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# Moody or Aggressive Kids

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November 2016  
PAL Conference, Seattle WA



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## Disclosure Statement

- I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity
- I will be discussing non-FDA approved use of medications in this presentation

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## Learning Objectives

1. Development and aggression
2. ODD and Conduct disorder diagnoses
3. Principles for treating aggressive children
4. Differentiate "moody" from bipolar

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## What is "Aggression"?

- Aggression is:
  - forceful action, often to dominate or master
- Usually from:
  - inability to resolve a self-perceived vital conflict or need through a non-forceful means
- Not always pathological
  - aggression can be socially appropriate or developmentally normal




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## Development and Aggression

- Infants recognize anger in faces by 3 months
- Infant's anger appears by age 6 months
  - not simple crying
- 12-18 months ~50% of all nursery school peer social exchanges are conflictual
  - By 2 ½ years decreases to about 20%
- Under 6 years, aggression is used to get objects, territory or privileges
- After age 6, more aggression use in retaliation




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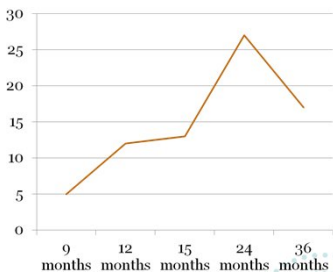
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## Development of Aggression



— % Frequency of peer to peer aggression seen in preschool

(Male rates ≈ females)



From Tremblay et al (2005) and Restoin et al

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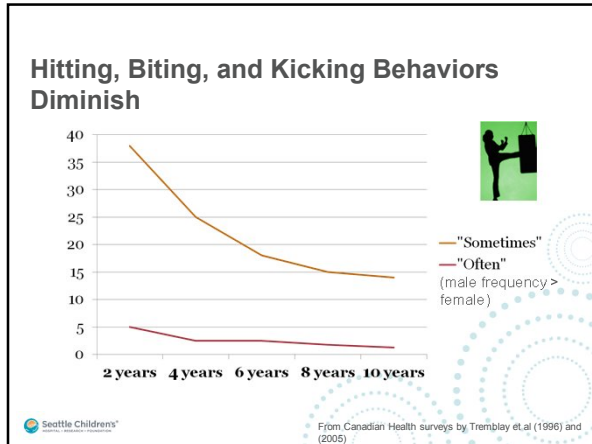
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### Usual evolution of aggression

- Physical → verbal
- Overt → covert
- “relational aggression”?
  - Harming others’ relationships or social status
    - “You can’t play with us” an early age example
  - Occurs in both sexes, but more often with girls

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### Function of Aggression

- Lacking language and social skills, kids use aggression to obtain a goal (toys, food, attention)
  - Diminishes as communication improves
- If protecting your personal safety, aggression can be normal
  - However *planned* aggression a concerning sign

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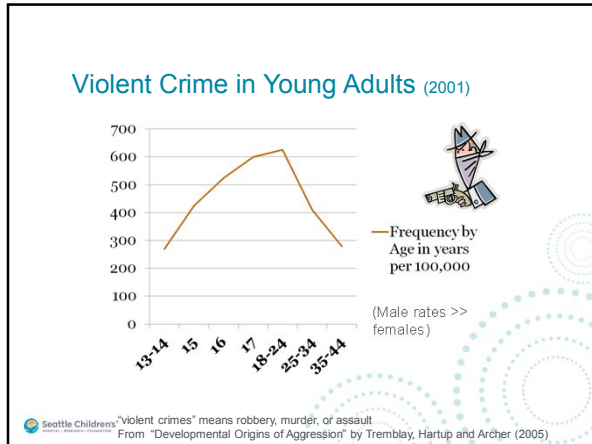
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- ### Aggression Risk Factors
- Birth complications
  - Low IQ
  - Mental health disorders like ADHD, PTSD, ODD
  - Poor emotion regulation skills (temperament)
  - Poor communication skills
  - Male gender (not in preschool)
  - Living in disadvantaged neighborhoods
  - Non-responsive parenting in first 2 years of life
  - Coercive, escalating discipline in toddler years
  - Parent modeled use of aggression
  - Lack of supervision or monitoring in adolescent years
  - Lack of parental warmth
  - Parental maltreatment
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- ### Early Maltreatment and Aggression
- Male maltreatment → physical aggression
  - Female maltreatment → relational aggression
  - Early neglect (age 0-2) strongly associated with later aggression
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## Media Exposure to Violence

- Viewing TV/movie violence a known risk factor
  - Desensitization is the main mediator per research
    - >200,000 violent acts and >16,000 murders viewed by age 18
  - But is not a risk factor in isolation
    - Only if other violence risk factors, and fewer protective factors
- Video game violence and video game "addiction" are more of the same issue
  - If this is the child's world, it isn't a kind and friendly world

AACAP "Children and TV Violence," March 2011 and AACAP, BeresniE "Impact of Media Violence on Children and Adolescents"



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## Violence as Discipline

- Often used by parents
- Corporal punishment at age 3 associated with increased aggression at age 5
  - Corporal punishment is associated with higher rates of adolescent/adult aggression, substance abuse, mental illness, crime and violence
- Teaching alternatives is more effective than just telling parents not to do it



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## Oppositional Defiant Disorder: What Is It?

- Recurrent pattern of negativistic, hostile, defiant behavior
  - More frequent/persistent than typical for age
    - daily if under age 5, less often when older
  - Causes impaired functioning
  - Not caused by other disorders
  - Usually present by age 8 years
    - But no official diagnostic age cutoff
    - Earlier onset associated with poorer prognosis



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### ODD Diagnosis Checklist: 4 + symptoms within past 6 months

1. Often loses temper
2. Often argues with adults
3. Often actively defies or refuses to comply with adult requests or rules
4. Often deliberately annoys people
5. Often blames others for his or her mistakes or misbehavior
6. Often touchy or easily annoyed by others
7. Often angry or resentful
8. Often spiteful or vindictive

Note sibling interactions do not apply here



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### DSM-5 ODD Diagnosis Modifiers

- Mild—symptoms in only one setting (usually home)
- Moderate—some symptoms in at least two settings
- Severe—some symptoms in three or more settings
- Kids with ODD rarely view themselves as the problem
  - But could be an “it takes two to tango” situation



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### Prevalence of ODD

- About a 5% current prevalence rate
  - Pre-pubertal boys > girls
- Persisting symptoms over the near term
  - About 3/4 still meet criteria ~2 years after diagnosis
    - 1 year further, less than 1/2 still meet criteria



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### Three general patterns of ODD

- Brief
  - Noncompliance and defiance for short period of development
    - rebellious separation/individuation
- Persistent
  - Early oppositional problems persist throughout childhood
- Induced
  - Oppositional problems started after maltreatment, which then may persist



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### Oppositionality Traits by Age

- Stubborn/tantrums ~ age 3-5
- Arguing and lying ~ age 6-8
- Bullying ~ age 9
- Stealing ~ age 12
- Planful rebellion ~ adolescence

} Possible Conduct Disorder



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### What About Conduct Disorder?

- Serious violations of rules, and the rights and needs of others
- Typically not diagnosed until adolescence
- Often follows ODD
  - ~30% of ODD kids progress to conduct disorder
- Is 3-4 times more common in males than females



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### Some Age Linked Conduct Behaviors

- School age:
  - Bullying or threatening others
  - Cruel to animals
  - Fire setting
  - Property destruction
- Adolescence:
  - Truancy, running away
  - Breaking into another's house or car
  - Stealing
  - Conning others for goods/favors




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### Conduct Disorder Checklist: 3 in past 12 months with 1 in last 6 months

- |   |   |
|---|---|
| <p>Aggression to people and animals</p> <ul style="list-style-type: none"> <li>• Bullying or threatening others</li> <li>• Initiates fights</li> <li>• Using a weapon that can cause serious physical harm</li> <li>• Being physically cruel to people</li> <li>• Being physically cruel to animals</li> <li>• Steal while confronting victim</li> <li>• Forcing sexual activity</li> </ul> | <p>Destruction of Property</p> <ul style="list-style-type: none"> <li>• Fire setting</li> <li>• Destroying others' property</li> </ul> <p>Deceitfulness or Theft</p> <ul style="list-style-type: none"> <li>• Breaking into another's house or vehicle</li> <li>• Frequent lying or conning others</li> <li>• Stealing without confronting victim</li> </ul> <p>Serious violations of rules</p> <ul style="list-style-type: none"> <li>• Staying out late at night despite parental prohibitions</li> <li>• Running away from home</li> <li>• Being truant from school</li> </ul> |
|---|---|




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### Conduct Disorder Means:

- A failure of parental authority
  - Therapeutically: are there other parenting or authority arrangements that would work better?
- A rejection of available motivations to be "good"
  - Therapeutically: are there other ways to motivate child in a positive direction?




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### Conduct Disorder

- About 1/2 of conduct disorder children continue these problems into adulthood
  - The other 1/2 more likely to be depressed, anxious or socially isolated adults
- Onset prior to age 10 associated with worse prognosis

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### "... with limited prosocial emotions"

- DSM-5 diagnosis descriptor for conduct disorder
  - Lack of remorse/guilt
  - Callous/unempathic
  - Unconcerned about performance
  - Shallow affect
- Possessing 2 or more of these traits for >12 months = poorer prognosis

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### Causes of ODD and Conduct Disorder

- Research consistently points toward a multifactorial origin:
  - Biology (includes temperament)
  - Social/School influences
  - Family environment influences
    - Internal Psychology from above of insecure attachment, poor social information processing, and expecting rewards from aggression
- Variance in aggression expression *about* 50% related to genetics, 25% family environment, and 25% community environment

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### Biological Contributing Factors

- Exogenous biological factors
  - drugs in utero, birth complications, toxins, malnutrition
- Endogenous biological factors
  - Genetics
    - Low sympathetic responsiveness
    - Low cortisol
    - High testosterone
  - Cognitive processing deficits
    - *Communication deficits especially*
- Temperament (traits present throughout life)



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### Social/School Contributing factors

- Academic failure
- Community violence
- Bullying
- Peer rejection
- Associating with other antisocial children



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### Family contributors to ODD/CD

- Poor supervision
- Erratic, harsh discipline
- Parental disharmony
- Low involvement in the child's life
- Offering attention primarily for yelling/tantrums
- Unresponsive to child emotional needs
- Insecure parent-child attachment



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### Psychological Factors in ODD/CD

- Disordered processing of social information:
  - Underutilize social cues
  - Misattribute hostile intent
  - Generate fewer solutions to problems
- Expecting a reward from aggression
  - Intermittent reinforcement
- Insecure attachment to others
- Fragile self esteem
- Confrontational view of the world



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### Comorbidities with ODD/CD

- ADHD
  - Most common, found in ~1/2 of ODD kids
- Mood disorders
- PTSD
- Anxiety disorders
- Substance abuse
- Tic disorders
- Learning disability
- Intellectual impairment



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### Performing the Evaluation

- Multiple Informants
  - School, parents, child
  - Discrepancies are common and diagn. helpful
- Medical History
- Educational Assessment
- Rating scales
  - General scales (i.e. PSC, CBCL, SDQ)
  - Specific scales
    - ADHD rating scales
    - Aggression rating scales



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### Behavior Focused History

- Character
  - Hot or cold?
- Timing
  - Triggered/perpetuated by?
- Frequency
- Duration

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### What is Temperament?

- Stable personality traits traceable from infancy through adulthood
- Some of these traits are noted as more difficult to parent:
  - High intensity
  - More negative moods
  - Irregular patterns
  - Negative first impressions
  - Less readily adaptable to change

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### Temperament and ODD

- Helpful to describe ODD as a mismatch between:
  - Child's temperament (i.e. "Your child would be challenging for any parent to raise")
  - Parents' (& society's) skill set and expectations



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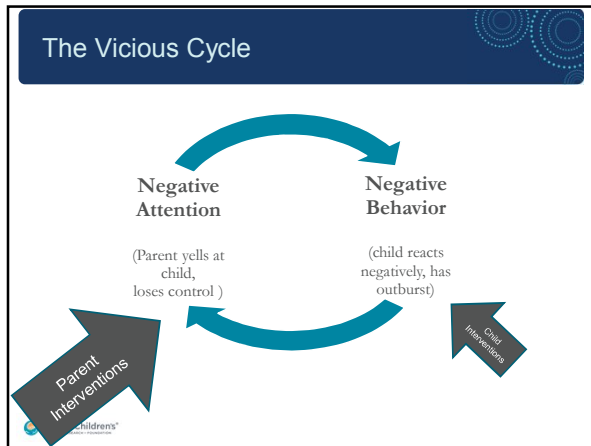
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- ### ODD Treatment
- Behavior management training
    - Need to engage parents in care for a chance of success
  - Offer parent support, as an un-nurtured parent will struggle to help their difficult child
    - Parenting groups/classes
    - Individual counseling
  - “Special” or “calendar” time for parent and child
    - Praise good behaviors

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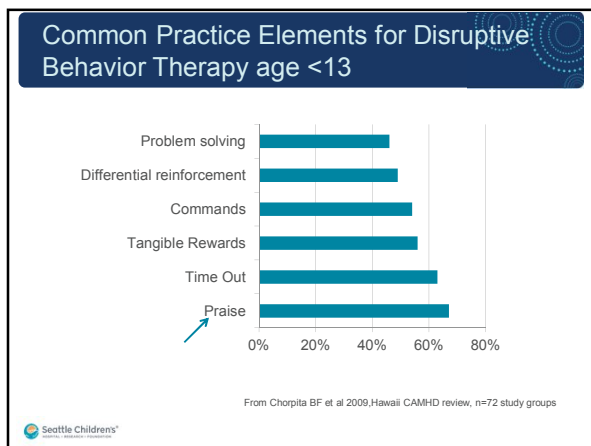
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### Similar Principles, Many Variations

- Functional Family Therapy (FFT)
- Behavior Management Training
- Collaborative Problem Solving
- Problem Solving Skills Training
- Anger Management Training
- Multisystemic Therapy (MST)
- Family Therapy
- Mentoring Programs
- Parent Child Interaction Therapy (PCIT)
- Positive Parenting Program (PPP). . . .



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### Age related psychotherapy choices

- Preschool
  - Behavior management training alone
- School Age
  - Behavior management training
  - School based interventions (social skills groups)
  - Individual therapy (cognitive problem solving)
- Adolescents
  - Behavior management training
  - Individual therapy



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### Other Treatment Strategies

- Treat comorbid conditions (like ADHD)
- Treat learning disabilities
  - Parent asking school for an evaluation
- Treat communication problems (speech therapy, correct hearing problems)
- Encourage pro-social activities
- Address parental MH problems



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### Medications for ODD and Conduct Disorder?

- There are NO FDA approved medications to treat ODD or Conduct Disorder
- Appropriate for treatable comorbidities
  - ADHD
  - Depression
  - Anxiety
  - Irritability associated with autism
- Substance abuse treatment comes before considering meds



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### Hot versus Cold Aggression

- “Cold” aggression is calculating, planned, instrumental to obtain a goal
  - Not reduced by medications
- “Hot” aggression is impulsive, poorly planned, has high CNS fight-or-flight arousal
  - Might be reduced by medications



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### Medication role with “hot” aggression

- Not to be a primary treatment
  - Primary treatment is psychosocial
- If necessary, could consider:
  - Alpha agonists (like clonidine/guanfacine)
  - Antipsychotics (like risperidone) when severe
  - Again, none FDA approved for this indication

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### Relative medication impacts

- Studies of maladaptive aggression:
  - Risperidone studies for Devel Disability, Conduct Dis, ADHD
    - Effect size ~0.9
  - Methylphenidate for ADHD
    - Effect size ~0.9
  - Alpha2 agonist for autism or ADHD
    - Effect size ~0.5
  - Atomoxetine for ADHD
    - Effect size ~0.2

Seattle Childrens® E Pappadopoulos et al 2006

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### Key Points: Why Do Kids Have Aggression?

- Triggered by environment
  - i.e. family and school stress, trauma
- Facilitated by a disorder
  - i.e. depression, ADHD, panic disorder
- Facilitated by one's biology
  - i.e. genetics, in utero events, temperament
- Child finds is the best way to obtain a goal
  - i.e. has poor language ability

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### Key Points with Externalizing Problems

- Best intervention is with child's environment rather than relying on child self-reflection to change
- Self-help parent readings/videos can help motivated parents
- Look for treatable comorbidities (i.e. ADHD)
- Resolve any recurring conflicts (i.e. bullying)
- Medications usually not the answer for ODD/conduct disorder

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### What About Bipolar?

- Has been a controversial child diagnosis
  - Without clear manic episodes of days duration, a child bipolar diagnosis is not reliable
- Label has been given to impulsive, chronically irritable, aggressive kids
  - Usually no classic mania has occurred
  - Future prognosis rarely is to develop true bipolar



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### Irritability does not yield Adult Bipolar Disorder

- Random community sample of 631 children at age 14, followed to age 33
  - Parent reported irritability in adolescence
  - Adult diagnostic interview of psychopathology
- Childhood irritability problems...
  - Did not predict adult bipolar disorder
  - Did predict other disorders
    - 33% higher risk for depression
    - 72% higher risk for GAD
    - 81% higher risk for dysthymia



Stringaris et al, 2009

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### Definition of Mania (DSM-5)

- >1 week episode of irritable or expansive mood
- At least 3 of the following (4 if *only* irritable mood)
  - Distractible
  - Indiscretions
  - Grandiose
  - Flight of ideas
  - increased goal directed Activities
  - little need for Sleep
  - Talkative
- DIGFAST Mnemonic



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### What DSM-5 changed about the Mania Definition

- Increased the required level of increased energy/activity symptoms
  - Now this must be present "most of the day, nearly every day"



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### "Rapid Cycling" Bipolar

- **4 or more distinct, full criteria manic, hypomanic, or depressive episodes in < 1 year**
  - Rapid cycling is rare in adults
- Kids are naturally more mood reactive, thus may hear a story of "rapid cycling"
  - Rarely fits the actual definition above
- Consider "rapid cycling bipolar" in kids only if:
  - Mood episodes are sustained (not labile)
  - No triggers identifiable for mood changes



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### Disruptive Mood Dysregulation Disorder (DMDD)

- An evolution of the Severe Mood Dysregulation research label
- Chronic, severe, persistent irritability
- Temper outbursts
  - grossly out of proportion to the situation
  - developmentally inappropriate
- Persistently irritable or angry mood in between temper outbursts, present most of the day, nearly every day, and noticed by others



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### DMDD diagnostic criteria

- Severe temper outbursts
  - > 3 episodes per week
  - Outbursts occur in multiple settings
- Persistently negative mood between outbursts
- Duration > 12 months
  - No remissions of >3 months
- Child is > 6 years old
  - Onset before age 10
- No manic episodes (defined as >1 day) within the year



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### DMDD is a *mood* diagnosis

- ODD/Conduct are disruptive behavior diagnoses
  - May help to differentiate
- *Clinical course and treatments are not known*
  - Care controversies still exist around DMDD
    - Maybe SSRI, maybe antipsychotic, maybe CBT...
  - I recommend caution about using this new label



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### Two Sample Case Scenarios



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### Case 1

- 3 year old girl
- Behavior problems in daycare
  - Hitting and biting other kids
  - Mom says she has been "kicked out"
- Often hits or pushes her parents when she wants something
- Other kids don't like to play with her
- You note it is often hard to understand when she speaks
  - parents say they can understand her OK



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### Case 1: continued

- Parents describe her as very active, difficult to contain
- Has an older brother with ADHD who was improved by methylphenidate
  - Parents wondering if she has ADHD too
- Parents have a history of conflict with each other
- Dad lost his job about 5 months ago, is looking for work



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### What might you do?



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### Some suggestions

- At her age, communication skills a big reason for oppositionality
- Poor speech a concerning sign
  - Parents will fill in the blanks of communication
- Until know if she can hear and communicate effectively verbally, other diagnoses are suspect
  - Recall poor communication is a core trigger for aggression and oppositionality



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### Communication Evaluation

- Hearing evaluation
- Speech therapist evaluation
  - Consider if has low IQ
  - Consider a school referral for education evaluation
    - Older than 3, so can't access "early intervention" program



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### Case 2: Acting out

- 4 year old boy
- Often hits other children
- Breaks toys when angry
- Threw crayons at mom yesterday during tantrum after she said he couldn't have candy
- Tantrums easily, often last for 30 minutes
  - Mom very concerned he won't apologize to her
  - Almost always tantrums if a limit is set



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### Case 2: continued

- Dad travels for construction work jobs
  - Described as having been oppositional himself
  - Mom stressed by not having consistent help
- No traumatic experiences reported
- Child is very physically active
  - Climbs on furniture, counters
  - Mom says spanking doesn't help
- Speech is normal, no developmental delays
- Between episodes mood is OK



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### Case 2: continue

- ADHD rating scale positive for hyperactivity symptoms, marginal for inattention
  - Mom was the only rater



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### What might you do next?



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### Some suggestions:

- Get more collateral information
  - Rating scales can help
- Hyperactivity in only one setting is not ADHD
  - Two or more settings
- Inform parent that age under 5 makes ADHD diagnosis less reliable




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### Functional Analysis of Behavior

- What happened? , then what happened?
- Ask mom details about the most recent tantrum
  - Setting (how the day was going— "not well")
  - Immediate Trigger (i.e. told no candy)
  - Immediate response to the behavior (yelled at him "I said no!")
  - Next actions
    - He throws crayons at her
    - The two argue and yell at each other
    - Eventually he gets a treat to "get him to stop"




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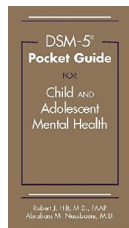
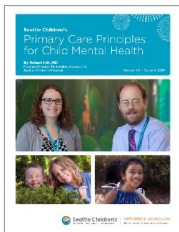
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### Discussion

- [Robert.hilt@seattlechildrens.org](mailto:Robert.hilt@seattlechildrens.org)
- [www.seattlechildrens.org/pal](http://www.seattlechildrens.org/pal)




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