

Autism and Child Development Screening and Surveillance

Presented by

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Autism and Child Development

Learning Objectives:

Participants will be able to:

- Recognize early signs of Autism and the importance of accurate surveillance and screening
- Examine what typical development looks like in children ages 0 - 5 years and how the development of children with Autism differs
- Define the five Pervasive Developmental Disorders
- Recognize the issues of ASD comorbidity
- Identify and support use of scientific methods and effective practices

AUTISM SPECTRUM DISORDERS

Current Issues:

- 1) Prevalence:
- 2) New pediatric guidelines in autism screening
- 3) Co-morbidity

What is Autism?

- Autism is one of a group of disorders known as autism spectrum disorder (ASD)
- ASD's are developmental disabilities that cause substantial impairment in three areas of dysfunction
 - ~ Qualitative impairment in reciprocal communication
 - ~ Impairment of reciprocal social interaction
 - ~ Restrictive range of play and interests
- Neurodevelopmental disorder with a spectrum of clinical conditions

DSM-IV Classification: Pervasive Developmental Disorders

- Pervasive Developmental Disorder
 - Autism
 - Asperger's Syndrome
 - PDD - NOS (not otherwise Specified)
 - Rett's Syndrome
 - Childhood Disintegrative Disorder

ASD FACTORS

- Present at birth
- Onset of symptoms before 36 months
- Accurate diagnosis possible at 18-24 months
- Parents first voice concerns 12 months
- Diagnosis is typically 3 years or older
- Lasts throughout the life span although clinical presentation changes

ASD Factors: Epidemiology

- Prevalence between 1:155
- ASD more prevalent in pediatric population than:
 - Cancer
 - Diabetes
 - Downs Syndrome
- Male to female ratio: 4 to 1
- 1 in 150 8 year olds in multi cities in US
- Health care providers WILL feel the impact of growing population

ASD FACTORS: CAUSES

- Causation unknown
- Strong genetic influence
- Identical twin studies show 75% risk
- Recurrence risk in siblings 2-8%
- Autism does NOT result from:
 - ~ Poor parenting
 - ~ MMR vaccine
 - ~ Thimerosal preservative in vaccines

Overview of Child Social Development

- What are the earliest signs of Autism?
- Delays or abnormalities in:
 - Joint Attention
 - Social Interaction
 - Play Behavior

TYPICAL BEHAVIOR JOINT ATTENTION

Interaction

Age

- | | |
|-----------------------------|-----------|
| ■ Reciprocal smiling | 2 months |
| ■ Gaze Monitoring | 8 months |
| ■ Follow a point | 9 months |
| ■ Showing objects | 10 months |
| ■ Pointing to an object | 12 months |
| ■ Pointing to obtain object | 14 months |
| ■ Social Referencing | 15 months |

TYPICAL SOCIAL INTERACTION

<u>Behavior</u>	<u>Month</u>
■ Imagines self as a character, talks for objects, plays show and tell, talks about feelings	36
■ Enjoys playing next to other children, offers toys	24
■ Plays pretend, attracts parental attention by looks or gestures	18
■ Check parent's facial expression, draws attention to objects of interest, begins to show empathy	15
■ Uses gestures to get needs met, repeats actions	12
■ Orients to name, moves back & forth, plays give & take	9
■ Relates to parents with joy, smiles often when playing	6
■ Interest in faces, smiles back, initiates smile	4

Typical Development: Play Behavior

<u>Type of Play</u>	<u>Age</u>
■ Imaginative play - pretending without toys or props	30+ mths
■ Symbolic play - giving objects identities other than intended	16+ mths
■ Functional play - using toy as it was intended	12+ mths
■ Sensorimotor - mouthing, fingering toy without regard to function	4-12 mths

Why screen for autistic spectrum disorders in pediatric/primary care?

- Prevalence is high
- Condition is serious
- Effective intervention available
- Improved outcomes with early and intense interventions
- Tools now available
- Parents expect and want it

SCREENING TOOLS

What screening tools can do:

- identify children who might have developmental delays
- be specific to a disorder or an area
- likewise can be general

What screening tools cannot do:

- give sure evidence of developmental delays
- be used to make a diagnosis

Developmental and Social Emotional Screening

- Several screening tools available for 'well child' visits
- Examples include:
 - Parental Evaluation of Developmental Status (PEDS) www.pedstest.com
 - Ages & Stages Questionnaire (ASQ)
 - Ages & Stages Questionnaire: Social Emotional (ASQ:SE)
 - Modified CHecklist for Autism in Toddlers (M-CHAT)
 - Childhood Autism Rating Scale (CARS)

Listen to Parents

■ Parents:

- ~ Are aware of the possibility of autism
- ~ Have concerns when something is wrong or different
- ~ Give accurate and reliable information about their children
- ~ Can be the best screening too! " 😊

Early RED Flags for Autism

- No big smiles or other warm, joyful expressions by 4-5 months
- No back-and-forth sharing of sounds by 9 months
- No babbling at 12 months
- No back-and-forth gestures, such as pointing, reaching, or waving by 12 months
- No words by 16 months
- No two word spontaneous meaningful phrases by 24 months

Autism- presenting symptoms (OR.. What is NOT present) 😊

- Speech delay
- Receptive skills may appear more advanced than receptive
- Poor eye contact
- Lack of joint attention-gaze
- Lack of use of gestures
- Lack of pretend play
- Behavioral problems-often appear "hyperactive"
- Repetitive behaviors emerge around 3 years old
- Hand & finger mannerisms
- Abnormal processing and modulation of sensory stimuli

Language Delay:

Absolute indications for immediate evaluation

- 9 months: No babbling
- 12 months: No pointing or other gestures
- 16 months: No single words
- 24 months: No functional 2-word phrases
(not echolalic or idiosyncratic)
- Any age: Any loss or regression of language or social skills

Autism Assessment 18 - 36 months

Deficits are more important than
the presence of specific behaviors
in diagnosing autism

(or why it is difficult to see in a snapshot)

Autism Assessment

18 - 36 months

Lack of:

Use of eye contact to regulate social interaction

Orienting to name

Joint attention behaviors: pointing & showing

Pretend play

Imitation

Nonverbal communication

Emergence of atypical behaviors AFTER 3 years
(stereotypes, scripted speech, sensory anomalies) and
then tend to disappear again as they grow older

Autism Assessment

18 - 36 months

- Autism screening tools are now recommended for primary care setting
- At 18-month visit use parent questioning and direct observation to assess child for:
 - ~ Social: Engaging in simple pretend play
 - ~ Language: Using 7-10 words
 - ~ Understanding: 1-step command
 - ~ Joint Attention: Using gestures: pointing, waving, shaking head
- MD's will refer for further evaluation if concerned

Individuals with ASD:

- Think in pictures, not words
- Play a video in their mind when they want to retrieve information...and that takes time
- Have difficulty with long strings (sequences) of verbal information
- Have difficulty holding one piece of information in their mind while manipulating another
- Attend to information from one sensory channel at a time
- Have difficulty generalizing information
- Experience inconsistencies in perceptions
- Generalizing information
- Getting the "big picture"/the "gestalt"
- Inconsistent perceptions & retrieval
- Sensory issues
- Taking another's perspective
- Managing transitions & change
- Have concrete & literal thinking

TRUTHS vs. MYTHS

Children with autism ...

Truth

- Can use advanced words, but they have no communicative function
- Can experience positive outcomes with improvement early and intensive intervention
- Can have intellectual functioning ranging from severe MR to normal intelligence
- Usually develop the pointing skill later
- Can engage in imaginative play
- Are affectionate on their own terms
- Look at or through you, but eye contact has no social purpose

Myth

- Do not talk
- Have no hope for
- Are geniuses
- Do not point
- Do not pretend play
- Are not affectionate
- Make no eye contact

ASD = Complex Disorder

COMORBIDITY

- Mental Retardation
- Communication Impairments
- Seizures
- ADHD
- Obsessive Compulsive Disorders
- Mood disorders and Depression
- Anxiety disorders (OCD)
- Explosive disorders
- Stereotypes and Self-Injurious-Behavior

OTHER COMORBIDITY ISSUES

- Certain atypical behaviors are NOT necessarily ASD
- High comorbidity with ADHD-like symptoms
- NVLD
- HFA
- Seeing the forest and not the trees 😊

Salient Elements of Asperger's Disorder

Social

- Social withdrawal
- Unskilled initiations and responses
- Socially stiff, awkward, emotionally blunted, self-centered, unable to understand social cues, inflexible, lacking in empathy and understanding
- Emotionally vulnerable and easily stressed
- Easy targets for teasing and bullying

Salient Elements of Asperger's Disorder

Speech/Language:

- Good speaking fluency
- Poor pragmatics
- Poor non-verbal skills
- Often has "scripted speech" when younger
- "Little Professor"

Salient Elements of Asperger's Disorder

Sensory:

- Hypo-and hyper-sensitivity to stimuli
- Poor auditory processing, including sound sensitivity

Physical/Motor:

- Fine and gross motor challenges; clumsy

Speech/Language:

- Good speaking fluency
- Poor pragmatics
- Poor non-verbal skills

Salient Elements of Asperger's Disorder

Cognitive/Academic

- Generally average intellectual abilities but with $VIQ > PIQ$ (2 SD's typically)
- Obsessive, narrowly defined interests (Anima, cartoons video games)
- Concrete/literal thinking style
- Rigidity and inflexible demeanor
- Poor problem solving skills
- Poor organization
- Difficulty in discerning relevant stimuli

DSM-IV-TR Diagnostic Criteria for Autistic Disorder

1. Qualitative impairment in social interaction;
2. Qualitative impairments in communication;
3. Restricted repetitive and stereotyped patterns of behavior, interests, and activities;
4. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3:
 - a) social interaction;
 - b) language as used in social communication;
 - c) symbolic or imaginative play
5. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder;
6. The disturbance is not better accounted for by another specific Pervasive Developmental Disorder.

Autism Assessment: Staff Roles

- Front office staff
 - Maintain and update referral list
 - Provide information on logistics of referral
- Allied health professionals
 - Distribute patient education
 - Provide routine feedback
- Clinical providers
 - Observe child's behavior
 - Listen to parent's concerns
 - Advise parents on development and behavior
 - Make referrals

Autism Assessment

Reimbursement

- Autism assessment with observation and parental discussion currently is coded under the general well-child visit
- *If implementing standardized developmental screening: increase reimbursement (handout)

REFERRALS

- DO NOT DELAY

- ~ Under 3 years - refer to Early Intervention
- ~ 3 years or above - refer to School District

- For diagnostic confirmation consider:

- Developmental & behavioral pediatrician
- Psychologist
- Pediatric neurologist
- Child psychiatrist

(speech-language, OT, school board, etc., cannot diagnose for service agency requirements)

The Next Steps...

- Acknowledge parent's fear and grief
- Provide information on how to tell others
- Provide parent with referral source information
- Encourage communication
- Set a follow-up appointment
- Follow up with referral provider(s)

REFERRAL LETTER

Today's Date: _____

Dear Child Development Specialist: (psychologist, neurologist, E.I. Agency, other _____)

On _____, we saw _____, age _____, D.O.B. _____

parents' name(s) _____ address _____

and looked carefully at his/her development with _____

(lists of measures), which are valid screening tools recommended by the American Academy of Pediatrics. We noted concerns with _____ in the following areas:

- _____ fine motor skills
- _____ receptive language
- _____ expressive language and articulation
- _____ gross motor skills
- _____ self-help skills
- _____ social-emotional behavioral skills
- _____ preacademic and academic skills
- _____ other concerns (autism, ADHD, etc)

We have responded by:

Information given to parents: _____

Referral(s) to _____

For: (evaluation, diagnostic clarification, recommendations for treatment or other services)

Please provide our office with the results of your evaluation. Yes _____ No _____

Thank you,

REMEMBER:

1. I am a child with autism. I am not "autistic."
2. My sensory perceptions are disordered.
3. Please remember to distinguish between won't (I choose not to) and can't (I'm not able to).
4. I am a concrete thinker.
5. Be patient with my limited vocabulary
6. Because language is so difficult for me, I am very visually oriented.
7. Focus and build on what I can do rather than what I can't do.
8. Help me with social interactions.
9. Try to identify what triggers my meltdowns.
10. If you are a family member, please love me unconditionally.

