Autism: Facts, Myths, and What To Do After Diagnosis

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What We Will Talk About

• History of autism
• What is autism?
  • DSM-V
  • Known risk factors
• Facts
• Myths
• What happens after diagnosis?
1970's London Child Psychologist and parent Lorna Wing, contributed to new DSM to broaden scope of autism diagnosis: autism epidemic begins, return to Asperger's criteria

1943, Kanner, Early Infantile Autism (Kanner's Syndrome), rare, psychosis, launching psychiatry, refrigerator mom

1938 Nazi's invaded Austria, target for eugenic programs, 200,000 children with disabilities murdered

Austrian Hans Asperger, 1930's, Autistic Continuum, speech
Autism “Epidemic”

- DSM History
  - 1918 American Psychological Association created manual for mental institutions, 22 categories
  - DSM-I 1952, focus on treatment of soldiers, 106 diagnoses
  - DSM-II 1968, 168 diagnoses
    - Revised 1974 changing homosexuality to egodystonic homosexuality
      - About the conflict of sexual orientation, not the innate sexual orientation
  - DSM-III 1980, 265 diagnoses
    - No more neurosis
    - Add PTSD
    - No more egodystonic homosexuality
    - Lorna Wing worked with revision to broaden criteria to diagnose autism
  - DSM-IV 1994, 297 diagnoses
    - Client centered, person with depression
  - DSM-V 2013, 300+ diagnoses
DSM-V

- Autism Spectrum Disorders
- Asperger, PDD-NOS dropped
- “High functioning” “low functioning” language obsolete
- Levels of support: 1, 2, 3
<table>
<thead>
<tr>
<th>Severity Level for ASD</th>
<th>Social Communication</th>
<th>Restricted interests &amp; repetitive behaviours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 3 - 'Requiring very substantial support'</strong></td>
<td>Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning; very limited initiation of social interactions and minimal response to social overtures from others</td>
<td>Preoccupations, fixated rituals and/or repetitive behaviours markedly interfere with functioning in all spheres. Marked distress when rituals or routines are interrupted; very difficult to redirect from fixated interest or returns to it quickly.</td>
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<tr>
<td><strong>Level 2 - 'Requiring substantial support'</strong></td>
<td>Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions and reduced or abnormal response to social overtures from others</td>
<td>RRBs and/or preoccupations or fixated interests appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress or frustration is apparent when RRBs are interrupted; difficult to redirect from fixated interest.</td>
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<td><strong>Level 1 - 'Requiring support'</strong></td>
<td>Without supports in place, deficits in social communication cause noticeable impairments. Has difficulty initiating social interactions and demonstrates clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions</td>
<td>Rituals and repetitive behaviours (RRB's) cause significant interference with functioning in one or more contexts. Resists attempts by others to interrupt RRB's or to be redirected from fixated interest.</td>
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autism

1 in 150
1 in 110
1 in 88
1 in 50

the rates are increasing...
don’t you want to know why?
Core Deficit: Social Interaction

- Inability to change communication to listener
- Does not follow rules of conversation
  - Take turns
- Don’t share interests
Core Deficit: Communication

- Deficits in nonverbal communication
- Poor eye contact
- Difficulty with body language
- Difficulty understanding gestures
  - Sign language is problematic for many
- Lack of facial expressions
Core Deficit: Restricted, Repetitive, Patterns of Behavior, Interests, and Activities

- Objects
- Speech
- Lining up objects
- Echolalia
- Idiosyncratic phrases
- Insistence on sameness
  - Movies, food, routines, routes, rituals
Repetitive Behaviors
Other Deficits

- Theory of mind
  - Stanley Greenspan
    - Think about thinking
- Perspective taking
## Autism Defies Generalization

<table>
<thead>
<tr>
<th>Social Interaction</th>
<th>Aloof</th>
<th>Active but Odd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured IQ</td>
<td>Severe</td>
<td>Gifted</td>
</tr>
<tr>
<td>Communication</td>
<td>Non-Verbal</td>
<td>Highly Verbal</td>
</tr>
<tr>
<td>Gross Motor Skills</td>
<td>Awkward</td>
<td>Agile</td>
</tr>
<tr>
<td>Fine</td>
<td>Uncoordinated</td>
<td>Coordinated</td>
</tr>
<tr>
<td>Sensory</td>
<td>Hyposensitive</td>
<td>Hypersensitive</td>
</tr>
</tbody>
</table>
## Effects of Autism: Boys vs. Girls

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
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</thead>
<tbody>
<tr>
<td>More repetitive behaviors</td>
<td></td>
</tr>
<tr>
<td>More &quot;restricted&quot;- or overly focused - interests</td>
<td></td>
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<tr>
<td>Tend to have trouble with vocabulary and word knowledge</td>
<td></td>
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<tr>
<td>Fewer repetitive behaviors, like hand-flopping or spinning</td>
<td></td>
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<tr>
<td>Restricted interests tend to be more socially acceptable</td>
<td></td>
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<tr>
<td>Better vocabulary and word knowledge</td>
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</table>
Sensory Profile Unique

- Hyposensitivity
- Hypersensitivity
- Sights
  - Lights, colors, shapes
- Sounds
  - Blender, vacuum
- Touch
  - Tags in clothing
- Thermal
  - Inappropriate dressing for weather
- Olfactory and gustatory
  - Textures, color of food, smells
Sensory Hotspots

- I find it difficult to focus on a task or concentrate.
- I chew on everything.
- I have difficulty listening to what others say.
- I close my eyes in bright light.
- I dislike having my hair brushed or touched.
- I don't like loud or unexpected noises.
- I have the tags cut out of my clothing.
- I am a fussy eater and like to eat the same things daily.
- I don't always feel pain like others might.
- I don't like being cuddled.
- When I touch things, I am often too hard or too soft.
- Some fabrics make me upset and uncomfortable.
- I have poor fine motor skills and hate writing and cutting etc.
- I don't like being tickled.
- I have poor gross motor skills and have coordination difficulties.
- I prefer to walk on tiptoes.
- I sit awkwardly and fidget on the carpet.
- I hate being barefoot.
Sensory Needs: Sensory Seeking
Proprioceptive and Vestibular
Sensory Needs: Sensory Seeking
Proprioceptive and Vestibular (cont)
Sensory and Emotional Needs

Where is my body in space?
TANTRUM VS AUTISM MELTDOWN

Tantrum

-- "Want" directed
-- Goal/Control Driven
-- Audience to perform
-- Checks engagement
-- Protective mechanisms
-- Resolves if goal is accomplished

AGE: 1 to 5 years

Autism Meltdown

-- Overstressed/Overwhelmed
-- Reactive mechanism
-- Continues without attention
-- Safety may be compromised
-- Fatigue
-- Not goal dependent
-- May require assistance to gain control

AGE: Through Adulthood

www.autism-daddy.blogspot.com
www.facebook.com/autismdaddy
Brain Development

- Limbic system greatly affected
  - Emotions, motivation, behavior
- Amygdala
  - No amygdala, no fear
  - Larger amygdala, fears and anxiety

Parts of the BrainAffected by Autism

- Cerebral Cortex: A thin layer of gray matter on the surface of the cerebral hemisphere. Two-thirds of this area is deep in the fissures and folds. This area of the brain is responsible for higher mental functions, general movement, perception and behavioral reactions.
- Amygdala: This region is responsible for all emotional responses including aggressive behavior.
- Hippocampus: This makes it possible to remember new information and recent events.
- Brain Stem: The brain stem is located in front of the cerebellum and serves as a relay station, passing messages between various parts of the body and the cerebral cortex. It controls the primitive functions of the body—essential to survival including breathing and heart rate.
- Cerebellum: This is located at the back of the brain. It fine tunes motor activity, regulates balance, body movements, coordination and the muscles used for speaking.
Autism Facts

[Graph showing age and birth year correlation with autism diagnosis]

Boys 5x more likely to be diagnosed with ASD than girls.
Autism Facts (cont)

- Can be reliably diagnosed by age 2
- High quality early intervention does more than develop skills
- 1/3 are non-verbal
- Autism-related GI issues are real
- Autism-related sleep disturbances are common and treatable
- 1/3 have epilepsy
- Environment does play a role
- ½ “run” or “bolt”
Causes of Autism

- Primarily genetic, from family
- Over 1,000 candidate genes out of 20,000 total genes in humans, may contribute to autism
- One of the most heritable conditions in psychology
- Interaction of genes with the intrauterine environment
  - Perhaps high levels of testosterone in the womb?
- Interaction of genes with the environment
- Older fathers carry more mutations in sperm
- Highly complex interaction of genes with the environment
Myths

- Autism is not caused by MMR according to:
  - American Academy of Pediatrics
  - World Health Organization
  - Center for Disease Control
- Dr. Andrew Wakefield paper, 1998 British Medical Journal claimed MMR to be cause of autism
- Paper later retracted by the Lancet
- Research was outright fraud according to the British Medical Journal
- Wakefield had a financial stake in finding autism was caused by MMR
- Wakefield lost medical license in UK
- Wakefield came to US and was joined by Jenny McCarthy, parent
- Wakefield has lost his license to practice medicine in 13 states
What To Do?

- Find support
- Learn about your child’s sensory profile
- Under age 3, Valley Mountain Regional Center
  - Early Intervention
- After age 3, school district
- Lifetime
- Plan
- Meet other positive parents
- Read
"I'm a visual thinker, not a language-based thinker. My brain is like Google Images."

- Temple Grandin

http://www.theautismeducationsite.com