Disruptive, Impulse-Control, and Conduct Disorders (and DMDD)

RC Rounds – Dr. A. Jewett

Overview

Disruptive Mood Dysregulation Disorder (note – a depressive disorder)

Oppositional Defiant Disorder

Intermittent Explosive Disorder

Conduct Disorder

Antisocial Personality Disorder

Pyromania

Kleptomania

Other Specified Disruptive, Impulse-Control, and Conduct Disorder

Disruptive Mood Dysregulation Disorder

- Severe **recurrent temper outbursts** manifested verbally (ie. Verbal rages) and/or behaviorally (ie. Physical aggression toward people or property) that are grossly out of proportion in intensity or duration to the situation or provocation
- The temper outbursts are **inconsistent with developmental level**
- The temper outbursts occur, on average, **three or more times per week**
- **The mood between temper outbursts is persistently irritable or angry most of the day, nearly every day, and is observable by others (teachers, parents, peers)**
- Has been present for **12 or more mo** without 3 or more months without all of the above sx
- Present in at least **two of three settings** and severe in at least one of these
- **Should not be made for the first time before age 6 or after age 10**
- By history or observation, age of onset before age 10
- Never been a distinct period lasting more than 1 day during which full symptom criteria for a manic or hypomanic episode has been met
- Does not occur exclusively in MDD, not better explained by ASD, PTSD, separation anxiety disorder, persistent depressive disorder
- **Cannot co-exist with ODD, IED, or Bipolar** but can co-exist with MDD, ADHD, conduct, SUDs
- Symptoms not due to medical condition or substance

Temper tantrums 3 x/wk x 12 mo, 2/3 settings
Dx between 6-10
Persistently irritable mood
Cannot coexist with ODD, IED, Bipolar
Never mania or hypomania

- Bipolar episodic
- These kids are not bipolar – more likely to be MDD, anxiety
- M>F
- 2-5%
- More school age
- Prev higher than bipolar prior to adolescence (and vice versa)
- DMDD – most ODD, only 15% ODD DMDD (strong overlap)

Disruptive Mood Dysregulation Disorder

Core feature is chronic, severe, persistent irritability

Bipolar disorder – episodic bipolar symptoms, different category

2-5%, higher in males and school age children than females and adolescents

Onset before age 10, not before age 6

50% still meet criteria one year later

Rates of conversion to bipolar disorder very low

More at risk of developing unipolar depressive and/or anxiety disorders in childhood

Bipolar rare prior to adolescence with steady increase into early adulthood, DMDD more common than bipolar disorder prior to adolescence and become gradually less common

Predominantly male (bipolar equal genders)

Level of dysfunction comparable to bipolar disorder, suicidality and aggression

Most children with DMDD will also have a presentation that meets criteria for ODD; only 15% of ODD would meet criteria for DMDD

Strongest overlap with ODD

Risk factors:

- Extensive hx of irritability even before criteria met
- May also meet criteria for ADHD, anxiety disorder, MDD
- Similar rates to bipolar for shared genetics of anxiety disorders, unipolar depressive disorders or SUDs
- Both have information processing deficits
- Unique dysfunction in attention deployment to emotional stimuli

Biggest ? – Why not Bipolar
DMDD = more males (bipolar M=F), more common in children, not episodic, persistently irritable mood
Similarities = shared comorbidities (ADHD, anxiety, SUDs), similar level of dysfunction, suicidality, aggression

4 sx from:

- Angry/irritable (loses temper, easily annoyed, resentful)
- Argumentative/defiant (argues with authority, actively defies requests, deliberately annoys others, blames others)
- Vindictive (2 x)

At least 6 mo
Under 5 – most days for 6 mo
5 and up - 1/wk x 6 mo
Cannot coexist with DMDD
Severity based on # settings

Oppositional Defiant Disorder Criteria

- A pattern of angry/irritable mood, argumentative/defiant behavior, or any vindictiveness lasting at least 6 months as evidenced by at least four symptoms from any of the following categories, and exhibited during interaction with at least one individual who is not a sibling
- Angry/Irritable Mood
  - Often loses temper
  - Is often touchy or easily annoyed
  - Is often angry and resentful
- Argumentative/Defiant Behavior
  - Often argues with authority figures or adults
  - Often actively defies or refuses to comply with requests from authority figures or rules
  - Often deliberately annoys others
  - Often blames others for his or her mistakes or misbehaviors
- Vindictiveness
  - Has been spiteful or vindictive at least twice in past 6 mo
- Note: the persistence and frequency of these behaviors should be used to distinguish between normal behavior. For children younger than 5, should occur on most days for at least 6 mo. For 5 and up, should occur once per week for at least 6 mo. Consider developmental level, gender, culture
- Disturbance in behavior is associated with distress in the individual or others in his or her immediate social context
- The behaviors do not occur exclusively during the course of a psychotic, substance use, depressive or bipolar disorder. Criteria must not be met for disruptive mood dysregulation disorder
- Mild – one setting, moderate – two settings, severe – three settings

Most freq setting at home
Look for impairment
Parenting implicated in cause
Comorbid with ADHD and conduct
Increased suicide
M>F prior to teens, 3.3%
Also risk for anxiety, MDD
Angry/irritable sx = emotional d/o
Defiant, argumentative, vindictive = conduct
Different from conduct in that no aggression or destruction

Oppositional Defiant Disorder

May be confined to only one setting, most frequently at home

Not unusual for preschool children to have weekly temper tantrums; only ODD if most days x 6 mo, w other sx, and had impairment (ie. Asked to leave preschool)

More prevalent in families in which child care is disrupted by a succession of different caregivers or in families in which harsh, inconsistent or neglectful child-rearing practices are common

Two of the most common comorbid conditions are ADHD and conduct disorder

Increased risk for suicide attempts

3.3% prevalence, more in M than F prior to adolescence (1.4:1)

Often precedes development of conduct disorder, especially childhood onset

Also risk for anxiety disorders and MDD

Defiant, argumentative and vindictive sx have most risk for conduct

Angry-irritable sx more risk for **emotional disorders**

Increased risk for ASPD, impulse control problems, substance abuse, anxiety, and depression

Consistent over cultures

Different from conduct disorder in that less severe, no aggression toward people or animals, destruction of property, theft or deceit, more emotional dysregulation

ADHD – more likely failure to conform in situations that demand sustained effort or attention

DMDD – more severe, frequent, and chronic temper outbursts

Risks:

- Temperamental: high emotional reactivity, poor frustration tolerance
- Environment: harsh, inconsistent or neglectful child-rearing practices
- **Genetic: lower heart rate, lower skin conductance reactivity, reduced basal cortisol reactivity, abnormalities in prefrontal cortex and amygdala – also in Conduct disorder**

- Behavioral outbursts – verbal or physical twice per week or three outbursts per yr that causes damage or destruction, physical injury
- Beyond provocation, not premeditated (like ASPD)
- At least age 6

Intermittent Explosive Disorder Criteria

- Recurrent behavioral outbursts representing a failure to control aggressive impulses as manifested by either of the following:
  - Verbal aggression (ie. Temper tantrums, tirades, verbal arguments or fights) or physical aggression toward property, animals, or other individuals, occurring twice weekly, on average for a period of three months. The physical aggression does not result in damage or destruction of property and does not result in physical injury to animals or other individuals.
  - Three behavioral outbursts involving damage or destruction of property and/or physical assault involving physical injury against animals or other individuals occurring in a 12 mo period.
- The magnitude or aggressiveness expressed during the recurrent outbursts is grossly out of proportion to the provocation or to any precipitating psychosocial stressors.
- The recurrent aggressive outbursts are not premeditated (impulsive and anger based) and are not committed to achieve some tangible objective like money, power, intimidation
- The recurrent aggressive outbursts cause either marked distress in the individual or impairment in occupational or interpersonal functioning or are associated with financial or legal consequences
- Chronological age is at least 6 years (or equivalent developmental level)
- Not better explained by another mental disorder, medical condition, or effects of a substance. For children 6-18, not part of an adjustment disorder.
- Can be made in addition to ADHD, conduct, ODD, ASD when outbursts are in excess of those usually seen in these disorders and warrant independent clinical attention

Intermittent Explosive Disorder

Associated with MDD, anxiety, SUDs
2.7% prevalence
More in young and low education
Rare after 40
Genetics, trauma, amygdala response, more M, other d/os

Outbursts last for less than 30 min and commonly occur in response to a minor provocation by a close intimate or associate

Core is failure to control aggressive behavior in response to subjectively experienced provocation that would not typically result in an outburst

Mood disorders (unipolar), anxiety disorders, and SUDs are associated with IED but onset typically later on

2.7% prevalence

More in younger individuals and people with low education

Most common in late childhood or adolescence, rarely for 1st time after age 40

Core features are persistent and continue for many years, may be episodic

Risk factors:

- History of physical or emotional trauma during first two decades of life
- First degree relatives, twin studies show substantial genetic influence
- Serotonergic abnormalities, especially in limbic system (anterior cingulate) and orbitofrontal cortex
- Amygdala responses to anger stimuli on fMRI are greater
- Greater in males than females in some studies
- Greater in some cultures (US) than others (Asia, Middle Easy, Romania, Nigeria)
- Greater risk if ADHD, conduct, ODD, ASPD, and BPD

- 3/15 in 12 mo, 1 in past 6 mo
- Aggression to people and animals (bullies, fights, weapon, physical cruelty, stealing, forced sex)
- Destruction of property (fires, destruction)
- Deceit or theft (break ins, cons, shoplifting)
- Serious violations (past curfew or skipping school before 13, run away x 2)
- If >18 - not ASPD
- Childhood (before 10) vs. adolescent onset
- Specify prosocial emotions (2 of) – lack of guilt, lack of empathy, unconcerned RE performance, shallow affect

Conduct Disorder Criteria

- A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of at least three of the following 15 criteria in the past 12 mo from any of the categories below, with at least one criterion present in the past 6 mo.
  - Aggression to people and animals
    - Often bullies, threatens, or intimidates others
    - Often initiates physical fights
    - Has used a weapon that can cause serious physical harm to others (ie. A bat, brick, broken bottle, knife, gun)
    - Has been physically cruel to people
    - Has been physically cruel to animals
    - Has stolen while confronting a victim (mugging, extortion, armed robbery)
    - Has forced someone into sexual activity
  - Destruction of property
    - Has deliberately engaged in fire setting with the intention of causing serious damage
    - Has deliberately destroyed others property (other than by fire setting)
  - Deceitfulness or theft
    - Has broken into someone else's house, building, or car
    - Often lies to obtain goods or favors or to avoid obligations, cons others
    - Has stolen items of nontrivial value without confronting a victim (shoplifting, forgery)
  - Serious violations of rules
    - Often stays out at night despite parental prohibitions before age 13
    - Has run away from home overnight at least twice while living in parental home, or once without returning for a lengthy period
    - Often truant from school beginning before age 13
- The disturbance in behavior causes clinically significant impairment
- If the individual is 18 or older, criteria are not met for ASPD
- Specify childhood onset type (at least one sx prior to age 10), adolescent onset type (no sx before age 10) or unspecified onset
- Specify if: with **limited prosocial emotions** - at least two of following over the past 12 mo
  - **Lack of remorse or guilt** – does not feel bad when does something wrong, lack of concern over negative consequences
  - **Callous – lack of empathy** – disregards and is unconcerned about the feelings of others, cold and uncaring
  - **Unconcerned about performance** – does not show concern about poor performance at school, work, etc., does not put forth necessary effort even when expectations are clear and blames others for poor performance
  - **Shallow or deficient affect** – can turn emotions on or off quickly or use them for gain
- Specify if mild (minimum sx, minor harm), moderate, severe (many symptoms, significant harm)

- Childhood – more male, disturbed peer relationships, ODD, ADHD, WORSE prognosis – ASPD
- Adolescence better, less conduct, less persistence, F=M, but F more substance use
- Limited prosocial emotions = more likely to be aggressive, more childhood
- Perceive others as more threatening than reality
- Higher rates suicide

Conduct Disorder

For estimation of onset, typically 2 years later than actual – important to get collateral

Childhood onset – usually male, physical aggression, disturbed peer relationships, ODD, full criteria often met prior to puberty, ADHD, other neurodevelopmental difficulties → MORE likely to have persistent conduct disorder into adulthood than those with adolescent onset

Adolescent onset less likely to display aggressive behaviors, more normative peer relationships, less likely to persist into adulthood, M=F

Limited prosocial emotions = more likely to engage in aggression planned for instrumental gain, more likely in childhood onset

In ambiguous situations, aggressive individuals with conduct disorder frequently misperceive the intentions of others as more hostile and threatening than is the case and respond with aggression that they then feel is reasonable and justified

Negative emotionality, poor self control, poor frustration tolerance, irritability, temper outbursts, suspiciousness, insensitivity to punishment, thrill seeking, and recklessness frequently co-occur

Substance misuse is often associated particularly in ADOLESCENT FEMALES

SI and completed suicide occur at higher rate

- 4% prevalence
- Rates increase in adolescence
- Rare after 16
- Majority remit
- Early onset worse prognosis, more criminality, more SUDs
- Conduct also increases risk for mood, anxiety, PTSD, psychosis, SSD

Conduct Disorder

Approx. 4% prevalence, consistent across countries

Rates rise from childhood to adolescence, higher among males than females

ODD common precursor to childhood onset

Onset rare after age 16

For the majority, disorder remits by adulthood

Early onset type is worse prognosis and increased risk of criminal behavior, conduct disorder and SUDs in adulthood

Conduct disorder at risk for later mood disorders, anxiety disorders, PTSD, impulse control disorders, psychotic disorders, somatic symptom disorders, and substance related disorders as adults

Start with lying and shoplifting → rape, theft while confronting victim emerges last; if severe occurs early = worse prognosis

Conduct Disorder

Consider context – do not misapply criteria in high crime areas or war zones

Males more fighting, stealing, vandalism, school discipline problems

Females more lying, truancy, running away, substance use, and prostitution

Males more physical and relational aggression, females more relational aggression

More risk taking, early onset sexual behavior, accident rates higher, criminal system

ADHD and ODD both common in conduct disorder, worse outcomes

Also specific learning disorder, anxiety disorders, depressive or bipolar disorders, substance related disorders

Risk factors:

- Females more SUDs, running away, lying, less fighting and vandalism
- More accidents and risk taking
- ADHD and ODD comorbid worse outcomes
- Risks = lower IQ, esp verbal, bad parenting, exposure to violence, fam hx (esp childhood onset), genetics (bio and adopted)
- Interesting physiology = lower heart rate, reduced fear conditioning, lower skin conductance

- Difficult under-controlled infant temperament
- Lower than average intelligence particularly with regard to verbal IQ
- Family level risk factors = parental rejection and neglect, inconsistent child rearing, harsh discipline, physical or sexual abuse, lack of supervision, early institutional living, frequent changes in caregivers, large family size, parental criminality, and certain kinds of familial psychopathology
- Peer rejection, delinquent peers, neighborhood exposure to violence
- Physiology: slower resting heart rate (reliably noted in conduct, not characteristic of any other mental disorder), reduced autonomic fear conditioning, low skin conductance, ventral prefrontal cortex and amygdala
- Genetics = more common in bio and adopted parents with conduct disorder, more in relatives w severe ETOH use disorder, depressive and bipolar disorders, or SCZ or bio parents with a hx of ADHD or conduct disorder
- Family history even more in childhood onset
- Worse prognosis if = childhood onset, limited prosocial emotions, co-occurring ADHD or SUDs

- Pervasive pattern of disregard and violation of rights of others
- Since age 15, at least 18
- 3 of
- No social norms re law, lying, impulsivity, irritability, disregard for safety, irresponsibility, no remorse
- Conduct disorder before 15

Antisocial Personality Disorder Criteria

- In personality disorders section, but closely connected to externalizing disorders in this section
- Pervasive pattern of disregard for and violation of the rights of others, occurring since age 15, as indicated by 3 or more of:
  - Failure to conform to social norms with respect to lawful behaviors
  - Deceitfulness, repeated lying, use of aliases, conning others for personal profit
  - Impulsivity or failure to plan ahead
  - Irritability and aggressiveness as indicated by repeated physical fights or assaults
  - Reckless disregard for safety of self or others
  - Consistent irresponsibility as indicated by repeated failure to sustain consistent work behavior or honor financial obligations
  - Lack of remorse as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another
- At least age 18
- Evidence of conduct disorder with onset before age 15
- Not solely during course of SCZ or bipolar disorder

Glib superficial charm – MCQ
M>>F
More likely to die by violent means
Up to 70% in males with AUD, SUDs
Less with age (esp criminal)
Relatives of F with ASPD higher than M
Also relatives increased risk of SSD (F) and SUDs (M)

Antisocial Personality Disorder

- Collateral very helpful
- May be indifferent to or provide a superficial rationalization for having hurt, stolen, or mistreated someone – ie. Life is unfair, he had it coming, help number one
- Glib superficial charm, can be quite voluble and verbally facile – using technical terms or jargon that might impress someone unfamiliar with the topic
- Lack of empathy, inflated self-appraisal and superficial charm are more predictive of recidivism
- History of many sexual partners, may never have sustained a monogamous relationship
- Irresponsible as parents, malnutrition and neglect
- More likely to die prematurely by violent means
- **Dysphoria, tension, inability to tolerate boredom, depressed moods**
- Lots of comorbidities w other disorders and PDs
- **Likelihood of developing ASPD in adult life is increased if the individual experienced childhood onset of conduct disorder (before age 10 years) and accompanying ADHD, also neglect, abuse, unstable parenting, inconsistent discipline can increase likelihood that conduct disorder will evolve to ASPD**
- 0.2-3.3% prevalence
- Highest prevalence of ASPD (greater than 70%) among most severe samples of males with AUD and substance abuse clinics, prisons, or forensic settings; higher in poverty or migration
- Chronic course but may become less evident or remit as they grow older, especially with criminal behavior
- More common in first degree relatives
- Relatives of females with ASPD higher risk than males
- Biological relatives of individuals of with ASPD are also at increased risk of somatic symptom disorder (females) and substance use disorders (males)
- Both genetic and environmental factors (adopted kids resemble bio parents more, but adoptive family can influence risk of developing PD)
- Much more common in M than F

Deliberate and purposeful fire setting, tension before, pleasure after
Cant be for a purpose (vengeance, gain)
May become firefighter
Comorbid with AUD, ASPD, other SUDs, bipolar, gambling
More M with learning issues
Very rare

Pyromania

- Deliberate and purposeful fire setting on more than one occasion
- Tension or affective arousal before the act
- Fascination with, interest in, curiosity about, or attraction to fire and its situational contexts
- Pleasure, gratification or relief when setting fires or when witnessing or participating in their aftermath
- The fire setting is not done for monetary gain, as an expression of sociopolitical ideology, to conceal criminal activity, to express anger or vengeance, to improve one's living circumstances, in response to a delusion or hallucination, or as a result of impaired judgment (ie. Intoxication, ID, NCD)
- Not better explained by conduct disorder, a manic episode, or ASPD
- Tidbits:
  - Often regular watchers at fires in neighborhoods, may set off false alarms, pleasure from equipment and personnel associated with fire
  - May become firefighters, spend time at fire dept
  - May make considerable advance preparation for starting a fire
  - May be indifferent to consequences of life or property or may derive satisfaction from destruction
  - Often have a current or past history of AUD
  - Lifetime prevalence of fire setting (not pyromania) is 1.13%
  - Most common comorbidities ASPD, SUD, bipolar, pathological gambling
  - As a primary dx, very rare – only 3.3% in criminal system of repeated fire setters
  - Episodic, may wax and wane, more adolescents
  - Associated with conduct disorder, ADHD, adjustment disorder, more in males especially with poorer social skills and learning difficulties

- Stealing, tension before, pleasure after
- Avoid stealing when arrest immediately possible but do not plan
- Depressed or guilty
- Rare in gen pop 0.6%, F>M
- Higher rates of OCD, SUDs, AUD as genetics

Kleptomania

- Recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value
- Increasing sense of tension immediately before committing the theft
- Pleasure, gratification, or relief at the time of committing the theft
- Stealing is not committed to express anger or vengeance and is not in response to a delusion or a hallucination
- The stealing is not better explained by conduct disorder, a manic episode, or antisocial personality disorder
- Tidbits:
  - Objects are stolen despite the fact that they are typically of little value, individual could have afforded to pay for them, may hoard them or return them later
  - Generally avoid stealing when immediate arrest is possible, they usually do not preplan theft or fully take into account chances of being caught
  - No assistance from others
  - Frequently feels depressed or guilty about the thefts
  - Same pathways as behavioral addictions
  - 4-24% of individuals arrested for shoplifting
  - Very rare in general population – 0.3-0.6%, females to males 3:1
  - Often begins in adolescence, can be sporadic with brief episodes and long remissions or chronic
  - First degree relatives have higher rates of OCD, SUDs, AUD
  - Can be associated with compulsive buying as well as depression, bipolar, anxiety, eating disorders (bulimia), PDs, SUDs, and other DIC disorders

ADHD present = stimulants → non-stimulants → risperidone → ?VPA
No ADHD = risperidone → VPA

Pearls from London Review Course

- DDX for ODD = conduct disorder, ADHD, mood disorders, disruptive mood dysregulation disorder, IED, ID, language disorder, social anxiety disorder, trauma
- **70% have comorbidities → ADHD most common, then conduct, anxiety, MDD, SUDs**
- **Increased likelihood of ODD → Conduct = childhood onset, defiant, vindictive, argumentative, severe sx, males, comorbid ADHD**
- Increased likelihood of anxiety disorders and MDD → angry, irritable subtype and girls
- CD risk factors = harsh discipline, physical/sexual abuse, lack of supervision, poor school achievement, under controlled infant temperament, lower IQ, especially verbal
- X linked monoamine oxidase A also associated with conduct disorder
- **Bad Prognosis (ie. Conduct → ASPD) = childhood onset, limited prosocial emotions, comorbid ADHD and SUD, poor language skills, lower IQ**
- Comprehensive diagnostic assessment is paramount
- Treatment:
  - Prevention
  - **Family engagement**
  - Thorough evaluation with collateral information
  - Children's aggression scale, outburst monitoring scale
  - Crisis planning
  - Younger children (under 8) → parent management training, multicomponent treatment (parent component most effective)
  - Older children (over 8) → family therapy (multisystemic therapy), individual therapy (CBT, problem solving skills)
  - **Parent management training – more focus on prosocial behaviors, less attention to undesired behaviors**
  - **Strongest evidence for multisystemic therapy – intensive intervention with youth and family, 4 mo, multiple times per week = social skills training, CBT, parent management, school supports, peer group, pharmacotherapy**
  - **Group treatments, restriction approaches, wilderness camps not supported in evidence (concerns over increase in aggression in groups)**
  - Pharm is second line after psychosocial interventions, treat comorbidities
  - If ADHD plus ODD or CD, use stimulants then atomoxetine or guanfacine/clonidine
  - If no ADHD, risperidone has conditional recommendation for use, but try to taper after 3 mo
  - **Don't use quetiapine, lithium, carbamazepine, or Haldol**
  - Some evidence for valproate in aggression
  - Always try stimulants first if ADHD

Under 8 – parent management training
Over 8 – multisystemic therapy, brief strategic family therapy, individual

33.3% ODD → CD
40% CD → ASPD

Toronto Review Course

- **1/3 of ODD develop CD**
- Avoid benzos in conduct disorder – may increase rate of crimes
- **40% of conduct disorder develop ASPD**
- For treatment of conduct, find non-criminal thrills like roller coasters
- May need hospitalization in crisis

Resources

- DSM V
- Dr. Vetter London Review Course
- Dr. Gajaria Toronto Review Course