# **Understanding Autism**

Information for Teachers and Support Staff

# **Definition of Autism**

 Autistic disorder or autism is a severe developmental disorder characterized by abnormalities in social functioning, language, communication, and unusual interests in behaviors.



# Spectrum disorder

What does it mean?

Its symptom patterns, range of abilities, and characteristics are expressed in many different combinations and in any degree of severity.





# Pervasive Developmental Disorders

- Autism: Severe language problems, lack of interest in others, repetitive behaviors, resistance to change, irrational routines.
- Asperger's: Relatively strong verbal skills, but trouble reading social situations and sharing enjoyment, obsessive interests.
- PDD-NOS: Known as "Atypical Autism," Kids have less severe social impairments.
- Childhood Disintegrative Disorders (CDD): Normal Growth for 2-4 years, then autism-like symptoms develop.
- Rett Syndrome: Similar pattern as CDD, but occurs earlier and mostly in girls

# CORE CHARACTERISTICS OF AUTISM

-Social Impairments

-Communication Impairments





-Sensory and perceptual impairments

-Cognitive Deficits



# **Communication Impairments**

- Expressive gestures- Ability to convey feelings. Children with autism may use gestures to get others to do things for them, but not to convey feelings.
- Echolalia- parrot-like repetition of words.

Parent: Do you want a cookie? Child: Do you want a cookie?



#### Communication Impairments Cont.

- Pragmatic Impairments: Inability to appropriately use language in social and communicative contexts
- Example: Phone rings. Mother asks child, "Can you get the phone?" Child replies, "yes." Child does not pick up the phone.





# **Cognitive Deficits**

**Executive Functions:** Permit individuals to maintain effective problem solving by inhibiting inappropriate behaviors, engaging in thoughtful actions, sustaining task performance, self monitoring, using feedback, and flexibility shifting, from one task to another.

Example: Not being able to organize steps to complete a task.

# **Cognitive Deficits Cont.**

Central coherence:

The strong tendency of humans to interpret stimuli in a relatively global way that takes the broader context into account.

Balloons, cake, hats, presents = Birthday Party!!



# **Cognitive Deficits Cont.**

• **Theory of Mind-** The ability to understand other people's and one's own mental states, including beliefs, intentions, feelings, and desires.

-Sally-Anne Task / False Belief Tests

Symbolic or imaginative play



# **Behaviors**

- Self stimulatory behaviors (i.e. gazing, hand flapping, rocking, toe walking, etc.)
- Repetitive/ Stereotyped behavior (i.e. Listening to specific portion of song)
- Ritualistic (i.e. Walking a certain way to class, order of dressing self)
- Tantrum/ Aggressive behavior

### Causes

Genetic Predisposition- Researches have identified possible susceptibility genes for autism.

Biological-Brain abnormalities

Environmental Factors

- Pregnancy complications
  - (health problems)Vaccines?



 Bottom line: It is accepted that there are multiple causes.

# Treatments

- No known cure!
- MANY different suggested therapies:
- Some include
  - Specialized diets, nutritional supplements
  - Social interventions (i.e social stories)
  - Sensory integration (occupational therapy)
  - Medications to manage behaviors
  - Applied Behavior Analysis



### A.B.A. in the Classroom

- Definition: A systematic approach to the assessment and evaluation of behavior and the application of interventions that alter behaviors.
- The manipulation of antecedents and consequences of behavior to teach new skills and eliminate maladaptive and excessive behaviors.
- Behavior Intervention Plans and children with autism.
- Teacher's role

# Early Intervention

• The promise of early intervention derives from the plasticity of the brain early in development.



#### Modifications in the Classroom

Visual schedules



Reduced workload

Written rules and directions

- More time to process information
- Access to assistive technology (i.e computer)
- Break tasks down into manageable steps

### Testing Accommodations and Modifications

- Prepare the students for the testing experience.
- Place the testing session in the student's daily schedule.
- Minimize distractions.
- Modify test administration to allow nonstandard responses.





There's no "typical." No portrait to paint. No two who are alike. Like snow flakes, they resemble, yet remain unique. Therein lies the challenge for parents, patients and physicians.

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