Child Psychiatry

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Objectives

1. To review normal psychosocial development, e.g. development of normal attachment and basic therapeutic strategies to repair attachment problems
2. To review major mental illnesses of childhood. e.g., Attention-Deficit Hyperactivity Disorder, and Autism Spectrum Disorder
3. To review other psychiatric disorders and how they present in child and adolescent patient population.

1.1 Infancy and Early Childhood: Psychosocial Development and Attachment

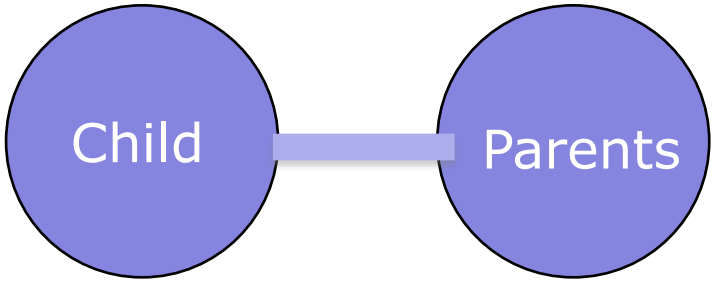
Why is attachment so important?

Many species have young that can survive on their own…

Baby turtle

Q. Can a human baby survive on its own?

A. To survive, a human child must attach to parents (or caregivers)…



Attachment Theory

Definition of Attachment

A biologically rooted [innate] (attachment behavioural system or motivational-control system

Strong emotional bond that matures during the first several years of life, and motivates the young child to:

1. Seek comfort, support & nurturance from Preferred Attachment Figures

2. Balance between:

Approach vs. Autonomy

Need for safety in proximity to a set of preferred attachment figures

Attachment Theory

Secure attachments

- Child with repeated experiences with caregivers who are responsive to their needs and thus expect their caregivers to be available and comforting when called upon
- Leads to resiliency
- Look at any example of a youth/adult who overcame challenges in life, and it inevitably leads to at least secure attachment

Insecure attachment

- Child with experiences in which requests are discouraged, rejected, or responded to inconsistently
- Leads to vulnerability to problems including mood, behavioural

Attachment Theory

Attachment behaviours include:

- Visual searching
- Active following
- Vocal signaling
- Intense protest (crying, yelling, screaming, etc.)
- Clinging
- ‘Worn down’: despair, helplessness, detachment

Attachment Theory

Ainsworth's " Strange Situation." Procedure

A 20 minute lab. procedure to test the infant's response to the reunion with mother and an unfamiliar adult after two brief separations.

Attachment Theory

Strange Situation: (20 min. lab. procedure)

1. Mother & infant introduced to the lab. playroom
2. Unfamiliar woman (stranger) joins them
3. Stranger plays with the infant
4. Mother leaves briefly
5. Mother returns
6. Both Mother and Stranger leave, briefly
7. Stranger returns
8. Mother returns

Attachment Theory

Major categories of Attachment (Strange Sit. Procedure)

(Based on: Amount of exploration, reactions to the departure and return of caregiver)

For One Year Olds:

1. Secure infants: (want proximity, seek it out actively)
2. Avoidant infants: (avoid proximity)
3. Resistant/Ambivalent: (active resistance)
4. Disorganized: [Main & Solomon, 1990]: (no strategy, act confused)

Attachment Theory

Attachment Styles [One Year Olds]:

1. Secure attachment – 55%
2. Anxious-avoidant insecure attachment – 23%
3. Anxious-ambivalent insecure attachment – 18%
4. Disorganized attachment – 15%

[van Ijzendoorn, 1995)

Q. What happens when you consistently meet a child's needs?

Child's working model / schema

View of world: "**The world is a safe place**… I can trust others…"

View of self: "I feel better thus **I am competent**…"

Ainsworth; Bowlby

When a child's needs are not met…

View of world: "**The world is NOT a safe place**… I cannot trust others…"

View of self: "I am a bad person…"

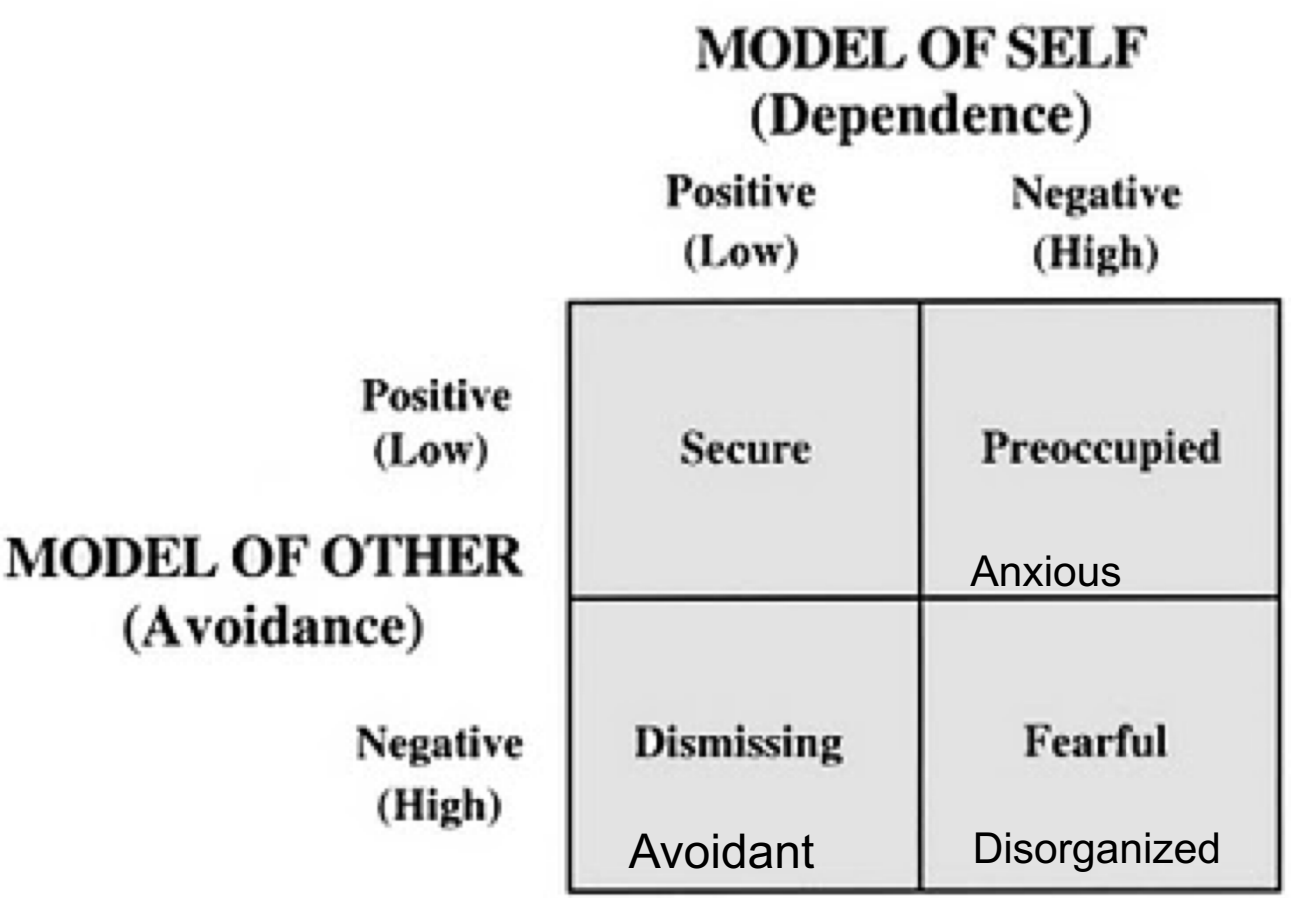
When attachment needs are not met…

Infants who are abandoned and separated from their mothers

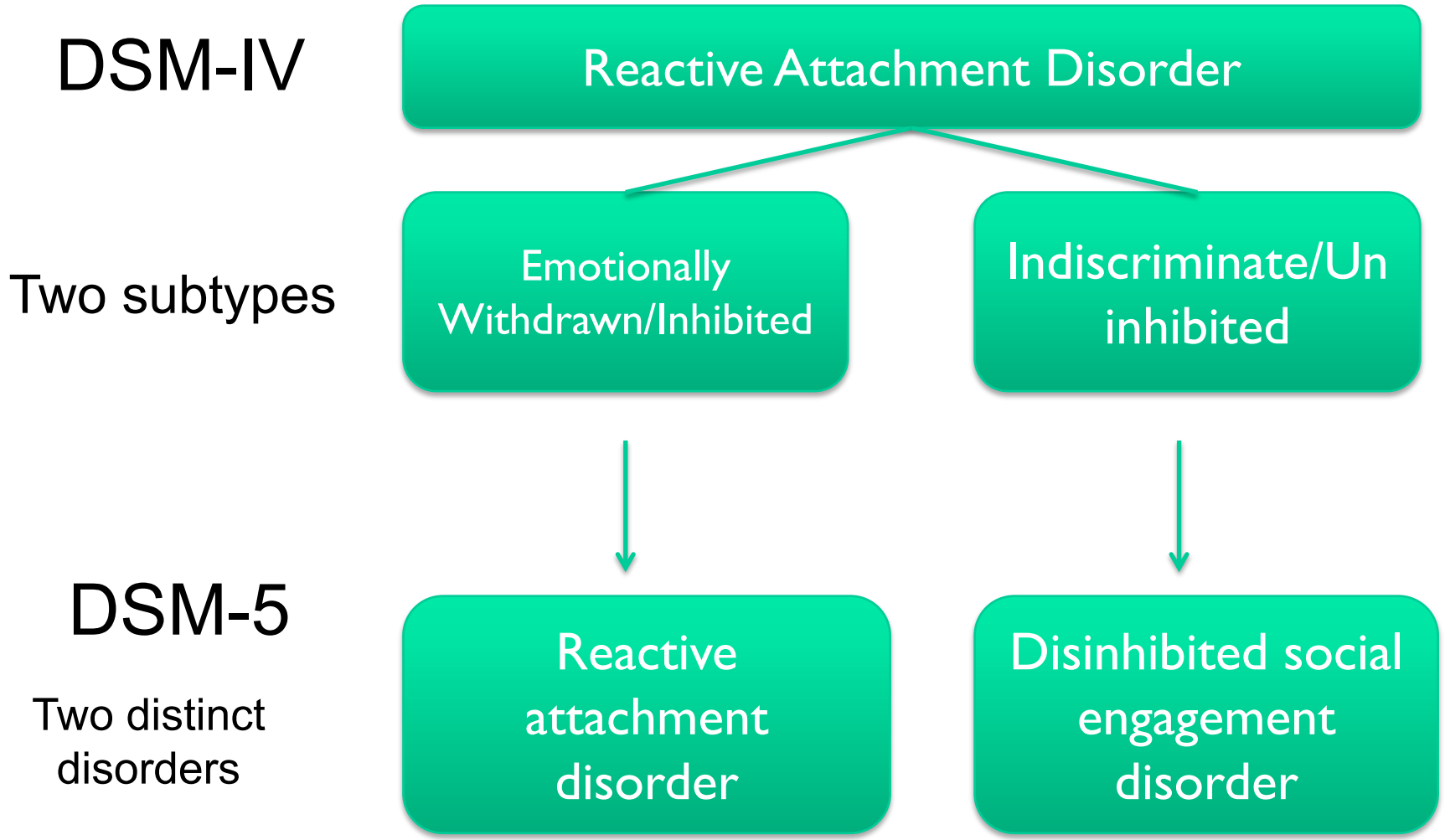
- Become unhappy and depressed, sometimes to the point of panic.
- After long periods of separation and isolation, they show symptoms of either apathy and withdrawal or restlessness, hyperactivity, inability to concentrate, and craving for affection

Improving mother/child interaction, WHO document

View of self/others in different



DSM-IV → DSM-5


DSM-IV
Reactive Attachment Disorder
Two subtypes
Emotionally Withdrawn/Inhibited
Indiscriminate/Un inhibited
DSM-5
Two distinct disorders
Reactive attachment disorder
Disinhibited social engagement disorder

Treatment

Establish an attachment relationship for the child when none exists

Improve disturbed attachment relationships with caregivers when they are evident.

Coercive treatments with children with attachment disorders are potentially dangerous and not recommended

1.2 Attention-Deficit Hyperactivity Disorder (ADHD)

Prevalence of ADHD

- School age children: 6-9%
- Gender differences: 9.0% in boys (4-16 yrs old) and 3.3% in girls (OCHS, 1989)
- More common in males (DSM 5) Children = 2:1 vs Adults = 1.6:1

- ADHD accounts for 30-50 % of mental health referrals (MTA Cooperative Group, 1999)
- ADHD presentation in children: (Polanczyk et al., 2007)
  - Combined (50-75%)
  - Inattentive (20-40%)
  - Hyperactive-impulsive (<5-15%)

Note: females more likely to present with Inattentive presentation

ADHD Diagnostic Criteria (DSM-5)

Persistent pattern of inattention and/or hyperactivity or impulsivity that interferes with functioning or development:

Inattentive symptoms (**≥**6/9), AND/OR hyperactive-impulsive symptoms (**≥**6/9) (for age 17 and older at least 5 symptoms are required)

Several symptoms must have been present <12 y.o.

Several symptoms must be present **≥2 settings (home,** school, work, friends, other activities)

Clear interference in functioning (school, social, family, work)

Symptoms not better explained by another mental health disorder or medical condition

Environmental Factors

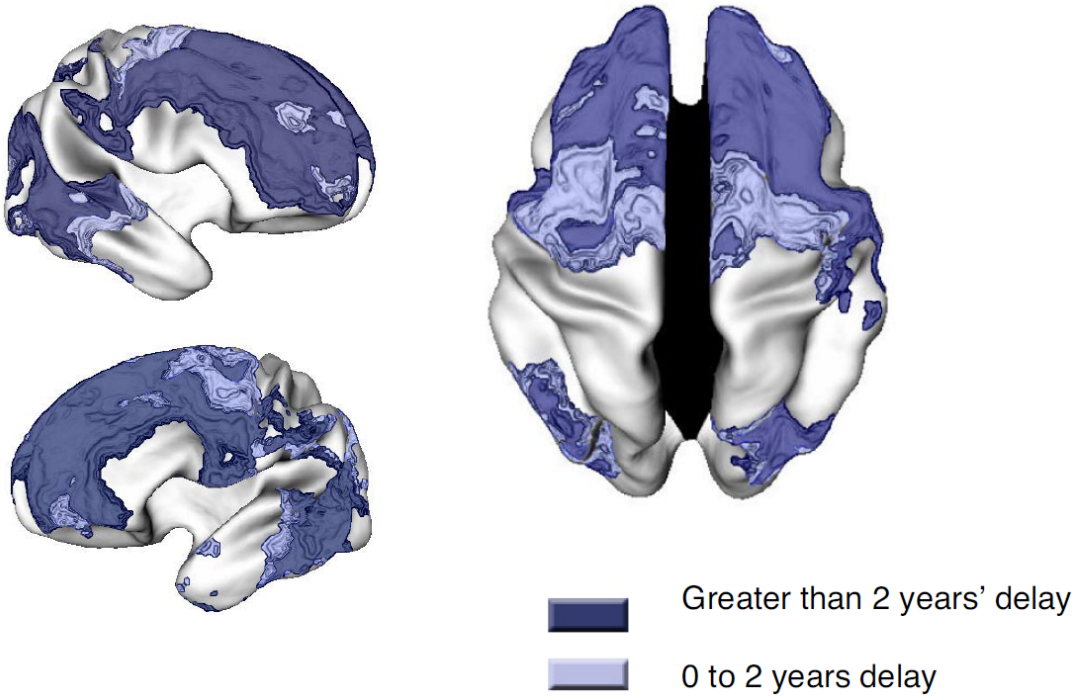
In utero:

- Maternal stress
- Exposure to tobacco, Alcohol, drugs/toxins
- Low birth weight & prematurity

Early Postnatal Exposure to :

- Neonatal anoxia or brain injury
- Exposure to lead and other toxins

Delayed Cortical Maturation in ADHD

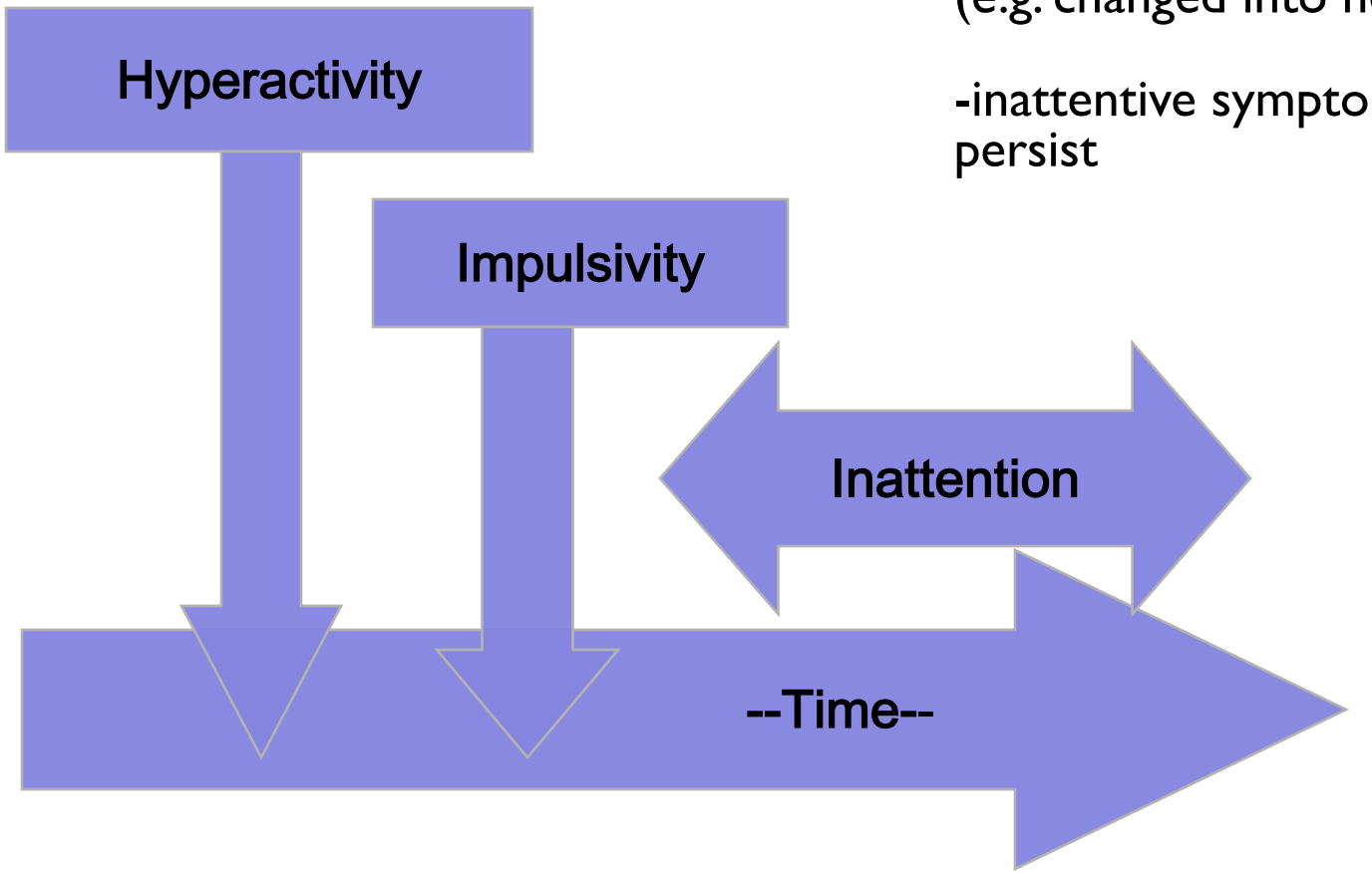


(Shaw et al., 2007)

ADHD Course of the Disorder

Hyperactive-impulsive symptoms are more likely to improve or become internalized (e.g. changed into nervous tension)

-inattentive symptoms are more likely to persist



(Faraone et al., 2005)

Diagnosing ADHD

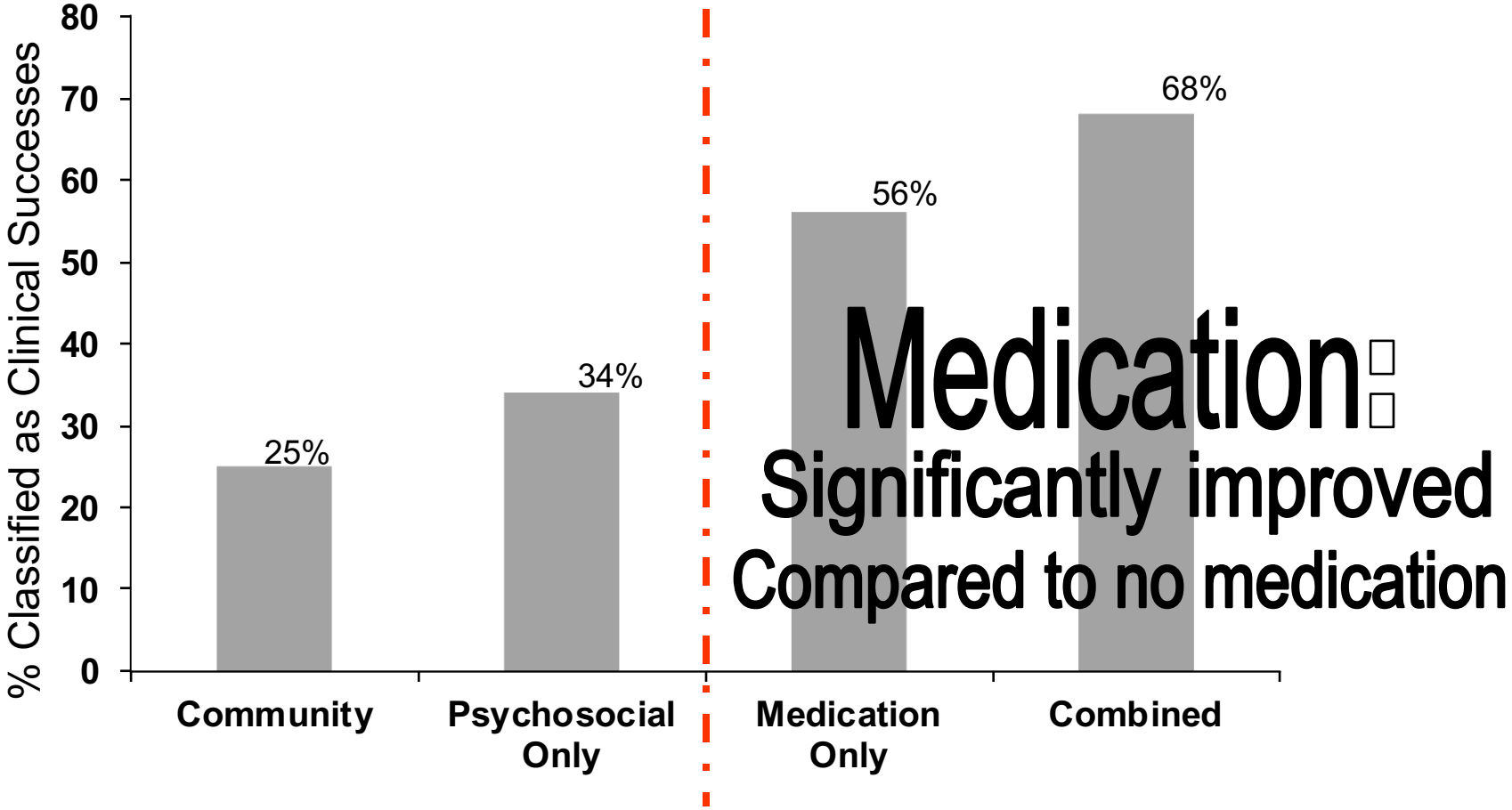
The diagnosis is based on history.

Need information about the individual in more than one setting.

ADHD is a diagnosis of exclusion.

Standardized rating scales and psychological tests can assist but aren't diagnostic.

Percentage of Children Responding to Various Treatments (MTA Results)



(Swanson JM et al.,2001)

Educational/Vocational Accommodations

Developmental neuropsychiatric disorder warranting access to educational accommodations

Academic remediation

Specialized educational placements

Academic/ workplace interventions

Note: see www.caddac.ca

Stimulants

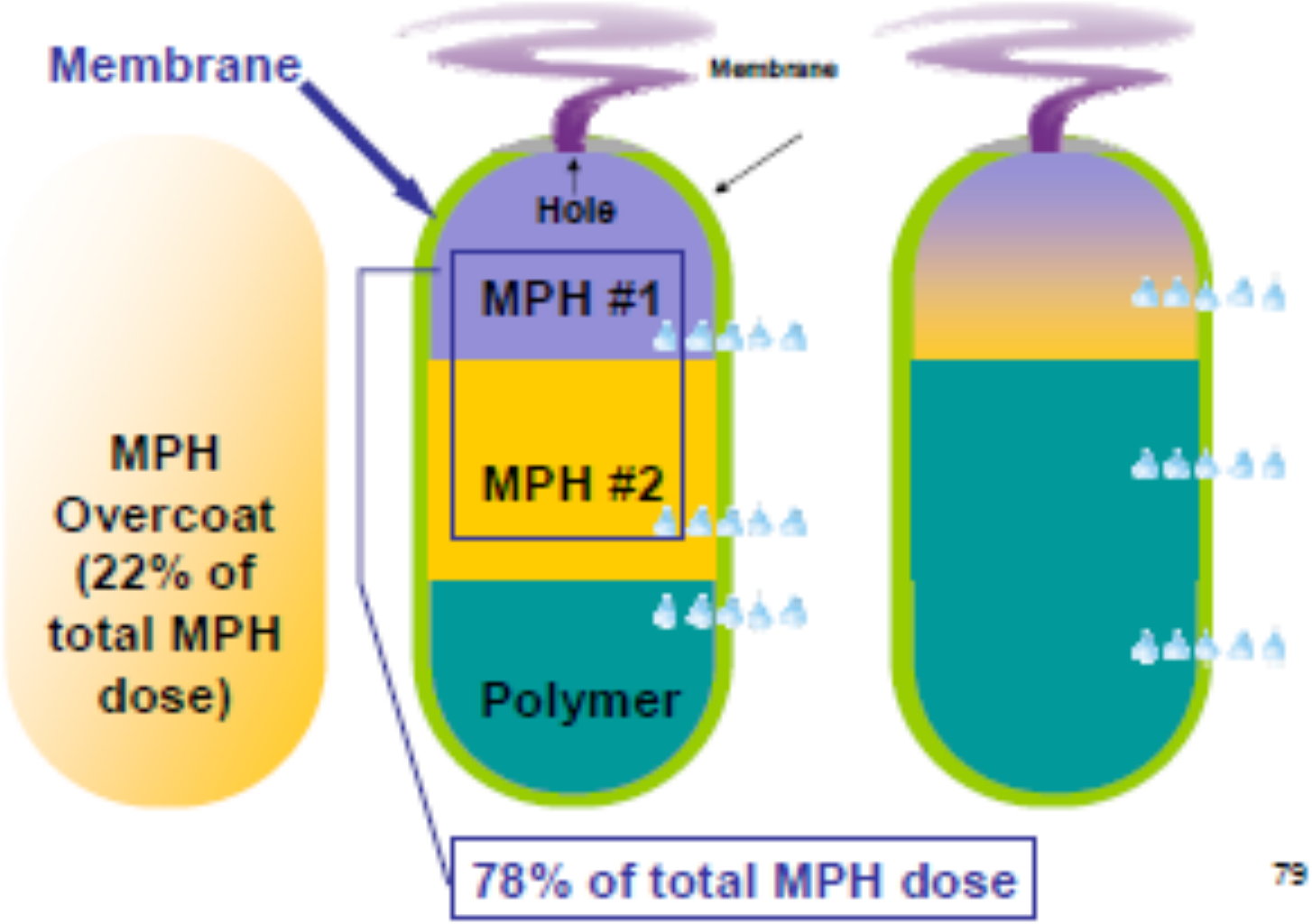
Methylphenidate (MPH)

- Ritalin, Ritalin SR
- Biphentin
- Concerta

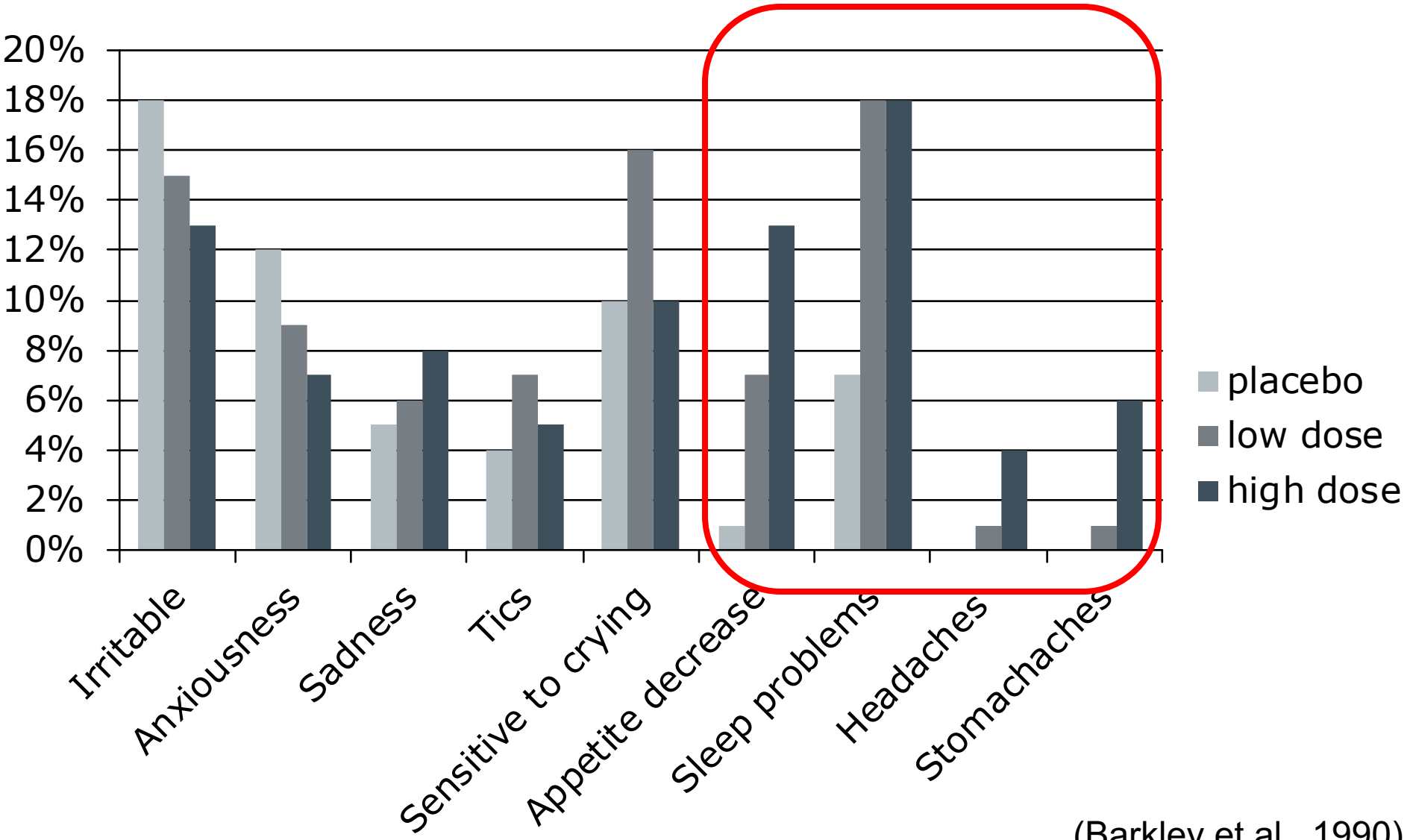
Amphetamines

- Dexedrine (d-amphetamine)
- Dexedrine spansule (d-amphetamine)
- Adderall XR(mixed salts amphetamine [d-amphetamine and amphetamine salts in a ratio of 3:1])
- Vyvanse (Lisdexamfetamine > d-amphetamine)

Concerta (OROS Delivery System)



Side effects of stimulant medication



(Barkley et al., 1990)

Possible Consequences of Untreated ADHD

- Impairments in: academic, occupational, financial & social
- Problems with self esteem/mood/anxiety
- Smoking & SUD
- Accidents : physical & MVA
- Sexual behavior (earlier, ++ partners, STDs, teen pregnancies,)
- Criminality

Break?

1.3 AUTISM SPECTRUM DISORDERS

Case

10 year old boy, parents separated

He refusing to complete school work

He has no friends, feels lonely at recess, he is not interested in extra-circular activities

significant conflict with parents include verbal abuse and destruction of property

difficulties with transitions, seen as being “rigid”, enjoys playing on his X-Box

Ddx?

What questions can you ask to parents/child to clarify the diagnosis?

Autism Spectrum Disorder

- Prevalence ~ **1%** (CDC 1/88) (Can. J. Psych. 55(11), 2010, 715-20; Arch Gen Psyc 2011, 68(5), 459-65)
- Male to female ratio: 4: 1
- < 25% have Intellectual Disability
- Affects social interactions +/- communication, play, interests and behaviour

Natural History and Impairment

- Most people with ASD improve over time; language increases, symptoms decrease but adaptive functioning remains poor;
- 10% free of dx as adults
- Severely affects many aspects of a child's life; emotional, behavioural, medical
- Impact on family; causes more stress on the family than any other disorder of childhood; 1000 extra hours of care per year

ASD – Diagnostic Criteria DSM 5

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following:

1. Deficits in social-emotional reciprocity
2. Deficits in nonverbal communicative behaviors used for social interaction.
3. Deficits in developing, maintaining, and understanding relationships

ASD – Diagnostic Criteria DSM 5

B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following:

1. Stereotyped or repetitive motor movements, use of objects, or speech.

2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior

3. Highly restricted, fixated interests that are abnormal in intensity or focus

4. Hyper- or hyporeactivity to sensory input or unusual interests in sensory aspects of the environment

Early Red Flags: social communication

- Little social smiling
- Limited social eye contact
- Little comfort seeking
- Little separation anxiety
- Limited greeting
- Impaired joint attention

Early Red Flags: non-verbal communication

- Speech delay cut-off: spontaneous 2 word phrases with a verb by 24months
- No pointing
- No change in facial expression
- No gestures
- Can't guess what he/she wants
- Drag by the hand, used as a tool

Evaluation

- Psychiatric History

  -Pregnancy, neonatal and developmental hx, medical hx, family and psychosocial factors, intervention hx
- Observation of child including play
- Collateral of observations of child in social settings
- Physical evaluation

  - identify dysmorphic features, including neurological exam, head circumference,

  - Vision and hearing
- Psychological evaluation

  Cognitive testing, adaptive skills
- Speech/language/communication assessment
- OT evaluation (sensory/motor)

Treatment Plan

- Multimodal
- Establish goals for educational interventions
- Establish target symptoms for intervention

  Prioritize target symptoms and/or co-morbid conditions
- Monitor multiple domains of functioning (behavioural adjustment, adaptive skills, academic skills, social/communicative skills, social interactions)
- Monitor pharmacological interventions for efficacy and side-effects.

ABC's of ABA

ABA uses the following 3 step process to understand behaviour and **teach new skills**:

A: Antecedent/**instruction**

- What happens right *BEFORE* the behavior?

B: Behavior/ **the child's response**

- What the child does.

C: Consequence/ **teacher feedback**

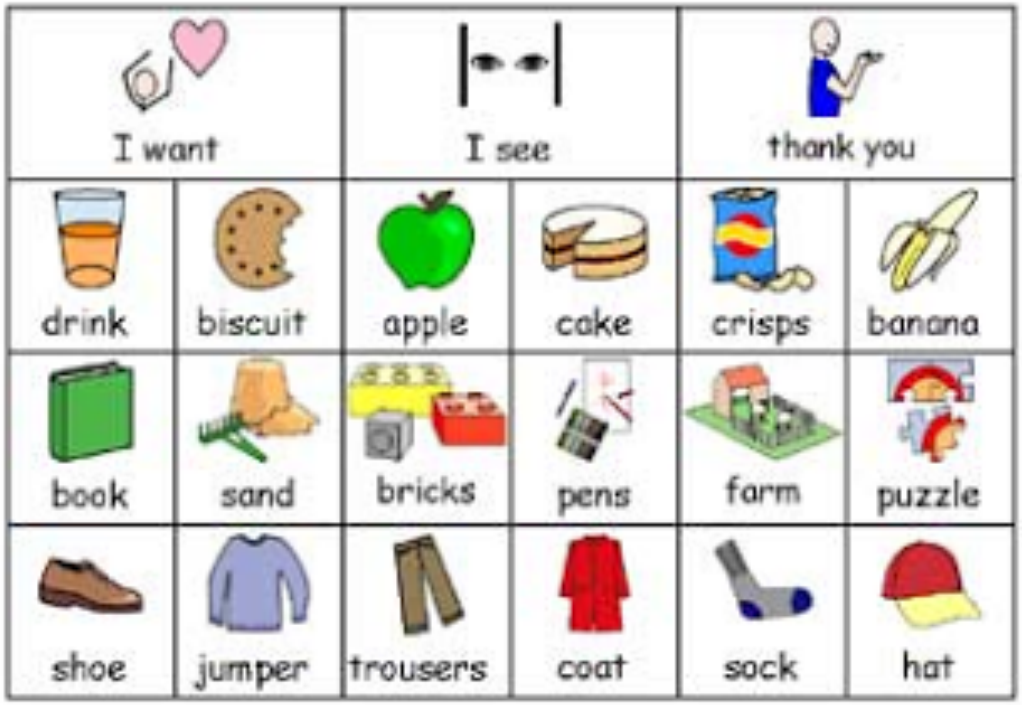
- What happens right *AFTER* the behavior?

Pharmacotherapy

- No treatment for core symptoms of social and relationship problems in Autism
- Risperidone[1] (5-16 y) and aripiprazole[2,3] (6-17 y) are FDA-approved for irritability in children and adolescents with autism
- Periodic attempts to decrease or discontinue medication is prudent since most require long-term treatment.

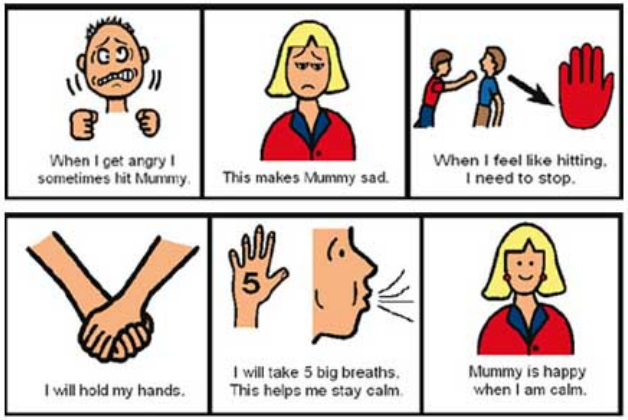
Visual Supports to facilitate Communication

Picture Exchange Communication Systems (PECS). Children are taught to select pictures of desired objects or activities as a way of requesting access to the object/activity



Visual Supports

Social Stories, to increase appropriate behavior by explaining social situation



Snoezelen room

Break?

1.4 Mood Disorders in Children and Youth

Epidemiology of Depressive Disorders (AACAP; NIMH data)

Age	Prevalence	Incidence
Preschool	0.3%	
Childhood (age < 12)	2% M 2% F	1%
Adolescence (age 12-18)	4% M 8% F	3%
Adulthood (age 18+)	2.5-5% M 5-10% F	7%

Cumulative incidence by age 18 = 20%

Etiology


Biological
Psychological
Social
Environmental
Depression

Predisposing and Protective (Resiliency) Factors

Predisposing	Protective (aka Resiliency)
Family history of mental health problems, i.e. genetics	Family history of mental health
Medical problems	Lack of medical problems
Adverse early childhood experiences **•Parental separation/divorce** **•Losses** **•Abuse/neglect** **•Extremes in parenting, e.g. overly authoritarian, or indulgent** **•Poverty** **•Etc…**	Positive early childhood experiences, i.e. positive attachment •Intact family •Emotionally healthy parents •"Ideal parenting", e.g. Authoritative parenting, or attachment-based parenting •Adequate finances and resources

Diagnosis

Disruptive Mood Dysregulation Disorder (DMDD)

DSM-5 Criteria

Severe, recurrent temper outbursts that are grossly out of proportion in intensity or duration to the situation

Occur 3 or more times each week for one year or more

Between outbursts, mood persistently negative (irritable, angry or sad), most of the day and nearly every day

Symptoms must be severe and present in at least two settings (home, school or with peers) for 12 or more months

Onset must be before age 10, in a child at least aged 6

Disruptive Mood Dysregulation Disorder (DMDD)

Rationale for DMDD

- To reduce overdiagnosis of bipolar by providing another diagnostic category
- Longitudinal follow-up of DMDD shows they do not change into bipolar as they age
- Intent of DMDD diagnosis is to capture children with frequent temper tantrums that previously were misdiagnosed with bipolar disorders

DSM-5 Major Depressive Disorder in Children/Youth

↓ mood (or irritable mood or ↓ interest) plus **≥ 4/8 over ≥ 2-** wks of **SIGECAPS**

Sleep

Interest

Guilt

Energy

Concentration

Appetite

Psychomotor agitation

Suicidal ideation

DSM-5 Major Depression in Children/Youth

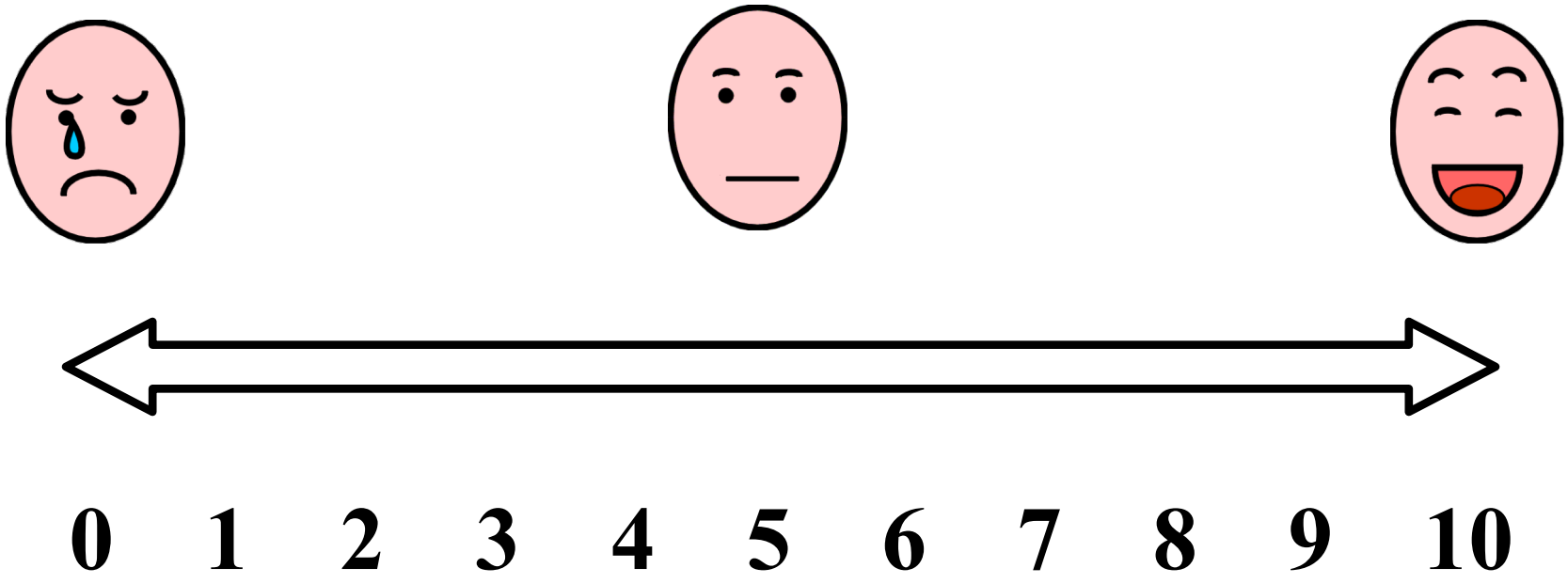
Same criteria as adults, with 2 exceptions:

- Mood state includes irritability
- Weight loss not absolute; failure to make expected gains recognized

Depression in Children/Youth vs. Adults

Children/Youth	Adults
Pt: "Nothing's wrong; its my parents who are the problem"	Pt: "I'm sad all the time and I don't want to feel this way"
May externalize symptoms (e.g. irritability, behavior problems, defiance) May have somatization	More classical internalizing symptoms
Child/youth brought by others to the appointment	Adult patient asks for help
Problems with school, home	Problems with work, school

Mood between 0 and 10



Treatment:

Treatment: Psychoeducation

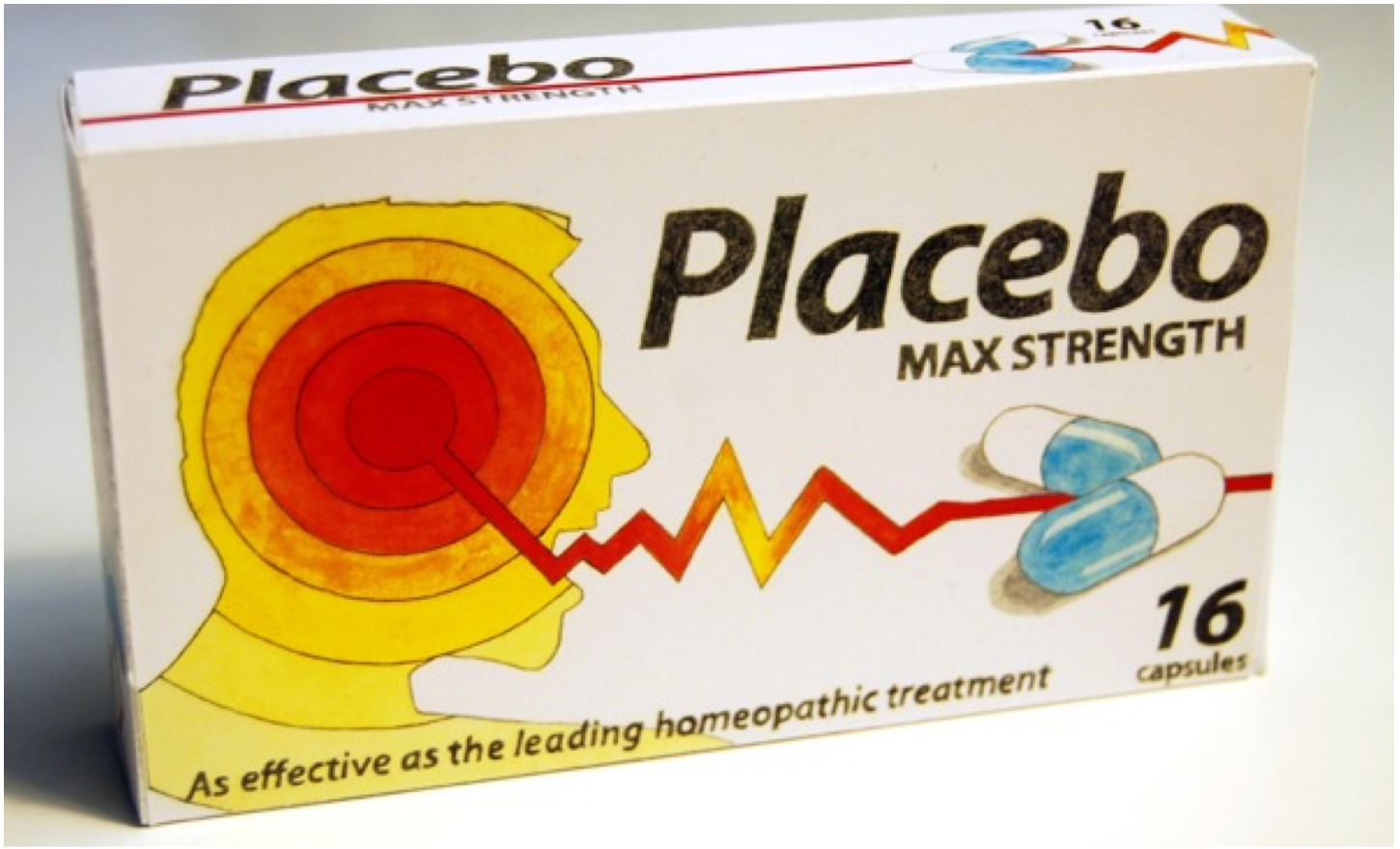
Discuss key concerns such as self-cutting or suicidal ideation

Negative behaviors (such as self-injury attempts) are common in children/youth

Explain that such behaviors are usually an attempt to deal with a stress

Identify the underlying stress/problem, and find healthier ways to cope

A. Placebo has a 35% response rate.



Special thanks to Darren Cullen, designer
http://designyoutrust.com/2013/01/universal-remedy/

Biological Approaches: Medications

Mild to moderate depression

- 1st line
  - Psychotherapy

Moderate to severe depression

- 1st line
  - Medications plus psychotherapy
  - Especially with psychotic depression

Monitoring

- Once weekly for first few weeks when first starting medications as suicidal risk greatest during first 2 weeks

Which antidepressant medication?

First-line: SSRI

- Fluoxetine (FDA approved)

Second-line: Switch to another SSRI

- Escitalopram (FDA approved for youth aged 12-17)
- Sertraline (RCT by Wagner)
- Citalopram (RCT by Wagner)
- Fluvoxamine

Compared to adult psychiatry, there are much less studies in child/youth psychiatry

General Pharmacotherapy Principles

Start low and go slow up to adult dosages

Only make one change at a time

Target symptom clusters, not just the diagnosis

Think Alliance rather than Compliance

Summary

Mood disorders common in children/youth

Early intervention is key to prevent children/youth problems from becoming adult problems

Treatments include

- Mild to moderate depression
  - 1st line: Counseling/psychotherapy, non-medication strategies
  - 2nd line: Add antidepressants

High placebo response rates support the importance of having a good therapeutic alliance

1.5 Oppositional Defiant Disorder and Conduct Disorder

ODD

What are the diagnostic criteria?

Oppositional Defiant Disorder

DSM V:

Key feature

pattern of angry/irritable mood, argumentative/defiant behaviour, or vindictiveness lasting at least 6 months as evidenced by at least 4 symptoms from any category exhibited during interaction with at least one individual who is not a sibling

ODD - Diagnosis

Important not to confuse ODD with normal development

toddlers and adolescents go through oppositional phases

behaviors occur in patient more frequently than with peers at same developmental level

Associated Features

Symptoms are almost invariably present in the home setting

May or may not be evident at school or in the community

Symptoms are typically more evident in interactions with those they know well

Justify behaviour as a response to unreasonable demands

ODD - Epidemiology

prevalence rates (lots of different data!)

1 - 16 %, most surveys 6 – 10 %

more common in males

2:1 males: females

onset usually by 8 years of age

ODD - Course

5-10% of preschoolers with ODD will end up with ADHD, not ODD

25% with ODD at the end of grade 6 will have co-morbid significant mood or anxiety problems

Most with ODD don't develop CD or ASPD

Prevention

Parent management strategies are the most empirically supported programs

Social skills training

Conflict resolution

Anger management

Treatment

Forming therapeutic alliance

- With child
- With parents

Consider cultural influences

- Different standards of obedience and parenting

Gather collateral information

Assess for comorbidities

Treatment

2 types of evidence based treatments

- Problem solving skills training
- Parent management training
  - Effective discipline
  - Age-appropriate supervision

Medications

- To treat comorbidities (ADHD, mood, anxiety)

Social Skills training

1.6 Anxiety Disorders in Children and Adolescents

Epidemiology

Specific phobias, SAD, GAD most common

Multiple anxiety disorders common in children

Risk Factors for Anxiety Disorders in children

Family History

Inhibited Temperament (esp Social A)

Insecure/Resistant Attachment

Overprotectiveness in parent

Stressful life events

Four Most Common Anxieties in children and adolescents

Separation Anxiety

Generalized Anxiety

Social Phobia (Social Anxiety Disorder)

Specific Phobia

Separation Anxiety

Separation Anxiety

Earliest onset anxiety disorder of childhood (8-10% of all children)

Age-inappropriate ,excessive and disabling anxiety about being separated from parents or home > 4 weeks duration

Often co morbid with another disorder

May appear suddenly or follow stressful event

Often resolves but likely to develop another disorder later;eg Social phobia and depression

Separation Anxiety

3/8 symptoms required

Unable to tolerate parents on different floor of house

Nightmares with separation/kidnapping themes (fear of anticipated separations when awake)

Often parental history of early separation anxiety

Selective Mutism

Usually shows up in Kindergarten or first grade onset 5-6 years of age

Restricted or lack of speech in one or more social situations with normal speech at home

Not due to developmental delay or delay limited to second language acquisition

Worse prognosis if not resolved by age 10

Selective Mutism

Selective Mutism: may be a precurser to social phobia ; failure to speak in specific social situations, usually school not due to language disorder

Children likely highly emotional, fearful, inhibited, and lonely

Usually resolves in months

1/3 go on to other psychiatric disorders (usually social phobia or depression

Classroom Sequalae to Anxiety

1. Poor school Attendance, higher dropout rates
2. Refusing to enter class unaccompanied
3. Teasing by other children due to above
4. Leaving class to call home, missing school with related somatic complaints eg headache and stomach ache
5. Mondays and return from holidays the worst
6. Refusal to go on school trips sleepovers with friends and even birthday parties

With Anxiety and School Avoidance be sure to assess for:

Learning Disabilities

Bullying

Comorbid undiagnosed ADHD

Student /teacher mismatch

Questions?