ Fatigue
	  ▪ Feelings of worthlessness, hopelessness, helplessness
	  ▪ Guilt
	  ▪ Decreased ability to concentrate
	  ▪ Recurrent thoughts of death
	▪ Symptoms interfere with function
	▪ Not attributable to other physical of mental disorders
		▪ History
		▪ Family history
		▪ Observation
		▪ Evaluation for co-morbidities
		▪ Comorbid with other forms of mood disorders
		▪ Differentiate between mild-severe, with or without psychotic symptoms, perinatal, with or without anxiety
		▪ Increase with chronic medical conditions
		▪ CDI
			▪ Individual CBT counseling for 3-12 months most effective
			▪ Counseling and medication are more effective than counseling alone
			▪ SSRIs and SNRIs show improvement; augmentation with mood stabilizers, lithium, and stimulants
			▪ Tends to be chronic with episodic flare-ups

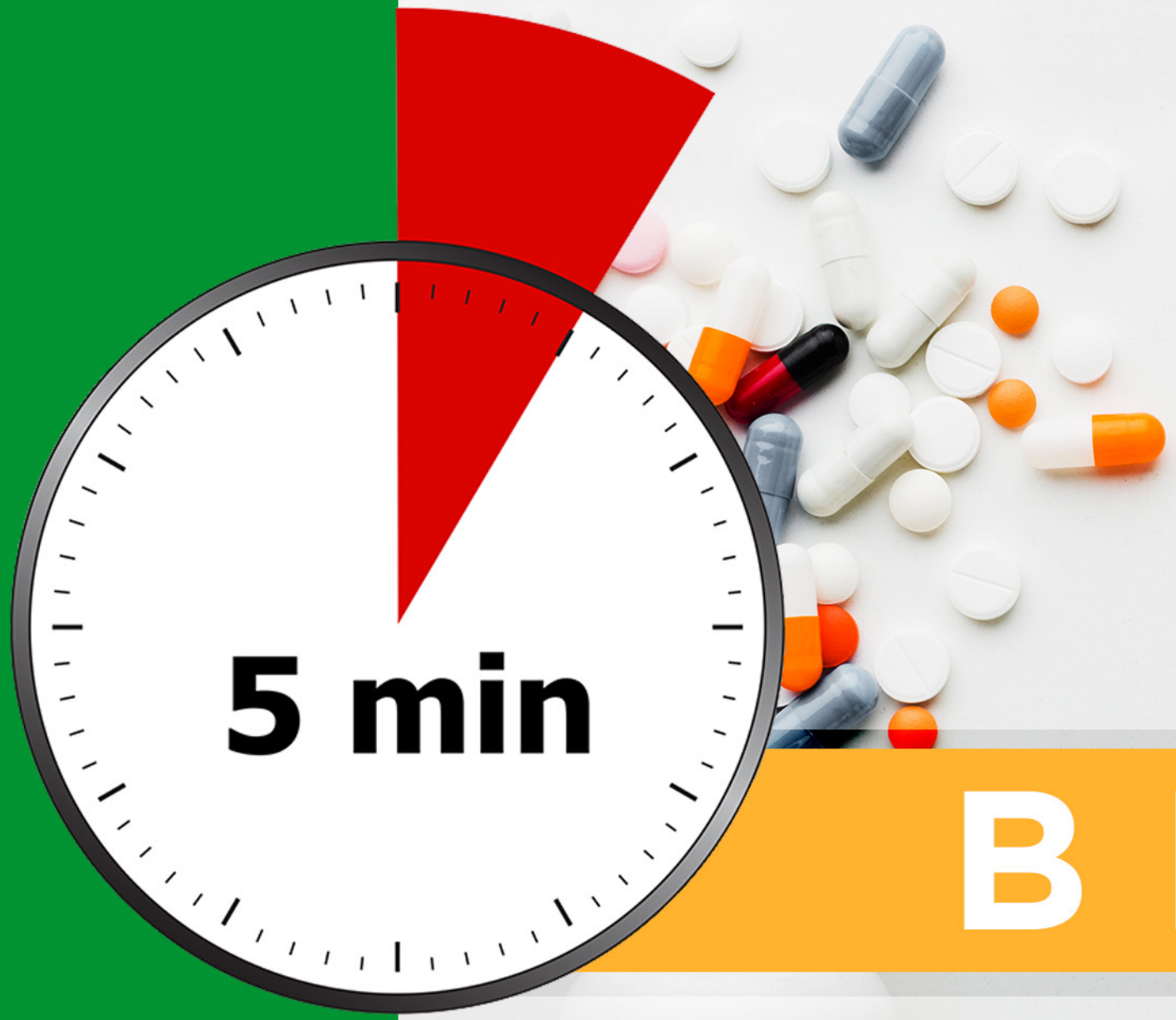
Long Term Outcomes of Untreated Anxiety and Depression

- Poor emotional regulation
- Decreased positive social interaction
- Decreased academic performance
- Lost executive functioning skills
- Increased risk for substance abuse
- Increased risk for suicide
- Higher use of mental health services as an adult

Having both Anxiety and Depression together increases all these risks

Bipolar I Disorder (DSM 5)

PREVALENCE	TARGET SYMPTOMS	DIAGNOSIS	TREATMENT
▪ .6% of individuals with first manic episode occurring in adolescents or early adulthood ▪ Rare to be diagnosed before age 14	▪ <u>Manic Episode</u> ▪ Expansive, elevated, or irritable mood for at least 1 week every day ▪ 3 or more: ▪ Grandiosity ▪ Decreased need for sleep ▪ Pressured and increased talk ▪ Flight of ideas ▪ Distractible ▪ Excessive activities ▪ <u>Depressive Episode</u> ▪ 5 or more: ▪ Depressed mood 2 weeks or longer ▪ Decreased interest ▪ Sleep disturbance ▪ Agitation or slowed movements ▪ Fatigue ▪ Decreased concentration ▪ Recurrent thoughts of death	▪ History ▪ Family history ▪ Observation ▪ Evaluation for co-morbidities ▪ Comorbid with other forms of mood disorders ▪ Differentiate between Bipolar I and Bipolar II (hypomania) ▪ Must have a manic episode ▪ Often presents with first episode of depression	▪ Counseling and medication are more effective than counseling alone ▪ Counseling focused on psychoeducation ▪ Lithium, atypical antipsychotic medications, anticonvulsants ▪ Tends to be chronic with episodic flare-ups ▪ High risk for suicide



BREAK

Summary of Screening Tools by Diagnosis

Diagnosis	Screening Tools	Age Approved	Comments
Anxiety	Multidimensional **Anxiety** Scale for Children Second Edition™ (**MASC** 2™)	8-19 years	Screens for GAD, OCD, social anxiety, performance anxiety, phobias, separation anxiety, panic disorder; Parent and Child Forms
	SCARED	8-18 years	Screens for panic disorder, separation anxiety, GAD & school phobia
Depression	Children's Depression Inventory	7-17 years	Scoring provides graph with t-scores; Parent and Child forms
	Patient Health Questionnaire for Adolescents	12-18 years	Quick (<10 min) screening tool
	Beck's Depression Inventory	15 years+	Quick (<15 min) screening tool
OCD Disorders	Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS)	6-17 years	Semi-structured interview- takes >30 min
	Children's Obsessive-Compulsive Impact Scale (COIS)	6-17 years	Rapid screen; focuses on impact rather than diagnosis; Parent and Child forms
Mood Disorders	Conners' Comprehensive Rating Scales (CBRS)	8-18 years	Separates different diagnoses; assessment tool takes >60 min

SUMMARY OF MEDICATION OPTIONS FOR MOOD DISORDERS

- **Selective serotonin re-uptake inhibitors (SSRIs): Depression and Anxiety**
  - This group of antidepressants increase serotonin in the synapse.
  - SSRIs decrease repetitive behaviors; decrease anxiety, irritability, tantrums, and aggressive behavior; and improve mood.
  - Examples: Fluoxetine, Sertraline, Citalopram, Escitalopram
- **Selective neuroepinephrine re-uptake inhibitors (SNRIs): Depression and Anxiety**
  - This group of antidepressants increase serotonin in the synapse and regulate the norepinephrine system.
  - SSRIs decrease repetitive thoughts and behaviors; decrease anxiety, irritability, tantrums, and aggressive behavior; and improve mood.
  - Examples: Venlafaxine, Duloxetine
- **Psychoactive or anti-psychotic medications: Depression, Mood disorders, Bipolar I**
  - These types of medications help with mood regulation and decrease aggression and self harm.
  - These medications can also decrease hyperactivity and reduce repetitive behaviors. They regulate weight in eating disorders.
  - Examples: Risperidone, Aripiprazole
- **Anti-anxiety medications: Anxiety (these medications are rarely used in children)**
  - This group of medications can help relieve anxiety and panic disorders, and symptoms of obsessive-compulsive symptoms.
  - Examples: Buspirone
- **Anticonvulsants: Mood disorders, Bipolar I, Bipolar II**
  - These medications can regulate mood in mood disorders.
  - Examples: Lamotrigine, Topiramate

Source: https://www.nichd.nih.gov/health/

Categories of Medications Used to Treat Mental Health Conditions in Childhood

Mood Disorders

Medications	Concurrent Diagnosis	Age Range	Dose Range	Comments
Anti-epileptics (Lamotrigine, Topiramate, Valproic Acid)	Mood Disorders	3 years	Variable	Lamotrigine must be titrated slowly, watch for skin rash. Valproic Acid controversial.
Bupropion (Wellbutrin)	Depression	12 years	50 to 300 mg	Comes in sustained and extended release. Watch for seizure threshold.
Atypical Antipsychotics: Risperidone, Aripiprazole, Olanzapine, Lurasidone, Quetiapine, Ziprasidone	Mood disorder, aggressive behavior	6 years	Variable	Regular labs to monitor for metabolic syndrome, watch for weight gain, tics.
SSRI and SNRI: Fluoxetine, Sertraline, Escitalopram, Venlafaxine, etc.	Depression, anxiety, OCD and related disorders	6-12 years	Variable	No measurable effects in clinical trials.

How Do Medications Work?

- Neurotransmitters travel from one neuron to the next across the synapse
- Stimulant medications increase dopamine in the synapse (extracellular levels) in the prefrontal cortex; antipsychotic medications decrease dopamine in the limbic system
- Medications also can decrease norepinephrine in the Limbic system (decreases hyperactivity and aggression).

Effects and Side Effects of Medication

Effects:

- 50-60% improve in behavior
- Improved academic skills
- Improved mood with decreased suicidal ideation, depression, and anxiety
- Improved social skills
- Improved mental health
- Improved function
- Improved relationships

Side Effects:

- Sleep disruption
- GI symptoms
- Change in appetite
- Increased heart rate
- Change blood pressure
- Altered growth
- Mood changes
- Irritability
- Fatigue
- Altered affect
- Metabolic changes (glucose, cholesterol, triglycerides) (Atypical Antipsychotics)
- Steven's Johnson (Lamictal and Depakote)
- Tardive Dyskinesia (Atypical Antipsychotics)
- **Suicidal Ideation (Black Box Warning)**

Case Study: Emma

Demographics, background and environments:

•3rd grade, 8 yrs. old
•History – refusing to separate from mother; checks her backpack repeatedly before leaving the house; adopted from India; adoptive father committed suicide when she was 5 years of age
•General education classroom, 28-30 students, one teacher and occasional paraeducators in room
•Suburb community
•Single mother

Education planning and teaming:

Prior to intervention

•***Individual challenges*** **–** Mother asked for assistance when Emma started to refuse to go to school; she stated she feared her mother would die, and she felt other kids judged her for having "dark skin". She checked her backpack. She lost interest in activities and friends.
•***Assessment: GAD with depression. Physical and Labs: Food allergies***
•Recommendations – Individual CBT, Parent training, change in diet, Sertraline titrated to 50 mg per day
•School IEP to address anxiety- graduated return to school

After Interventions

•***Individual successes*** **–** improved confidence, increased independence, improved academic performance, return to previous interest in friends and activities
•***CBT focused*** on grief, changing thoughts from negative to positive (reframing), self awareness, positive coping strategies, and focus on strengths rather than weakness. Addressed adoption: mother took Emma to India to meet her tribe; discussed heritage and ethnicity
•Remains in remission 6 years later.

The Challenge of Collaboration

The Problems

- Communication
- Differing Models of Care
- Differing Levels of Experience
- Time Management

The Solutions:

- ❑ *Decreasing barriers*
  - Space: Increasing numbers of Integrated Care Clinics
  - Communication: Regular case review meetings
  - Welcome and assume welcome attitude
  - Continuing education across disciplines
  - Read outside your discipline
  - Continuing opportunities to network (journal clubs, annual meetings, conferences, etc.)

Collaborating in the IEP Team and Process

School Issues

- Transparency, honesty, and openness with teachers, guidance counselors, coaches, and school administrators can be the most important way to help a child succeed
- School districts are required to make sure students with conditions like mood disorders are given accommodations
- Supporting the child appropriately while not letting the mood disorder be an excuse to miss assignments, etc.

IEP accommodation examples:

- Reducing homework or extending deadlines for assignments/ tests, focus on quality, not quantity
- Allowing a late start to school if the child is having problems with sleep
- Designating a knowledgeable staff member, the child can go to during the day
- Providing support in class if the child needs help with focusing, sitting still, seating with few distractions
- Smaller class size – however mood disorders are not typically a cognitive or intelligence issue
- Daily and weekly communication systems between parents and school
- ESY, summer school support, tutoring during extended absences
- Keyboarding instead of taking handwritten notes
- Enrichment classes to emphasize the child's strengths
- Consistent Scheduling: schedule most challenging tasks during optimal learning/performance times, movement breaks, planned and unplanned breaks, plans for unstructured times of the day or down time

Psychotherapy - Behavioral Approaches

- **Cognitive Behavioral Therapy (CBT)**
  - Widely researched form of therapy for mood disorders (e.g., depression and bipolar)
  - Children, adolescents, adults
  - Learn about the connections of their thoughts, feelings and behaviors
  - Make specific goals to change unhelpful thoughts, improve problem solving, make good choices, and increase involvement
- **Dialectical Behavior Therapy (DBT)**
  - Adolescents and young adults
  - Difficulties with regulating emotions
  - Learning skills to tolerate distress, manage emotions, decrease impulsive behaviors (e.g., SIB), improve relationships
  - Radically Open DBT (RODBT) – strategies and coping skills to break rigidity and perfectionistic tendencies and increase flexibility
- **Behavioral Activation Therapy (BAT)**
  - Adolescents and adults
  - Decrease avoidance/isolation behavior and increase engaging in activities that improve mood and access positive reinforcement
  - Increasingly challenging activities are addressed as the individual improves in mood and engagement
- **Acceptance and Commitment Therapy (ACT)**
  - Adolescents and adults
  - Focuses on teaching the individual to accept thoughts and emotions, choose a valued direction, and take action

Behavioral Activation Model

No Treatment

- Grief, trauma, stress, etc. can lead to little, to no access to positive reinforcement
- Can lead to more unhealthy behaviors – drug use, sleeping late, social withdrawal

Intervention

- Increase the amount of positive reinforcement a person receives, and negative patterns are broken
- Replace negative avoidant behaviors with new rewarding behaviors can increase access to positive reinforcement

Common challenges

- Avoidant behaviors provide immediate relief but ultimately do more harm than good.
- Helps in the long term, not an immediate solution
- Sometimes hard to find motivation to follow through
- Positive replacement behaviors need to be easy and rewarding

Behavioral Solutions and Mood Disorders

MOOD DISORDERS, ETC.	ISSUES	BEHAVIORAL SOLUTION
Anxiety Disorders – separation, social, etc.	Fears, avoidance	Exposure Therapy, Behavioral Activation Cognitive Behavioral Therapy
Phobias	Irrational fears, panic attacks	Exposure Therapy and Contact Desensitization Therapy
Selective Mutism	Refusal to talk	Exposure Therapy Cognitive Behavioral Therapy
Obsessive Compulsive Disorders	Excessive repeated thoughts and compulsive behaviors occur regularly (washing, counting, doubt, checking, collecting, hoarding)	Cognitive Behavioral Therapy Functional Analysis
Depression	Sadness, apathy, irritability, feelings of guilt, helplessness, pessimism, fatigue, low energy, loss of appetite	Behavioral Activation Cognitive Behavioral Therapy
Bipolar Disorder	Episodic mood shifts including mania and depression	Psychoeducational counseling

Alternative Treatments

- Diet
  - Consider food intolerances, supplements, amino acids
- Biofeedback
- Yoga
- “Green therapy”
- Exercise
- Animal therapy
- Art therapy
- EMDR with children for past trauma and OCD

Risk With No Treatment

UNTREATED:

- Academic problems
- Difficulty with relationships
- Decreased health
- Increased substance abuse and addiction

TREATED:

- No difference between treated mood disorders and general population
- No indication that treatment increases substance use or addiction
- Suicidal risk minimal and less than if untreated

CDC. gov, 2021

Note. 2016 data 2-17 years of age

HOW TO APPROACH PARENTS?

ASSESS WHERE THE FAMILY IS:

- Understanding of Mood Disorders
- What information have they received thus far and where
- Understanding of medical terminology
- Values and beliefs regarding medical model of treatment versus alternative models
- Parent education: Use face-to-face education whenever possible rather than relying on reading material/ internet searches alone
- Avoid rushing; give time for questions and clarification
- Use a collaborative approach with school, behavioral health, pediatrician, specialist, parents, and child.
- Set goals “with” the family rather than “at” the family

ETHICAL AND CULTURAL CONSIDERATIONS

- Respect for autonomy
- Appropriate information
- Cultural sensitivity
- Beneficence
- Non-maleficence: First do no harm
- Justice

DISPELLING MYTHS

- Mood Disorders are just behavioral problems treated with better parenting.
- Individuals with mood disorders just need to try harder; they do not need medication.
- Those with Mood Disorders will outgrow their problems.
- Medications have not been tested in children and should not be used in children.
- Children taking medications to treat Mood Disorders are likely lose their personalities and be sedated throughout their childhood.
- Parents who put their children on medications just don’t want to parent.

Summary

Mood Disorders are medical conditions that have target symptoms identified by the DSM 5.

Medications are effective in treating many mood disorders.

The most common classifications of medications used to treat mood disorders include antidepressants, atypical antipsychotics, anticonvulsants.

The most effective behavioral strategies used to treat mood disorders is a combination of CBT and parent training and education.

Parents need face-to-face information, collaborative goal setting, time, support, and opportunity to explore options.

Ethical dilemmas include access to care, autonomy and decision making, and appropriate diagnosis and monitoring.

References

Beck, A. et. al. (2021). Screening for depression in children and adolescents" A protocol for a systematic review update. *Systematic Reviews*. 10:24-37.

Johnstone, K., Kemps, E., & Chen, J. (2018). A meta-analysis of universal school-based prevention programs for anxiety and depression in children. Clinical *Child and Family Psychology Review,* 21:466-481.

Leffler, J.M., Riebel, J., & Hughes, H.M. (2014). A Review of Child and Adolescent Diagnostic Interviews for Clinical Practitioners. *Assessment, 22*(6): 690-703.

McKinnon, A., Keers, R., Coleman, J. R. I., Lester, K. J., Roberts, S., Arendt, K., Bögels, S. M., Cooper, P., Creswell, C., Hartman, C. A., Fjermestad, K. W., In, A. T., Lavallee, K., Lyneham, H. J., Smith, P., Meiser, S. R., Nauta, M. H., Rapee, R. M., Rey, Y., & Schneider, S. (2018). The impact of treatment delivery format on response to cognitive behaviour therapy for preadolescent children with anxiety disorders. *Journal of Child Psychology & Psychiatry*, *59*(7), 763–772. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1111/jcpp.12872

Nordahl, H., & Wells, A. (2017). Testing the metacognitive model against the benchmark CBT model of social anxiety disorder: Is it time to move beyond cognition? *PLoS ONE*, *12*(5), 1–11. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1371/journal.pone.0177109

Østergaard, K. R. (2018). Treatment of selective mutism based on cognitive behavioural therapy, psychopharmacology and combination therapy - a systematic review. *Nordic Journal of Psychiatry*, *72*(4), 240–250. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1080/08039488.2018.1439530

References

Peris, T. & Piacentini, J. (2016). *Helping Families Manage Childhood OCD: Decreasing Conflict and Increasing Positive Interaction: A Therapist Guide*. Oxford University Press.

Russell, G., & Kelly, S. (2011). Looking beyond risk: A study of lay epidemiology of childhood disorders. *Health, Risk & Society*, *13*(2), 129–145. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1080/13698575.2010.515738

Stringaris, A., Vidal, R. P., Brotman, M. A., & Leibenluft, E. (2018). Practitioner Review: Definition, recognition, and treatment challenges of irritability in young people. *Journal of Child Psychology & Psychiatry*, *59*(7), 721–739. https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1111/jcpp.12823

Scahill, L., Riddle, M.A., McSwiggin-Hardin, M., Ort, S.I., King, R.A., Goodman, W.K., Cicchetti, D. & Leckman, J.F. (1997). Children's Yale-Brown Obsessive Compulsive Scale: reliability and validity. J Am Acad Child Adolesc Psychiatry, 36(6):844-852.

U.S. Preventative Task Force. (2016). Screening for Depression in Children and Adolescents: Recommendation Statement. *American Family Physician*, 93(6): 506-508.

Youngstrom, E. A., Freeman, A. J., & Jenkins, M. M. (2009). The assessment of children and adolescents with bipolar disorder. *Child and adolescent psychiatric clinics of North America*, *18*(2), 353–ix. https://doi.org/10.1016/j.chc.2008.12.002

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OTHER WEBINARS IN THIS SERIES

- Overview of Psychopharmacology and Childhood Disorders (Recorded)
- Psychopharmacology and ADHD: April 14, 2021 (Recorded)
- Psychopharmacology and Autism: May 12, 2021 (Recorded)
- Psychopharmacology and Mood Disorders: June 9, 2021
- Psychopharmacology and Evidence-Based Practices: July 14, 2021
- Ethics of Medication: August 11, 2021
- Psychopharmacology: Diagnosis and Assessment: September 8, 2021