Psychiatric Disorders in Children and Adolescents

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Child Psychiatrist
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OUTLINE

- INTRODUCTION
- ANXIETY DISORDERS
- MOOD DISORDERS
  - Depressive Disorders
  - Bipolar Affective Disorder
- OTHER DISORDERS
- CASE STUDY
ACCESS TO MENTAL HEALTH CARE
Introduction:

- Mental Health problems are very common in children and adolescents. Studies suggest that 1:10 children may suffer from serious mental illness.
- Many psychiatric disorders have their onset in childhood, especially in adolescent years.
- Many psychiatric disorders are more common or as common in boys and girls during childhood. Around puberty the rates of anxiety and depression sharply increase in females.
A developmental model

- **Infancy**
  - Disorders of sleep, feeding, attachment (non-organic failure to thrive)
  - Language disorders
  - Developmental delay
  - Elimination disorders (encopresis, enuresis)

- **Preschool**
  - Autism spectrum disorders

- **Primary school**
  - Attention deficit hyperactivity disorder
  - Oppositional defiant disorder
  - Tourette (tic) disorder
  - Anxiety disorders (school refusal)
  - Conduct disorder
  - Childhood depression

- **Adolescence**
  - Obsessive–compulsive disorder
  - Eating disorders (Anorexia nervosa, Bulimia nervosa)
  - Substance abuse
  - Affective disorder
  - Psychosis (schizophrenia and schizoaffective)

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- Birth
- 18 months
- 3 years
- 5 years
- Puberty
- 12 years
- 16 years
Figure 2: Prevalence of different types of mental disorders in the past 12 months in 4-17 year-olds

- Anxiety disorders: 6.9%
- Major depressive disorder: 2.8%
- ADHD: 7.4%
- Conduct disorder: 2.1%
Depressive Disorders
Early Warning Signs

- Mood fluctuation: Sadness, agitation, restlessness, anger, severe mood changes, especially when they persist.
- Weight loss or gain
- Fatigue and loss of energy
- Sleep disturbances
- Withdrawal and loss of interest
- Decline in academic performance
- Legal issues
Depressive Disorders

- There are 2 major forms of depression: Major Depressive Disorder and Dysthymic Disorder.
- Other forms include Seasonal Affective Disorder, Depression, NOS and Premenstrual Dysphoric Disorder.
- The risk of depression in girls increases 2 to 4 folds after puberty.
- A lot of adolescents may also have subclinical depression.
Major Depressive Disorder

- At least 2 weeks of persistent depressed/irritable mood and loss of interest. At the same time other symptoms have to be present such as appetite and sleep changes, decreased energy and motivation, increased guilt feelings, decreased concentration and suicide thoughts.
- Irritability, anger, tantrums, and physical symptoms can be more common in children and adolescents.
Major Depressive Disorder

- It is believed that around 2% of children (1:1 male to female) and 4-8% of adolescents (2:1 female to male) experience Major Depressive Disorder.
- Recurrence of Major Depression is around 70%.
- 60% of children who suffer from MDD experience suicidal thoughts and a lot of them have suicide attempts.
- The presence of disruptive disorders, a history of abuse and substance abuse, family history of suicide and availability of weapons increase the likelihood of suicide.
Dysthymic Disorder

- Less intense but more chronic symptoms of depression
- In children symptoms have been present for at least one year.
- Impairment at times can be more severe than in MDD
- Rates are 0.6% - 1.7% in children and 1.6-8% in adolescents
Risk Factors

- Interaction of genetics and environmental factors are thought to be important
- High family loading of depression, loss, abuse and neglect...
- Other Co morbid condition can predispose to depression such as Anxiety Disorders, ADHD, Substance Abuse, Medical illness such as diabetes...
Treatment:

- In mild cases of depression there is some evidence that supportive therapy can be helpful.
- In more moderate to severe cases consider two particular therapies: Cognitive behavioral therapy and Interpersonal therapy.
- In severe cases or when there is no response to therapy, consider pharmacotherapy
  - SSRI
  - SNRI
  - Augmentation therapy: Thyroxine, Sodium Valproate, SGA
Treatment:

- SSRIs have been shown to be effective. Currently Fluoxetine is the only FDA medication indicated for depression on children.
- Monitor for emergence of suicidal thoughts and behaviors.
- Monitor for emergence of manic symptoms.
- 20% to 30% of children who present with an episode of depression will end up developing Bipolar Affective Disorder.
Prevention:

- Treatment of maternal (and paternal) depression.
- Treatment of anxiety disorder that often precedes depression
- Improve life style by adding exercise, involvement in social activities, hobbies, good diet...
"You told me I’m my own worst enemy. So I got a restraining order against myself!"
Anxiety Disorders:

- One of the most common psychopathology in children. They are often undetected and untreated.

- They include disorders:
  - Separation Anxiety Disorder
  - Simple phobia
  - Generalized Anxiety Disorder
  - Social Anxiety Disorder
  - Panic Disorder
  - Post Traumatic Stress Disorder
  - Obsessive Compulsive Disorder
Anxiety Disorders:

- It is important to differentiate between normal fears, worries, and shyness and pathological anxiety. It is also important to have an understanding of normal developmental anxiety. For example, older children and adolescents are often worried about social competence, health matters, and school performance.
- Consider Anxiety Disorder if symptoms do not subside, especially when they interfere with functioning and development.
Generalized Anxiety Disorder

- GAD is characterized by chronic and excessive worries about multiple areas such as school, home, future, health, natural disasters.
- Worries are accompanied by somatic complaints.
- As those symptoms are internal, parents and teachers are often not aware of the magnitude.
Social Anxiety Disorder

- Patients with Social phobia show severe discomfort in one or more social setting.
- They are very self-conscious and are very afraid of being scrutinized and judged.
- There might be **avoidant behaviour**. They might be afraid to answer questions, start conversations, eat in front of others, answer the phone, accept peer invitations...
- Social anxiety often peaks in adolescent years
Panic Disorder

- They are characterized by sudden recurrent panic attacks. Some symptoms include feeling very anxious, pounding heart, sweating, shortness of breath, dizziness, chest pain, tingling, feelings of unreality, fear of loss of control...

- Patients who have panic attacks often are afraid of having another attack and may avoid situations or setting where the attacks have occurred.
Prevalence

- It is not clear how common anxiety disorders are in children and adolescents. The estimates vary from 6 to 20% of children have at least one anxiety disorder.
- Panic Disorder usually emerges late in the adolescent years.
- Social Anxiety peaks in the adolescent years.
- Several anxiety disorders are more common in girls especially after puberty.
- Children who suffer from anxiety disorder appear to be 2 to 3 times more likely to develop another anxiety disorder or depression later on in life.
Risk Factors

- Biological risk factors include genetics and temperaments.
- Children who are very behaviorally inhibited in childhood are at higher risk of developing anxiety in middle childhood and social anxiety in adolescence.
- Parent’s anxiety, through genetics and modeling
- Self medications through Illicit substances
Treatment

- Cognitive Behavioral therapy (with exposure component) can be extremely useful for most anxiety disorders.

- Resilience building:
  - Confidence, self esteem, structure,

- If the anxiety is very severe consider addition of psychotropic medications:
  - SSRI’s: Fluoxetine, Fluvoxamine
  - SNRI’s: Venlafaxine, Duloxetine
  - Off Label: Beta Blockers, Pericyazine, SGA
“St. John’s Wort is a great herb for improving your mood. But maybe it’s time to cut back the dosage.”
Bipolar Affective Disorder:

- There is considerable debate still on how to best define Bipolar Disorder in children and adolescents. There is consensus however that Bipolar Disorder can first present in childhood.
- Children who have mood lability, reckless behaviors and aggression / irritability are often labeled Bipolar. This is still controversial.
Bipolar Affective Disorder:

- The different types of Bipolar Disorder include Bipolar I, Bipolar II and Bipolar III.
- To be diagnosed with Bipolar I a patient must have history of a manic episode that lasts 7 or more days unless hospitalized. Manic symptoms include euphoria (or extreme irritability), decreased need for sleep, grandiosity, hyper-sexuality, increased activity level, racing thoughts...
Bipolar Affective Disorder:

- When asking questions keep in mind the child’s developmental level.
- Patient who have Bipolar I can be in a manic, depressive, hypomaniac, or mixed episode.
- Patients who have Bipolar II have episodes of major depression and hypomaniac episodes. Hypomaniac episodes are less severe than manic episodes and last at least 4 days.
Bipolar Disorder

- Rapid cycling means having 4 or more mood episodes a year.
- Mixed episodes are when depressive and manic symptoms occur together.
- In children and adolescents the illness is more chronic (less episodic) and usually harder to treat.
Prevalence

- Bipolar I rates in adults are from 0.4-1.6%. Bipolar I and II in adults are around 2.6%. The rate increases to around 6% if subthreshold cases are included.
- Recent surveys of adults show that for many symptoms have started in childhood or adolescence.
- Around 1% of youths may have Bipolar Disorder
Risk Factors

- The risk of Bipolar Disorder increase 4-6 folds if a first degree relative suffers from Bipolar. In cases of prepubertal onset the genetic loading is even more significant. In those patients it is often very common to have maternal and paternal first degree relatives with severe mood disorder.
- Most children who have Bipolar Disorder, have had disruptive behaviors and hyperactivity. The majority of ADHD patients do not have Bipolar
- Children with depression, especially psychotic depression have a higher risk of developing Bipolar.
Treatment:

- Medication treatment is usually essential if the diagnosis is confirmed.
- Pharmacotherapy:
  - Mood stabilizers: Lithium, Sodium Valproate, Carbamazepine
  - SGA: Olanzapine, Risperidone, Aripiprazole, Quetiapine
- Psychoeducation and Relapse prevention are important.
NOT NOW DEAR, I'M BUSY

HOW TO RAISE THE PERFECT CHILD

Cheri Madden
Advice for Parenting

- Provide a safe and loving environment.
- Develop a relationship of mutual trust, honesty and respect.
- From early on develop a relation that invites your child to talk to you. OPEN COMMUNICATION is vital. Do not hesitate to talk and ask questions. Always makes sure your child knows you are available and willing to listen.
- Positive feedback is always more helpful than negative feedback.
- Allow age appropriate independence and assertiveness.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Complete a comprehensive diagnostic evaluation documenting the presence of a condition for which medication is indicated</td>
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<td>2.</td>
<td>Inform parents and child (to the extent allowed by developmental level and cognitive functioning) of the potential benefits and risks of medication as compared with alternative options</td>
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<td>3.</td>
<td>If the medication does not have a regulatory-approved indication for use in children with the condition, inform parents and child that the medication is being used “off-label”</td>
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<td>4.</td>
<td>Identify and measure the target symptoms and functions that medication is expected to improve</td>
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<td>5.</td>
<td>Based on the medication, obtain baseline clinical or laboratory parameters (e.g., weight, height, blood pressure, pulse rate, cholesterol level, renal function)</td>
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<td>6.</td>
<td>Start medication at a dose in the lower end of the usually effective dose range aiming at identifying the lowest possible dose that produces the desired outcome</td>
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<td>7.</td>
<td>Monitor effects, side effects and, if appropriate, plasma levels (e.g., lithium levels) in the first few weeks of treatment, and adjust the dose as appropriate</td>
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<td>8.</td>
<td>If there is improvement, optimize the dose aiming at maximum resolution of symptoms and improvement in functioning</td>
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<td>9.</td>
<td>Determine the maintenance dose and, based on the condition and medication, establish a tentative duration of treatment</td>
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<td>10.</td>
<td>As appropriate, periodically consider the need for continuous treatment vs. discontinuation</td>
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<td>11.</td>
<td>When discontinuing treatment, examine the need for gradual taper, which is recommended for most medications after chronic treatment (e.g., antidepressants, lithium, antipsychotics), vs. abrupt discontinuation, which can be appropriate for some medications (e.g., methylphenidate)</td>
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“You devote 50% of your energy to your career, 50% to your children and 50% to your marriage. I think I see the problem...”
Brief case

- 13 year old boy diagnosed with ADHD
- Treated with Methylphenidate
- Mood fluctuation
- Struggled with peer relationship
- Home schooling
- Referred to Headstart
- Autism Diagnostic Interview / WISC
• VCI: 45th pc
• PRI: 66th pc
• WMI: 42nd pc
• PSI: 9th pc
• FSIQ: 37th pc (94)

• Noted to be aggressive, impulsive, difficult to engage, hyperactive
Symptom Domains and Associated Features of ASD

- Social Impairment
- Repetitive Behaviors
- Speech/Communication Deficits
- Expressive/Receptive Language Disorders
- Social Phobia
- Autism Spectrum Disorder
- ADHD Symptoms
- ASD (Aspergers)
- Impulsivity/Aggression
- Obsessive Compulsive Disorder

ADHD Symptoms

ASD (Aspergers)
ADHD and PDD

- **ADHD** is a neuropsychological disorder characterized by *developmentally inappropriate* levels of hyperactivity, impulsivity, and inattention.
  - Combined Type
  - Predominately Inattentive Type
  - Predominately Hyperactive/ Impulsive Type

- **ASD** is characterized by delays and *deficits in the development* of social interaction, communication skills, and cognitive abilities.
  - Autism
  - Asperger Syndrome
  - High Functioning Autism
The Modal ASD Student

- Male
- Logical
- Spatially aware
- Honest
- Detail Oriented
- Eye contact issues
- Thorough
- Independent Thinker
- Clumsy
- Efficient
- Focused
- Lonely or sad
- Appears rigid
- Disorganized
- Sensory aversive
- Bright, especially in areas of interest
- Doesn’t see others point of view
- Uses odd phrases or gestures
“Can he **PASS** the course? He could have **written** the textbook!

But...it doesn’t matter if he can’t get to class!”
<table>
<thead>
<tr>
<th>Behavior</th>
<th>Cause</th>
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<tbody>
<tr>
<td>Head on desk</td>
<td>Sensory overload</td>
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<tr>
<td>Mimics or recites back</td>
<td>Time to process</td>
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<td>Great expressive skills</td>
<td>Compensates for receptive skills</td>
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<td>Odd speaking habits</td>
<td>Pragmatic Language deficits</td>
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<tr>
<td>May not respond to facial</td>
<td>Difficulty with non-verbals</td>
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<td>expressions, tone</td>
<td>Leads to miscues in assignments</td>
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<td>Does not recognize you</td>
<td>Limited facial recognition</td>
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<td>May not shift topic on cue</td>
<td>Does not automatically catch on</td>
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<td><strong>ADHD SYMPTOMS IN ASD</strong></td>
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<td><strong>ASD</strong></td>
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<tr>
<td>- Unusual profile of social and emotional behaviour</td>
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<td>- Distinct language and interest profile: <strong>idiosyncratic and solitary</strong></td>
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<td>- More impulsive</td>
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<td>- Unusual aspects of organisational skills: <strong>unconventional means of solving problems and inflexibility</strong></td>
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<tr>
<td><strong>ADHD</strong></td>
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<td>- They know how to play and want to play but they do so badly</td>
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<tr>
<td>- Diverse range of linguistic skills and interests: <strong>Conventional for children of that age</strong></td>
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<tr>
<td>- Problems with organisational skills</td>
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What Else Can Look Like ASD?

- Nonverbal learning disability
- Obsessive compulsive disorder
- Anxiety plus language delay (with/without sensory issues)
- Cognitive delay plus anxiety
- “Just Odd”
Recent research has indicated that changes in diagnostic practices may account for at least 25% of the increase in prevalence over time, however much of the increase is still unaccounted for and may be influenced by environmental factors.

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Epidemiology

- “True” increase or “epidemic?”
- Up to 40% comorbidity with ADHD
- Increased awareness, broader diagnostic criteria, diagnostic substitution...
- Probably a little of both...
When do you use meds?

- When there are underlying biological factors.
- Let the symptoms guide you!
  - Anxiety Disorder
  - Depression
  - ADHD
  - Psychosis
  - Aggression
  - Obsessive/compulsive features
  - Sleep problems
  - Seizures
  - Mood Lability
  - Repetitive behaviour

- Otherwise, **MEDICATION IS A LAST RESORT**
So what do we use?... In addition to Stimulants!!

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<tr>
<th>Antipsychotics</th>
<th>Risperidone, Aripiprazole</th>
<th>Chlorpromazine</th>
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<th>Clozapine</th>
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<td>Olanzapine</td>
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<td>Quetiapine</td>
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<td>Anti-Fight or Flight Meds</td>
<td>Clonidine</td>
<td>Beta-blockers:</td>
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<td>Anti-epileptics &amp; Mood Stabilizer</td>
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<td>Lithium</td>
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<td>Anti-anxiety</td>
<td>Benzodiazepines:</td>
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Resources

- CAMHS 1800 819 089
- Headspace.org.au  1800 650 890
- www.kidshelpline.com.au  
  ○ 1800 55 1800
- www.lifeline.org.au  
  ○ 13 11 14
- Beyondblue.org.au
- SANE Australia Helpline  
  ○ 1800 18 7263