Understanding Autism Spectrum Disorder (ASD)

Presented by:
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Training Objectives

• Introduce social model of disability and neurodiversity

• Review timeline of ASD and related legislation

• Describe development differences associated with ASD
What is a Disability?

Medical Model  
The issue is the individual

Social Model  
The issue is an inaccessible world
What is a Disability?

When environmental supports meet individual needs, the impact of disability is reduced.
Neurodiversity

• Neurological differences are to be recognized and respected as any other human variation.
What is Autism Spectrum Disorder (ASD)?

- **Pervasive neurodevelopmental disorder**
  - Pervasive = affects all aspects of life
  - Neuro = brain
  - Developmental = lifelong

  *Not a disease or mental illness*

- Current ASD Prevalence Estimates:
  - 1 in 54 nationally
  - 1 in 44 in Minnesota
  - 4:1 male/female ratio*
Overlapping Conditions

- Intellectual Disability (ID)
- Fetal Alcohol Spectrum Disorder (FASD)
- Attention-Deficit Hyperactivity Disorder (ADHD)

- Mental Health:
  - Anxiety
  - Depression
  - OCD

- Physical Health:
  - Epilepsy/Seizure
  - Gastro-intestinal
  - Sleep
  - Motor
ASD Skills and Strengths

- Detail-oriented
- Focused
- Rule-bound
- Creative
- Kind
- Honest
- Loyal
- Punctual
- Productive
- Humorous
Timeline

• **1943/1944:** Leo Kanner & Hans Asperger

• **1965:** Social Security Act; Elementary and Secondary Education Act

• **1973:** Section 504 of the Rehabilitation Act

• **1975:** Education for All Handicapped Children Act, currently known as the Individuals with Disabilities Education Act (IDEA)

• **1980:** DSM-III published, introduces diagnostic criteria for “infantile autism”
Timeline

- **1990:** Americans with Disabilities Act (ADA)

- **1991:** The federal government makes autism a special education category. Public schools begin identifying children on the spectrum and offering them special services.

- **1994:** DSM-IV published, Asperger's Syndrome is added to the DSM, expanding the autism spectrum to include milder cases in which individuals tend to be more highly functioning

- **1999:** Olmstead v. L.C.- Supreme Court Ruling
Timeline

- **2000**: Children’s Health Act of 2000 authorized the CDC to create the Autism and Developmental Disabilities Monitoring (ADDM) Network

- **2004**: Individuals with Disabilities Education Act (IDEA) reauthorized

- **2013**: DSM-V published, which folds all subcategories of the condition into one umbrella diagnosis of autism spectrum disorder (ASD)

- **2020**: CDC publishes most recent ASD prevalence estimates of 1:54 individuals
Autism Prevalence
United States 1970-2020
Source: Center for Disease Control

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- **58%** of youth with ASD had a transition plan in place by the federally required age
- **58%** of young adults with ASD worked for pay at some point
- **37%** of young adults were disconnected (no job/education) after high school
- **60%** of youth with ASD had at least two health or mental health conditions
- **19%** young adults with ASD ever lived independently
- **Our knowledge base virtually ends at the age of 25**
ASD and Intersectionality

- Autism impacts all communities, locally and globally.
- While the prevalence of ASD is relatively consistent across communities, access to diagnosis and support services differs across socio-demographics and identities.
Adversity, Disparity, and Stigma

- Children with ASD encounter more ACEs than children without ASD, and that this difference is especially pronounced in lower income families.
- ACEs emerged as one of the strongest and most consistent correlates of unmet healthcare needs impacting children with ASD.
- Most people experience intersecting forms of stigma, which have complex effects on health behaviors, physical health, and mental health.
Understanding ASD

IF YOU'VE MET ONE PERSON WITH AUTISM, YOU'VE MET ONE PERSON WITH AUTISM.

-STEPHEN SHORE
Patterns of Development

Typical Development
Developmental Delay
Autism

Motor
I.Q.
Language Comprehension
Language Expressive
Social
Memory
ASD Triad of Impairments

Socialization
- Lack of reciprocal social interaction skills

Imagination
- Restricted and repetitive behaviors

Communication
- Difficulty in understanding nuances of communication (verbal and nonverbal)

(Wing & Gould, 1979)
ASD: DSM-5

• Persistent deficits in social communication and social interaction across multiple contexts:
  – Language/communication
  – Reciprocity of conversation
  – Eye contact
  – Social expression and affect
  – Implicit social learning (unwritten rules/hidden curriculum)
ASD: DSM-5

• Restricted, repetitive patterns of behavior, interests, or activities:
  – Sensory perception and integration
  – Stimming behavior(s)
  – Focus and attention
  – High-interest areas
  – Adaptive behavior
Sensory Perception

- Hypersensitive *(too much)* vs. hyposensitive *(need more)*
  - Tactile/Somatosensory System: touch
  - Visual System: sight
  - Auditory System: hearing
  - Gustatory System: taste
  - Olfactory System: smell
  - Vestibular System: balance
  - Proprioceptive System: body position
  - Interoceptive System: internal response
Sensory Processing Challenges

- Difficulty **filtering** extraneous input
- Chaotic and/or unpredictable sensory input often distressing
  - Other people – lines, crowds, etc.
  - May need breaks from sensory environment
  - May have a low frustration tolerance
Stimming Behavior

Individuals with ASD experience the world differently. Stimming behaviors are a way to regulate, including:

- Fidgeting
- Rocking
- Pacing
- Flapping
- Scripting
- Other repetitive behaviors
Communication Differences

- **Expressive**
  - Speech delay
  - Echolalia
  - Prosody

- **Receptive**
  - Literal thinking
  - Processing speed
What is Theory of Mind?

• Theory of mind is the ability to attribute mental states:
  – beliefs, intentions, desires, emotions, knowledge, etc.
    • to oneself,
    • to others,
    • to understand that others have different perspectives
Theory of Mind Development

6 months: Distinguish between motion of animate and inanimate objects

12 months: Joint attention

14-18 months: Follow gaze, begin to link emotions and goals

18-24 months: Pretend play

3-4 years: Distinguish between own and other’s beliefs and knowledge

5-6 years: Understand that someone can hold beliefs about another person’s beliefs

9-11 years: Faux pas (social mistake)

(Wellman & Liu, 2004)
Joint Attention

• Ability to coordinate our attention with other people
  – **Dyadic Interaction:** Face to face between two people
  – **Triadic Interaction:** Two people in relation to a third external object, situation, or event

• To engage in joint attention, we need to process information about our own point of reference, the point of reference of another person, and the congruence between these perspectives
Joint Attention

• Critically important for the development of more behaviors observed during childhood, including language skills and theory of mind.
  
  – **Responding to Joint Attention (RJA):** emerges around 9 months of age and is uniformly present by 15 months
  
  – **Initiating Joint Attention (IJA):** emerges around 12 months and is uniformly present by 18 months
Theory of Mind Challenges

• Difficulty understanding other people’s thoughts, beliefs, intentions, and feelings.

• Difficulty predicting and making sense of the behavior of others.

• Lack of understanding that behavior impacts how others think and/or feel.
Bi-Directional Challenge

• “Interaction difficulties between typical and autistic individuals may be attributable to both parties; typical individuals may make less accurate mental state attributions about individuals with autism in the same way that individuals with autism appear to display mind-blindness towards typical individuals.”

(Edey et al, 2016)
Conclusion

- ASD is a lifelong condition associated with multiple developmental differences

- Challenges that arise can be addressed by provided environmental supports

- A non-autistic perspective influences the interpretation of autistic behavior

- Continued work is needed to ensure access to coordinated supports across the lifespan