Autism

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What is Autism?

- Autism is a developmental disability that typically appears during the first three years of life.
- The result of a neurological disorder that affects functioning of the brain.
- Autism interferes with the normal development of the brain in areas of reasoning, social interaction and communication skills.
The Autistic Spectrum
Pervasive Developmental Disorder (PDD)

- Asperger's Syndrome
- Fragile X Syndrome
- Rett Syndrome
- And more...
Asperger's Syndrome

- One form of high-functioning autism
- **Language**
  - Speech sometimes repetitive
  - Conversation revolves around self
  - Grammar & vocabulary usually good
- **Cognition**
  - Obsession with complex topics
  - Lack common sense
  - May have dyslexia or problems with math
- **Behavior**
  - Clumsy & awkward movements
  - Self-stimulating behavior
  - Inappropriate social interactions
- Most likely hereditary
Rett Syndrome

- Neurological disorder
- Primarily affecting females
- Exhibit autistic like behaviors
  - Repetitive hand movements
  - Prolonged toe-walking
  - Body rocking
  - Sleep problems
- Typically exhibits regression in cognition, behavior, social and motor skills
- Some Characteristics
  - Teeth grinding / difficulty chewing
  - Seizures
  - Functioning level between severe and profoundly mentally retarded
Fragile X Syndrome

- Genetic disorder which is the most common form of inherited mental retardation
- Carried by the mother and passed on to son
- Large number of recognizable features
- 15-20% of those with Fragile X Syndrome exhibit autistic-like symptoms
Common Myths

- Autism is an emotion disturbance due to poor parenting.
- Autism is caused by failure to bond and lack of discipline.
- Children with autism look different from other children.
- Autism is a rare disorder.
- Individuals with autism cannot learn.
- Autism can be cured
General Characteristics

- Poor eye contact
- Delayed social maturity
- Self-stimulating actions
  - Rocking
  - Head banging
  - Biting
  - Hand flipping
  - Nail picking
- Sleeping problems
- Tantrums
Characteristics cont...

- Hypersensitivity to sensory stimulation (flashing lights, noise—especially high-pitched, colors)
- Insensitivity to pain
- Aggression
- Necessity for routine
- Visual fixations/concentration
- Seizures
- Appearance of deafness
- Marked restriction of activity and interest
Learning Characteristics

- Delay in Language Development
- Late achievement of developmental milestones and then possible regression
- Concrete information is more easily understood than abstract information
- See things as a whole
- Slower at processing information
- Difficulty processing auditory stimuli
- Need concrete space-based visual cues
Social Delays

- Children with autism will often seem withdrawn
- Children with autism often do not interact with their peers unless forced
- Autism cause children to be unaware of their social surroundings and unable to perceive social cues
Verbal Delays

- Some children with autism will progress normally until around 1½ to 2 years of age and will then become nonverbal.
- In some cases the use of language comes back over time, but not always.
- Children with autism are many times taught sign language to overcome nonverbal characteristic.
- Visual cues are used to develop some type of communication skills.
Cognitive Skills

- Theory of Mind – a child’s inability to see another’s point of view
- Visual fixation
- Delayed processing skills
- Inability to generalize processes
Possible Causes for Autism

- May be genetic
- Vaccines (MMR & DPT)
- Toxins and pollutants
- Exposure to Rubella & Cytolomegalovirus during first trimester of pregnancy
Diagnosis Criteria

- There is **no** medical test to determine autism
- Observations
- Parental contribution
- Characteristic checklist
- A certain number of ‘characteristics’ must be displayed in order for a person to be classified as autistic
Treatments

- Medication
  - Ritalin (autism is associated with ADD & ADHD)
  - B6 with magnesium
  - Di-methylglcine (DMG)

- Diet
- Sensory integration techniques
- Auditory integration techniques
- Applied Behavioral Analysis (ABA)
Teaching Strategies

- Use visual cues (pictures)
- Use slow, short phrases
- Use checklists
- Use class/individual work schedules
- Organize the classroom in a non-distractive manner
- Make boundaries clear in all areas of the classroom
- Make material need clear
Teaching Strategies cont...

- Tailor schedule and plans to individual needs – don’t generalize
- Make eye-contact
- Have child repeat back directions to confirm understanding
- Find alternative ways to motivate
- Use subtly colored paper for handouts
- Be clear about what you mean
- Computer use may be helpful
Statistics

- 4 to 6 out of 1,000 births are affected by autism
- 1 in 500 have a related disorder
- 400,000 people in the US today have some form of autism
- Autism is the 3\textsuperscript{rd} most common developmental disability, ranking one more common than Down’s Syndrome
- 4 out of 5 children with autism are males
- No racial or ethnic connections are known
Autism Organizations

- Autism Society of America
  7910 Woodmont Avenue #300
  Bethesda, MD 20814
  1-800-3-AUTISM

- Illinois Center for Autism
  548 South Ruby Lane
  Fairview Heights, IL 62208
  (618) 398-7500
Online References

- Autism Society of America
  http://www.autism-society.org
- Division TEACCH: Treatment and Education of Autistic and Communication handicapped Children
  http://www.teacch.com
- AutismFYI.org
  http://www.autismfyi.com
- Center for the Study of Autism
  http://www.autism.org
Text References
