Early Childhood and Autism

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Assessment for Identification

• TWO PRIMARY EARLY DEVELOPMENT PATTERNS:
  • For some children, characteristics are evident in infancy and within first year of life
  • Other children experience a period of normal development prior to the onset of symptoms. This change generally occurs between 12-36 months.

First Signs: “RED FLAGS”

• Language Differences:
  • Child does not babble or coo by 12 months; or infrequent
  • Child does not say single words by 16 months of age
  • Child does not say two-word phrases on his/her own by 24 months of age.
  • Regression or loss of words (20-40% of parents report)
  • Peak age for regression in 2nd year of life.
First Signs: “RED FLAGS”

**Communication Differences:**
- Lack of showing gestures
- Lack of coordination of nonverbal communication
- More limited joint attention as demonstrated by less showing objects, pointing to objects, alternating eye gaze between person and object of interest.
- Unusual prosody

First Signs: “RED FLAGS”

**Social Interaction Differences:**
- Joint attention behaviors in 1st birthday videos 91% not observed (Osterling & Dawson, 1994)
  - Looking at face of another
  - Showing objects
  - Pointing
  - Orienting to name
- Lack of sharing interest or enjoyment
- Child demonstrates limited imitation of facial expressions or actions.
- Child shows little or no interest in other children.
- Less likely to imitate actions of others

First Signs: “RED FLAGS”

**Movement Differences:**
- Repetitive movements with objects
- Unusual body movements or posturing of body, arms, hands, or fingers.
Autism Spectrum Disorder versus Developmental Delay

• Are there differences in early development?

• What are the distinguishing markers?

Osterling, Dawson, & Munson (2002)

• Infants with both ASD and CD
  • used gestures less often
  • looked at objects held by others less often
  • engaged in repetitive motor behaviors more often than typical babies

Osterling, Dawson, & Munson (2002)

Infants with ASD

• Looked at others less often and
• Oriented to their name less often than those with CD or typical children
Current Research Re: Early Signs

- Autism brain science “has moved stunningly fast,” says Kevin Pelphrey, Associate Professor of Child Psychiatry at the Yale School of Medicine’s Child Study Center.

- “It would be great if there were a grand unified theory of autism, but we’re far from that right now,” says David Amaral, research director at the University of California-Davis MIND Institute.

CURRENT RESEARCH: EARLY INDICATORS OF AUTISM SPECTRUM DISORDERS

Charman, T. Autism Research Comes of (a Young) Age
Journal of the American Academy of Child & Adolescent Psychiatry
March 2010 (Vol. 49, Issue 3, Pages 208-209)

Objective: To examine prospectively the emergence of behavioral signs of autism in the first years of life in infants at low and high risk for autism.

Method: A prospective longitudinal design was used to compare 25 infants later diagnosed with an autism spectrum disorder (ASD) with 25 gender-matched low-risk children later determined to have typical development. Participants were evaluated at 6, 12, 18, 24, and 36 months of age. Frequencies of gaze to faces, social smiles, and directed vocalizations were coded from video and rated by examiners.
CURRENT RESEARCH: EARLY INDICATORS OF AUTISM SPECTRUM

Results: The frequency of gaze to faces, shared smiles, and vocalizations to others were highly comparable between groups at 6 months of age, but significantly declining trajectories over time were apparent in the group later diagnosed with ASD. Group differences were significant by 12 months of age on most variables. Although repeated evaluation documented loss of skills in most infants with ASD, most parents did not report a regression in their child's development.

CURRENT RESEARCH: EARLY INDICATORS OF AUTISM SPECTRUM DISORDERS

Conclusions: These results suggest that behavioral signs of autism are not present at birth, as once suggested by Kanner, but emerge over time through a process of diminishment of key social communication behaviors. More children may present with a regressive course than previously thought, but parent report methods do not capture this phenomenon well. Implications for onset classification systems and clinical screening are also discussed.

Children's Hospital of Philadelphia
Sarah Paterson, Developmental Psychologist April, 2010

• Structural changes are evident in the fiber tracts of brains of children later diagnosed with autism, even as young as 6 months old. That's six months to a year before autistic children typically begin to show any outward signs of their condition, says Joseph Piven, a researcher at the University of North Carolina-Chapel Hill.
Sophisticated new imaging technology is picking up subtle differences in the brains of autistic children.

“The changes lie not in the brain cells themselves but in the pathways that transmit messages between brain regions”.

Brain overgrowth may drive early symptoms of autism

- Eric Courchesne, director of the Autism Center of Excellence at the University of California, San Diego. Presentation at International Meeting for Autism Research, May, 2011.

- Courchesne’s team looked at 84 infants and toddlers aged 12 to 40 months with autism.

Brain overgrowth may drive early symptoms of autism

- The researchers found abnormal growth in the superior longitudinal fasciculus, which connects the frontal and temporal lobes of the brain, crucial for the development of language.

- Between 12 and 24 months of age in children with autism, this tract matures too quickly. But the growth is short-lived; it slows down after 24 months of age, leading to faulty connectivity between their brain regions.
How are early indicators helpful in program planning?

- Provide good descriptions of core issues
- Identify priority areas of need

***Direct FOCUS on communicative and social issues early on.

PLAY ASSESSMENT

- What objects/toys does child seek out?
- What are the properties/features of the materials chosen?
- How are these items generally used?

PLAY ASSESSMENT

- How are these items generally used?
- Conventional means:
  - functional use
  - variety used
  - flexibility
  - symbolic/pretend play
  - constructive play
PLAY ASSESSMENT

• How are these items generally used?
  • Unconventional means:
    • puts in mouth
    • spins
    • throws/dumps
    • flips
    • carries

PLAY ASSESSMENT

• Where does the child generally use the materials?
  • isolated area
  • favorite spot
  • within group
  • multiple places

PLAY ASSESSMENT

Observe and note related communicative behaviors.
• Interactions:
  • frequency
  • duration
  • quality
PLAY ASSESSMENT
Observe and note related communicative behaviors.
• Interactive partners:
  peers
  adults
  both peers & adults

PLAY ASSESSMENT
Observe and note related communicative behaviors.
• initiations
• responses
• joint attention
• imitation skills

Musical Movement Pairs
TEACHING PLAY
Choose Preferred Toy
Teach Schemes
  > Teach another scheme (same toy)
  > Teach different scheme (same toy)
  > Add interaction with teacher/adult
  > Exchange peer for teacher (coach peer)

LET’S PLAY
THINGS TO KEEP IN MIND:
★ Children on the autism spectrum almost always need some direct instruction to learn interactive play skills.

★ Staff need to formulate a plan: identify achievable objectives based upon current level of performance and interests.

★ Identify play schemes which can be easily expanded and gradually increase complexity.

LET’S PLAY
DETERMINE TEACHING STRATEGIES
Examples:
* Break down sequence - small achievable steps.
* Follow child’s lead
* Start with skill in child’s repertoire
* Model
* Use shaping and physical prompts
* Be “playfully intrusive”
* Consider direct instruction (DTF)
* Frequent opportunities
***Incorporate communicative exchanges***
Questions, then

Move into break out groups!

Placement in Least Restrictive Environment (LRE)

FAPE in LRE...
...it’s for all kids!
CONTINUUM OF PLACEMENTS

Continuum of Placement Options

- Regular Early Childhood Program
  - Examples: Child Care, Head Start

- Early Childhood Special Education Program
  - Examples: Separate class, separate school

- Home or Service Provider Location

DECISION MADE BY IEP TEAM
Early Childhood Setting

- The placement should...
  - be as close as possible to the student's home.
  - unless the preschool student's IEP requires some other arrangement, the child is to be educated in the community setting the child would attend if not disabled.

§300.116(c)

Early Childhood Setting

- A child with a disability is never removed from age-appropriate settings solely because of needed modifications to the early learning curriculum or activities.

§300.116(e)
Placement Discussion Questions

- With the use of supplementary aids and services, can the child’s IEP be implemented in the child’s current setting(s) and/or other settings with same age peers?
- What settings for service delivery will meet the child’s needs?
- What settings have been considered and rejected? Document this consideration in the IEP.

Additional Questions?

- What are the aspects of less restrictive settings that are most difficult when including your student(s) with autism?
- Where are you stuck??

Turn and Talk
**Four Areas**

- Behavioral regulation/Sensory
- Communication
  - Expressive
  - Receptive
- Social interaction with peers
- Adapted materials/Curriculum

**Key Supports for Successful Inclusion:**

**Behavioral/Sensory Issues:**

- Sensory Supports
- Teaching of coping strategies
- Behavioral Supports that focus on function and teaching of replacement behaviors
- Visual schedules and schedules within a schedule
- Video/technology

**Key Supports: Communication/Social**

- Direct teaching of communication in context
- Pre-planning for participation
- Supported and direct teaching of social skills and play
- Highlighting salience of socially competent peers
Key Supports: Materials/Curriculum

- “Autism friendly” organization of room and materials
- Keep it visually clean
- Simplify choices
- Combination of individual and group instruction

Meet Josh

Meet Camila
COLLABORATION

- Family/Primary caregivers
- Integration of Therapy Services
- Daycare
- Bridging approaches

REALITIES OF COLLABORATION

- Prioritize
- Creative scheduling
- Data systems
- Ongoing
- Crisis