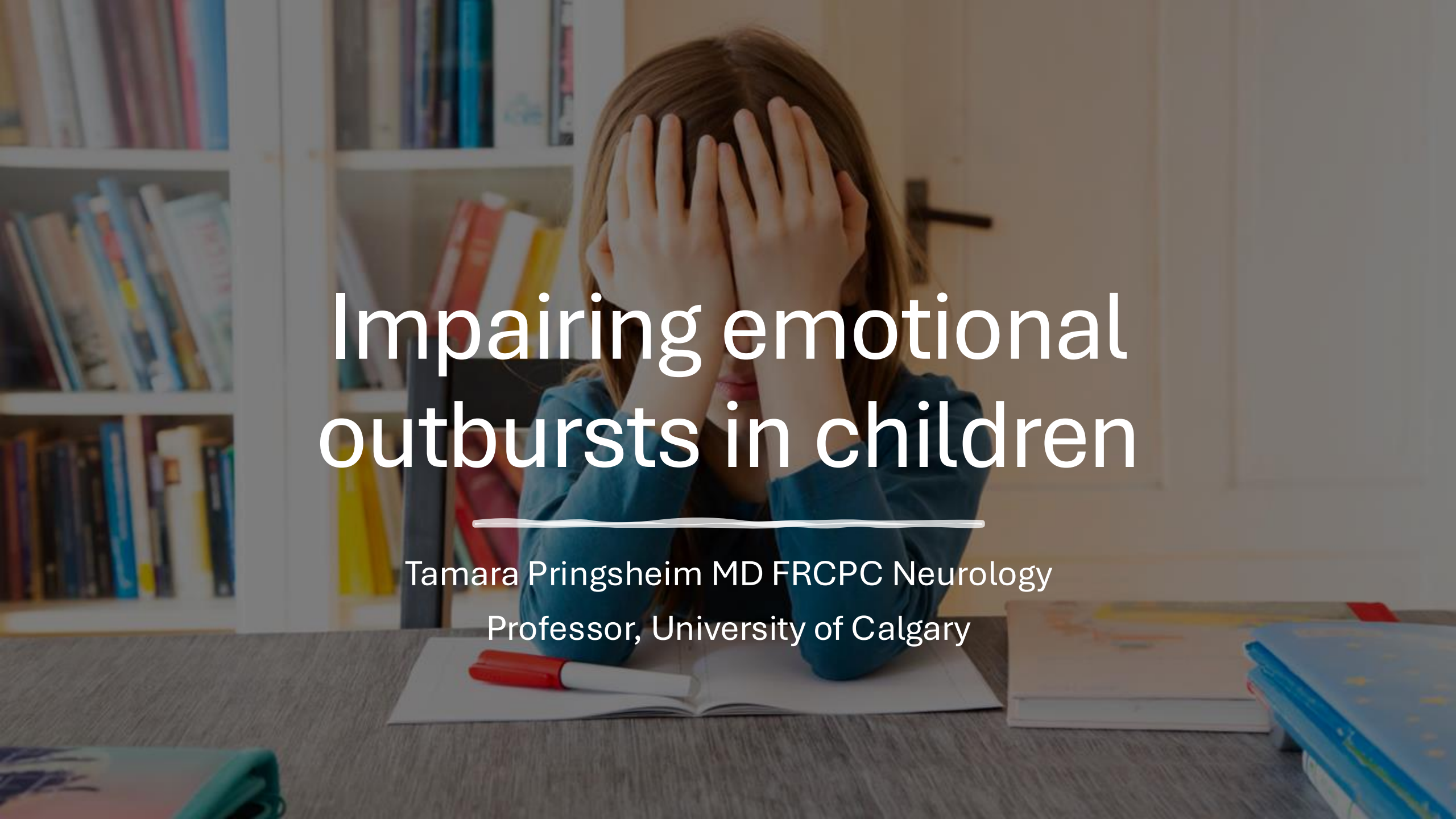

Impairing emotional outbursts in children

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Objectives

- To define and describe the clinical features of impairing emotional outbursts in children
- To outline principles of assessment and treatment in the out-patient setting

Michael

- 8 year old boy with diagnosed ADHD
  - Performing well academically
  - Lives with both parents and younger sibling
  - On no medical treatment
- Michael's parents are concerned about "rage attacks" which occur at least three times a week
- Minimal provocation required
  - Parents saying "no" to requests for more computer game time
  - Change in plans
  - Broken toy

Michael

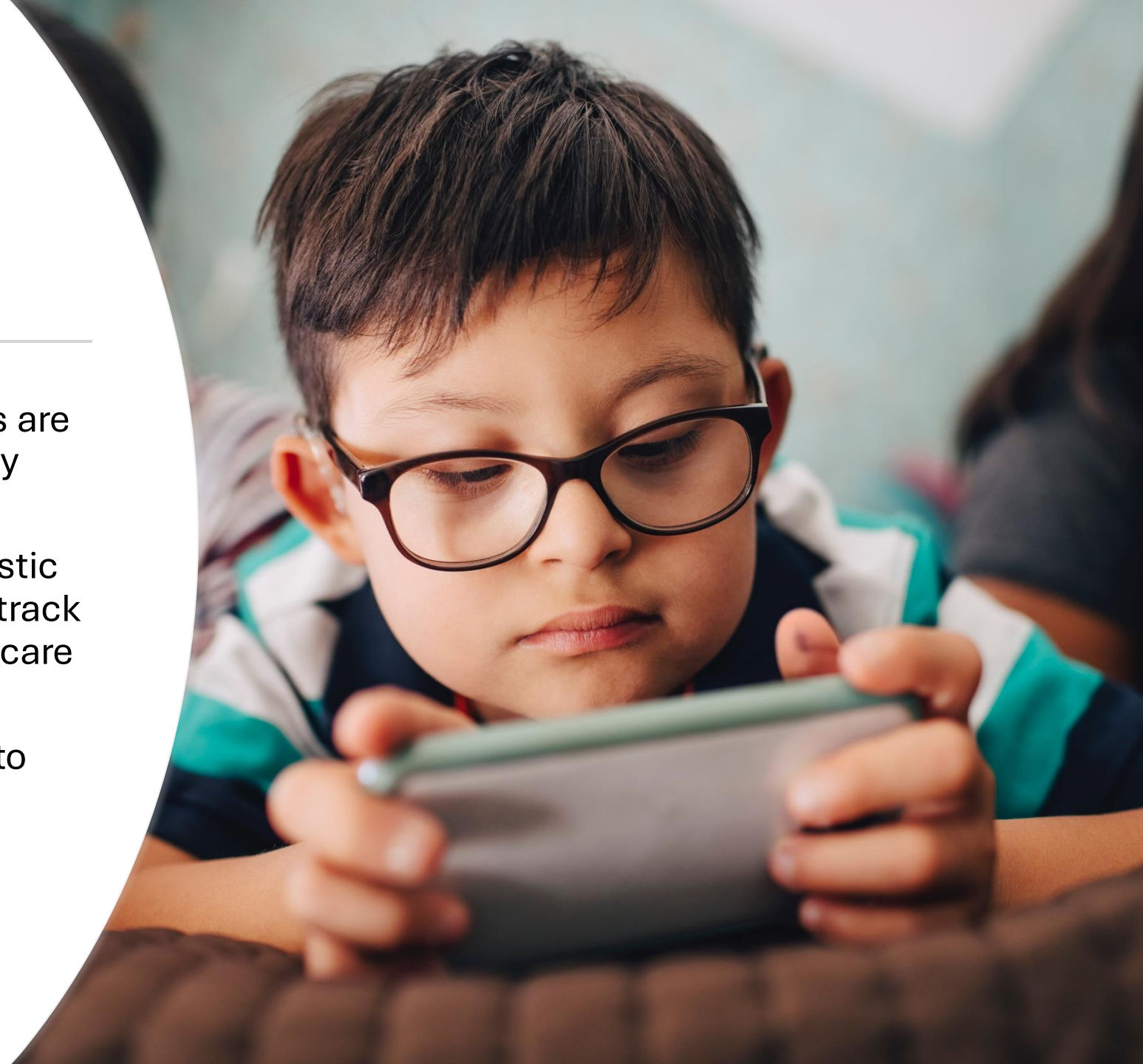
- Rage attacks typically last 30-45 minutes
- During the attacks, Michael
  - Yells
  - Cries
  - Throw objects at parents, breaks things, slams doors
  - Expresses remorse afterwards
- Attacks typically only occur at home, with family members
- Michael's parents are concerned and are looking for advice on how to help him

What are impairing emotional outbursts?

- Recently defined by the American Academy of Child and Adolescent Psychiatry task force
- Episodes of
  - Developmentally inappropriate displays of anger or distress
  - Manifested verbally and/or behaviourally with physical aggression toward people, property, or self
  - Are grossly out of proportion in frequency, intensity, and/or duration to the situation or provocation
  - Lead to significant functional impairment
- Definition has been approved by the American Psychiatric Association DSM-5 Task Force as an R code
- R codes encompass symptoms signs and abnormal clinical and laboratory findings, not elsewhere classified

Why the new definition?

- Outbursts in children and adolescents are common, transdiagnostic, and variably defined
- Lack of explicit definitions and diagnostic nosology makes outbursts difficult to track and study across different systems of care
- Impairing emotional outbursts cause significant family stress and can lead to emergency departments visits and inpatient hospitalizations



History of emotional outbursts in DSM-5

- Disruptive Mood Dysregulation Disorder (DMDD)
  - Criteria include severe recurrent temper outbursts manifested verbally and/or behaviourally that are grossly out of proportion in intensity or duration to the situation or provocation
  - Classified as a mood disorder
  - Outbursts that occur fewer than 3 times per week and/or are not associated with persistent irritability between episodes do not meet criteria for DMDD
- Intermittent Explosive Disorder (IED)
  - Recurrent behavioural outbursts representing a failure to control aggressive impulses
  - Diagnosis excluded if outbursts occur in the context of other psychiatric conditions
- Term **Impairing Emotional Outbursts** intended to capture clinically significant outbursts across disorders or clinical presentations except for DMDD or IED

History of emotional outbursts in ICD-11

- Temper outbursts defined as part of Oppositional Defiant Disorder (ODD)
- ODD may manifest with or without chronic irritability and anger
  - Characterized by negative mood
  - Often accompanied by regularly occurring severe temper outbursts that are grossly out of proportion in intensity and duration to the provocation
- ODD in DSM-5 requires “often loses temper” rather than temper outbursts

Impairing emotional outbursts

- New definition recognizes that impairing emotional outbursts occur in other psychiatric and neurodevelopmental disorders, as well as in nonclinical samples
- Established definition is needed to allow clinicians and systems of care to characterize the frequency, severity, duration and functional impact of outbursts
- Until this new definition is incorporated into research, information on the nature, course and treatment of outbursts must be extrapolated from studies of related behavioural and emotional symptoms, including at least **4 different but overlapping constructs**

1. Irritability

Many definitions

Symptom of many disorders

Characterized by excessive reactivity to negative emotional stimuli with an affective component – anger, and a behavioural component – aggression

Two dimensions

Tonic – easily annoyed, grouchy

Phasic – outbursts, loses temper, becomes verbally or physically aggressive

2. Anger

Intense emotional state associated with a strong, uncomfortable and noncooperative response to a perceived provocation, hurt or threat

The affective component of irritability

When unregulated, leads to aggression

3. Aggression

Behaviour that is intentionally carried out with the proximate goal of causing harm to another person who is motivated to avoid that harm

Proactive aggression: observable response to an environmental event, low emotionality and high levels of instrumentality to obtain benefits

Reactive aggression: an angry response to provocation or frustration, often results in behaviours characteristic of outbursts

temper tantrums, yelling, damaging things, hitting

4. Emotional dysregulation

Characterized by too much emotion, too quickly and for too long relative to the antecedent triggering event

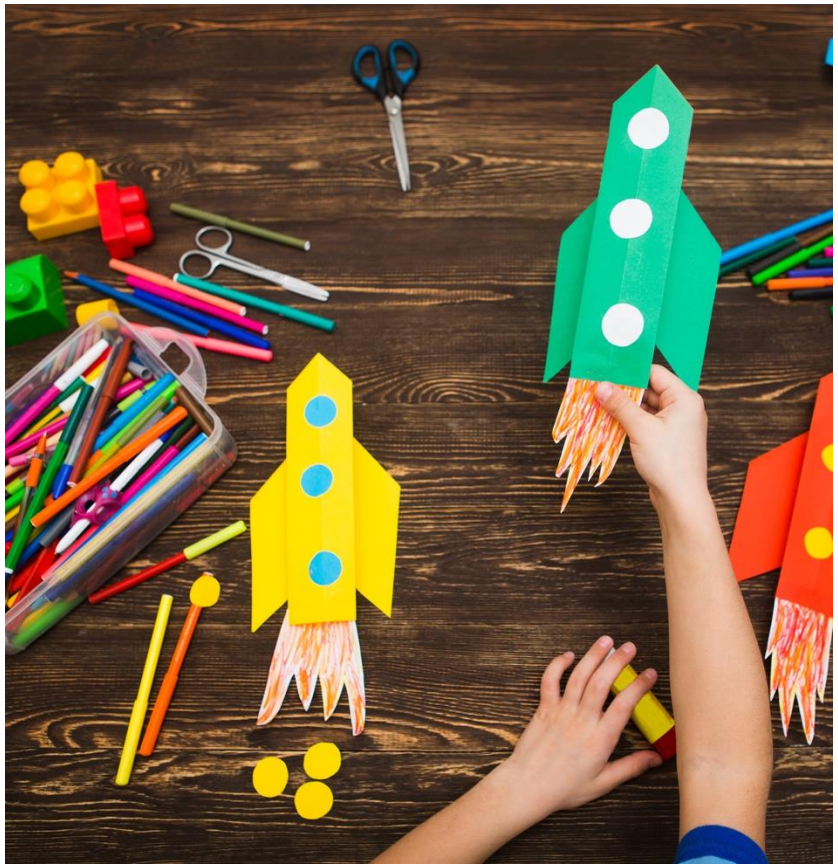
Anger dysregulation is the core feature characterizing outbursts

Outbursts in nonclinical samples

- Preschool children
- Tantrums: uncontrolled outbursts or anger and frustration
- Reported in >80% of preschoolers
- Mean duration
  - 2 minutes at 18 months
  - 4-5 minutes at 3-4 years
- Low level symptoms considered normal
- Severe symptoms defined by
  - Daily occurrence
  - Duration > 5 minutes
  - Significant aggression with nonparent adult

Outbursts in nonclinical samples

- Predictors of persistent tantrums or developing DMDD after age 6 years
  - Outbursts at least three times a week
  - Periods of extreme anger and inability to calm down
  - Tantrums outside of familiar surroundings with unfamiliar people
  - Tantrums for no apparent reason at least monthly
- Prevalence of tantrums decreases with age
  - Frequent severe tantrums reported in 7% of school aged children (9-13)
- Gender differences in prevalence of impairing emotional outbursts become more prominent in school age children
  - Boys >>> Girls



Outbursts in clinical samples

- Outbursts typically related to
  - Precipitants and risk factors specific to the child
    - Anxiety
    - Fear
    - Anger
    - Poor impulse control
    - Sensory overload
  - Environmental exposures
    - Trauma
    - Domestic violence
  - Specific interactions
    - Parent-child
    - Peer conflicts
- Core criteria of psychiatric or neurodevelopmental disorders

Outbursts in clinical samples

- Outbursts are frequently seen in psychiatric and neurodevelopmental conditions
  - ADHD
  - ADHD with comorbid ODD/CD
  - Autism
  - Tourette syndrome
  - Obsessive-compulsive disorder
  - Anxiety disorders
  - PTSD
  - Depression
  - Mania
  - Psychotic illness

Outcomes

- Berkley Longitudinal study evaluated life course patterns in 40 year old adults who were explosive at age 10
- Explosive behaviour was associated with
  - Poor educational and occupational outcomes
  - Downward mobility
- Follow up studies of irritability in childhood predict both internalizing and externalizing disorders in adolescence
- When followed into adulthood, childhood irritability predicts depression, anxiety and neuroticism
- Tonic irritability uniquely predicts depressive & anxiety disorders
- Phasic irritability uniquely predicts substance use disorder, ODD, CD and suicidal behaviours

Assessment

- Most currently available instruments were developed for research rather than practice
- Most measures do not assess specific factors such as the child's level of reactivity, how upset the child gets, the duration of outbursts, or their context
- Free instruments include:
  - Strength and Difficulties Questionnaire (SDQ)
  - Developmental and Well-Being Assessment (DAWBA)
  - Emotional Outburst Inventory (EMO-I)

Treatment Principles

- Goal: to eliminate or significantly diminish impairing emotional outbursts
- Effective treatment begins with a comprehensive diagnostic assessment of the conditions and situations in which outbursts occur
- Use standardized measures to quantify severity and track treatment response
- Functional behavioural assessment
  - Identify factors that trigger outbursts
  - Identify factors that reinforce outbursts

Treatment Principles

- Use interventions that
- Are diagnosis specific
  - e.g. Psychostimulants in child with ADHD for impulsivity, mood stabilizer in youth with bipolar disorder
- IN ADDITION TO
- Transdiagnostic therapeutic strategies
  - Children and youth with impairing emotional outbursts often have complex comorbid symptom presentations
  - Interventions need to be adapted across diagnostic categories
  - Characterizing outbursts as arising solely from a specific diagnosis may obscure functional aspects of the behaviours

Treatment Principles

- Impairing emotional outbursts often represent maladaptive or deficient coping skills
- Deficits in
  - Self-calming
  - Problem solving
  - Communication
  - Interpersonal negotiation
- Outbursts often occur when a child feels overwhelmed in response to frustration regarding the perception of unmet needs and demands

Treatment Principles

- Risk factors that increase vulnerability
  - Impulsivity
  - Developmental lags
  - Recurrent familial conflicts
  - Mismatches in parent-child temperament
  - Trauma
- Patterns of clinically significant impairing emotional outbursts often develop in response to inconsistent, invalidating, coercive and/or chaotic environmental exposures

Treatment Principles

- Disruptive behaviours can
  - Provide an escape from unwanted circumstances or demands
  - Ensure proximity with a desired person, need or outcome
- Children and caregivers may be unaware of these dynamics
- Once established, maladaptive coping strategies often persist unless caregivers change patterns of reinforcement, and the child is taught new skills

Treatment Principles

- Eliminating outbursts requires teaching and reinforcing more adaptive coping and problem solving skills
- Clinicians need to
  - Engage and motivate patients and families to participate in treatment
  - Conduct functional behavioural assessments
  - Use contingency management
  - Self regulation or family regulation skill building
- Goal: to shape behaviours and teach more positive coping skills

Treatment Principles

- Understanding the function of the behaviours is key
- Common goals of outbursts
  - Attention
  - Emotional relief
  - Avoidance
  - Power and control over the environment
- Treatment team must identify modifiable factors that trigger, reinforce, or excuse the behaviours
- Treatment team designs a behavioural intervention plan to promote alternative prosocial strategies while not reinforcing maladaptive behaviours

Psychological therapies

- Behavioural modification and cognitive behavioural therapies (CBT) underlie most evidence-based strategies
- Focus on the family
  - Behavioural management training
  - Parent-child interaction
  - Family therapy
- Focus on the child/youth:
  - Cognitive-behavioural treatment (CBT)
  - Behavioural management training

Psychological therapies

- Dialectical behaviour therapy
- Collaborative problem solving
- Applied behavioural analysis
- Trauma focused CBT

Psychological therapies

- Novel interventions
- Exposure-based CBT
- Identify scenarios that are triggers for the child
- Then use exposure techniques, skill building, and distress tolerance strategies

Group-based parent programs

- To reshape parenting behaviour for increased predictability, consistency, follow-through and more effective discipline
- Strategies vary by child's developmental stage
- Examples: Community Oriented Parent Education Program (COPE), Coping Power, Helping the Noncompliant Child, Incredible Years Parenting Program, Triple P
- Collaborative Problem Solving

Group-based parent programs

- General therapeutic features:
  - Stress management
  - Positive attention/special time
  - Planned ignoring of negative behaviours
  - Verbal directives and clear instructions
  - Establishing rules and expectations
  - Discipline and negative consequences
  - Family problem-solving/communication

Cognitive-behavioural therapy (CBT)

- Helps children develop cognitive/emotional regulation and behavioural skills (e.g., recognizing bias, generating helpful solutions, emotion coping, managing peer interactions)
- Examples: Coping Power, Dinosaur Social Skills Program, Problem-Solving Skills Training, SNAP (Stop Now and Plan)

Coping Power

- Based on social learning theory
- Children meet with a clinician for group sessions once/wk for 1 hr
- Using interactive exercises, children learn strategies to self-regulate emotion, identify social cues, take another person's perspective and problem-solve
- Parallel cognitive-behavioural parent group treatment

Goal-setting

- Children develop weekly goals with help from staff
  - With short- and long-term objectives
- Written on a goal sheet
  - Signed daily by adults and points assigned by staff in group sessions
- Group and individual incentives are offered for meeting goals

Goal-setting

My name is: [redacted]

My long term goal is: To get along better with my brother.

My short-term goals are:

1. Not to yell at him when I become ang
2. No negative physical contact.
3. Use friendly language.
4. Respecting his space.
5. To share more.
6. To trust him.
7. To forgive him.

HOPE TO ACHIEVE THIS GOAL BY: The middle of November

Identifying feelings

- Teach children to:
  - Recognize early signs of anger or “cues” (i.e., internal, external triggers)
  - Practice anger management early, before anger is difficult to manage
  - Recognize and name feelings states (happy, sad, nervous)
  - Recognize the feelings of others as well as their own
  - Read physical cues
    - Facial expression
    - Tone of voice
    - Body positions/movement
    - Internal (e.g., ↑ heart rate, rapid breathing, feeling flushed, sweaty palms, tight muscles, clenched fists)

Managing negative emotions

- Strategies include:
- Distraction
- Deep breathing/relaxation
- Self-statements
- These are practiced during group activities

Perspective-taking

- Helps children understand that people have different views of one situation
- Helps children understand that they themselves can view one situation in different ways

Social problem-solving: The **PICC** model

Problem **I**dentification:

Matthew pushed ahead of me in line at the school bus

What is my goal?

I want my place back in line

How am I feeling?

I'm angry

Choices

Consequences

Pharmacological treatments

- Medication is usually based on treating the underlying psychiatric disorder
  - ADHD – psychostimulants
  - OCD – ERP & SSRIs
  - Anxiety – CBT & SSRIs
- If this fails, add-on pharmacological treatments have been studied
- Strong preference for adding-on psychological interventions prior to using pharmacological treatments, and continuing psychological interventions, even if pharmacological treatments are started
- Will discuss treatments studied in randomized controlled trials

First generation antipsychotics: Aggression

- While evidence supports use, adverse effects discourages routine use
- Haloperidol
  - Conduct disorder
- Molindone
  - Conduct disorder
  - ADHD

Atypical antipsychotics: Conduct Problems, Disruptive and Aggressive Behaviour

- While evidence supports use, adverse effects discourages routine use
- Risperidone
  - ADHD (alone or added to methylphenidate)
  - ODD
  - CD
  - Intellectual disability
- Clozapine
  - CD
- Quetiapine
  - CD
  - Bipolar disorder & disruptive behaviour disorder
- Aripiprazole
  - Autism (irritability)

Other medications: Aggression

- Valproic Acid
  - ADHD & ODD/CD
  - Bipolar disorder & disruptive behavioural disorder
- Lithium
  - Hospitalized patients with CD
  - Severe mood dysregulation

Other medications: Oppositional Behaviour

Psychostimulants	• ADHD • ADHD & ODD/CD • ADHD & DMDD
Alpha agonists (clonidine and guanfacine)	• ADHD +/- ODD
Atomoxetine	• ADHD +/- ODD

Summary

- Impairing emotional outbursts are common in children, in both clinical and nonclinical populations
- Psychosocial interventions are the mainstay of treatment, using transdiagnostic principles
- When needed, pharmacotherapy should target the primary psychiatric or neurodevelopmental disorder