

CHCEDS434A

**Provide support to students with
autism spectrum disorder**

N. Sharrock

“To know one person with autism spectrum disorder is to know ONE person with autism spectrum disorder.”



Sue Larkey

DAY 1 Learning goals

- What is Autism Spectrum disorder?
- *Historical context and current research*
- Understand the ASD student and family's perspective
- Behaviour management

DAY 2 Learning goals

Support strategies

- Social Stories
- Visuals and cartoon communication
- iPad APPS
- What can we learn from a person with ASD?
- Resources
- Reflection and evaluation



What do you know?

- Discuss your own experiences of working with ASD students.
- What are your learning goals for this unit ?
- Group share

What is Autism Spectrum Disorder?

Autism spectrum disorders are life-long neurodevelopmental disabilities with onset before 36 months and characterized by:

1. impaired social interactions
2. impairments in verbal and non-verbal communication skills
3. restrictive and repetitive behaviours, interests and/or activities

“Recent research indicates the mean age for a diagnosis is eight years, but the age range varies from very young children to adults”

(Eisenmajer et al. 1996 as referred to in Attwood. T. 2007)

What is Autism Spectrum Disorder?

The **Diagnostic and Statistical Manual of Mental Disorders (DSMIV)** classifies PDD as an umbrella term for disorders that involve;

- impairments in social interaction skills, communication skills,
- the presence of stereotypical behaviours, interests, and activities.

The conditions classified as PDD in the *DSM-IV* are:

- Autistic Disorder
- Childhood Disintegrative Disorder (CDD)
- Rett's Syndrome
- Asperger's Syndrome (AS)
- Pervasive Developmental Disorder - Not Otherwise Specified (PDD-NOS)

Prevalence of ASD in society

NOTE: Before 1994 there was no Asperger's Syndrome diagnosis available.

1983 – 1:20,000 of the world population

2008 – 1: 150 of the world population

'A Western Australian study of children aged 0-16 in 2006/2007 found the prevalence to be 1:160. That equates to 6.25 per 1000 children.'

(Dr. Lee Sturgeon. 'Preparing for Success' DVD. Sue Larkey pub. 2010.)

Prevalence of other conditions

Cerebral Palsy – 2 per 1000

Diabetes – 1.4 per 1000

Deafness – 1.5 per 1000

Blindness – 0.3 per 1000

Leukemia – 0.045 per 1000

TOTAL – 5.245 per 1000.

Children with ASD occur **more often** in the population than all other conditions added together.

(Dr. Lee Sturgeon. 'Preparing for Success' DVD. Sue Larkey pub. 2010.)

Symptoms of ASD

Symptoms of ASD can be present in a variety of combinations and may accompany other disabilities.

Some people with the disorder

1. Have normal levels of intelligence,
2. Most have some degree of intellectual disability, ranging from mild to severe.
3. A range of difficulties may be found in expressive and receptive language and communication.
4. It is estimated that up to 50% of people with Autistic Disorder do not develop functional speech. For those who do, the speech may have unusual qualities and have limited communicative functions.

Spectrum condition

It is a spectrum condition and affects individuals in different ways, with different degrees of severity.

At the lower end of the spectrum, ASDs are often associated with learning disabilities.

Children with higher-end disorders, such as **Asperger's Syndrome** or **High functioning autism**, tend to have an average or above-average IQ.

All people with ASDs share difficulties with:

- communication
- social interaction
- thinking and behaving flexibly.

Sensitivities



In addition, some children with ASDs are especially sensitive to their environment.

Noise, bright colours, strong smells, strip lighting and high-frequency visual stimuli can cause stress or even physical pain; some children shrink away from physical touch and have a strong desire for privacy and their own space.

NOTE: The term 'Asperger's Syndrome' is recently (2012) being replaced by the term 'high functioning autism'.

History of diagnosis

1. Hans Asperger described a profile of abilities and behaviour in young children in 1944. He called it 'autistic personality'.
2. 1981, after Asperger's death, Lorna Wing first used the term *Asperger Syndrome* to describe children with an intellectual capacity within the normal range but whose abilities and behaviour are consistent with our understanding of Autistic Spectrum Disorders.

(Attwood, T. 'Strategies to reduce the bullying of young children with Asperger Syndrome'. *Minds & Hearts* website accessed 8/5/2012).

Current research

1. “One theory is that the disorder stems from one or more defective genes on the X chromosome. This may explain why statistics show that four times as many boys as girls are diagnosed with the disorder”.
(CHCEDS434A Community Services Training Guide. smallPRINT. 2009. p. 12)
2. “Autism spectrum disorders represent an abnormality of brain development and function, appearing within the first three years of life...”
<http://www.cddh.monash.org/assets/fs-autism.pdf>

Research continued

3. Parental history of bipolar and/or schizophrenia are found to be common in children with autism spectrum disorder.

(Dr. Lee Sturgeon. 'Preparing for Success' DVD. Sue Larkey pub. 2010.)

Brain structure and function

Research has shown that brains of people with ASD are wired differently and sometimes look different to that of atypical people.

Some of the differences are changes in;

- the size and thickness of the cerebral cortex
- in the neural fibres of the corpus callosum
- the functional activity of the front lobes
- the functional activity of the temporal lobes
- the structure of functional activity of the limbic system

Medical studies

One study found that children with autism had a weak synchronization between the left and right brain hemispheres.

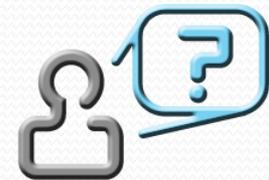
The strength appeared to be linked to the degree of the child's symptoms. The weaker the link the more severe the impairment in children.

(**Disrupted neural synchronization in toddlers with autism** – Dinstein I, Pierce K, Eyer L, Solso S, Malach R, Behrmann M, Courchesne E. *Neuron*. 2011 Jun 23;70(6):1218-25.)

Other possible factors

1. Environmental toxins
2. Prenatal viral infections
3. Brain injury, oxygen deprivation during birth, prematurity etc

The causes of ASD are not known. Autism is likely to have multiple reasons including genetic factors.



Myths and stereotypes

The following DO NOT have a causal link to ASD.

- Immunization
- Birth weight
- Number of previous babies
- Parental age
- Socio-economic status

Stereotypes

All people with an ASD have;

- Narrow interests
- Narrow abilities
- Challenges and high needs

This is NOT true for ALL people with ASD.

People with ASD are diverse and INDIVIDUAL.

Autism is only one part of the individual.

Myths



1. Meeting or supporting one person with ASD means you know how to support ALL people with ASD.
2. People with ASD cannot build solid relationships with others or feel or express love or empathy.
3. Many people with autism have savant abilities, such as extraordinary talents in math or music.
4. Most people with ASD are non-verbal or close to.
5. I should not expect much of a person with ASD.

Types of Autism

The conditions classified as PDD in the *DSM-IV* are:

- Autistic Disorder
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Autistic Disorder

Impairments of;

1. Social interaction
2. Communication and play
3. Restricted or repetitive interests or activities

Autistic Disorder

Other Commonly Associated Features

- Intellectual disability occurs in 70% of people with autistic disorder
- Is more common in males than females (3:1)
- Epilepsy is common and can develop at any age
- Unusual sensory responses e.g. sensitivity/aversion to particular sounds or tactile sensations, intolerance to foods, or fascination with spinning objects or lights
- Can form affectionate attachments to those they know well
- May develop behaviour disorders e.g. angry outburst, self-injurious behaviour, feeding difficulties/fads, sleep problems, and over activity (particularly as children)
- Anxiety due to poor communication skills, over –stimulation etc.

Asperger's Syndrome/Disorder is now referred to as **High Functioning Autism**

- Asperger's disorder is diagnosed by the presence of social interaction impairments and repetitive and restricted interests as described in Autistic Disorder above.
- There is usually no significant language delay; however, subtle impairments in the social use of language are present and often disabling, e.g. by leading to teasing and social isolation.
- This disorder is more common in males (13:1) but may be under diagnosed in females.

High Functioning Autism

Typical characteristics of Asperger's disorder are:

- Normal or borderline intellectual ability
- Clumsiness
- Concrete, pedantic speech
- Lack of common sense
- Normal or even precocious speech development
- Better verbal than non-verbal skills on psychological assessments
- Intolerance of change
- Anxiety

Asperger's v Autism

High functioning Autism	Low functioning Autism
May be thought of as a little 'odd' or 'eccentric'	Social impairment
May be awkward	Motor skills impaired
May be highly verbal	Communication impaired often non-verbal
Hypersensitivity or hyposensitivity mild	Hypersensitivity or hyposensitivity
Repetitive behaviours	Repetitive behaviours

People with Asperger's Syndrome (high functioning autism) have an intellectual capacity within the normal range. But have a distinct profile of abilities that has been apparent since early childhood.

Rett's Disorder

Rett's Disorder causes profound mental and physical handicap.

- The disorder is observed only in girls
- characterized by autistic behaviour
- dementia
- apraxia of gait
- loss of facial expression
- and stereotyped use of hands (hand-wringing or hand washing)

Rett's Disorder

Onset of all of the following after the period of normal development:

- (1) deceleration of head growth between ages 5 and 48 months
- (2) loss of previously acquired purposeful hand skills between ages 5 and 30 months with the subsequent development of stereotyped hand movements (e.g., hand-wringing or hand washing)
- (3) loss of social engagement early in the course (although often social interaction develops later)
- (4) appearance of poorly coordinated gait or trunk movements
- (5) severely impaired expressive and receptive language development with severe psychomotor retardation

Childhood Disintegrative Disorder

The essential feature of this disorder is a marked regression in multiple areas of functioning following a period of at least two years of apparently normal development.

After two years of age (but before 10 years of age) the child has a clinically significant loss of previously acquired skills in at least two of the following areas:

- expressive or receptive language,
- social skills or adaptive behaviour,
- bowel or bladder control,
- Play and/or motor skills. **The disorder is very rare.**

Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS)

The diagnosis of PDD-NOS is used when there is a severe and pervasive impairment in the development of social interaction associated with impairment in either verbal or non-verbal communication skills

or with the presence of stereotyped behaviours, interests, and activities,

but the criterion are not met for a specific

Pervasive Developmental Disorder.

General Strategies

Every child with ASD is unique and will respond in different ways to different situations and approaches.

General strategies:

- Having a clear routine to the day or lesson and using a visual timetable
- Minimising disruption to routine
- Organise classroom with clearly defined areas and setting up a quiet distraction-free corner

General Strategies

- Students with ASD may not understand facial expression and figurative language
- Explanations are to be clear in black & white terms
- Refer to child by name because they may not know that 'red group' or 'everyone' refers to them
- Concrete materials and visual signs (eg. Makaton and/or Auslan)
- Explicit links between old and new learning

General Strategies

- The student may find it hard to see the gist and may get bogged down in the detail
- being clear and firm about behaviour and applying rules consistently, but also understanding a child's limitations
- making use of ICT – computers are not demanding emotionally, as people often are, and can allow the child with ASD to rest from the demands and pitfalls of social interaction.
- Use fidget toys to redirect their behaviour

Behaviour modification

- When your anxiety goes up, so does theirs so use a calm monotone voice to direct behaviour stating what to do.

Example:

“Matthew please put the stick down.” Refrain from using ‘No’ because to the child it may mean *‘never for the rest of their life’* and may cause anxiety leading to a meltdown.

Behaviour modification

- ‘No touching in private areas’ can mean the child may wet their pants because you said not to touch their private areas.
- Say ‘NO’ only when you really mean it for their safety or the safety of others. ‘No running on the road’ or ‘No putting your hand in the oven’
- Sensory toys can assist in reducing anxiety in the student so if you remove it or take it away the anxiety returns and may be replaced with unacceptable or obsessive behaviours.
- People with high functioning Autism do not learn from their mistakes. They may become frustrated and angry. They then require more control and tend to be more rigid.

Behaviour modification

ASD people may be anxious because of their fears.

- **Fear of making a mistake – they need to be right**
- **Fear of ridicule amongst peers –need to be accepted, not hurt or bullied**

ASD people may value intelligence more than any other quality. They hate to be 'stupid'.

If they can't find the answer they may 'push the panic button' and become aggressive.

They need to be taught how to cope with frustration and that 'mistakes make you smarter'. Vocalize the thinking and model the behaviour you wish them to do.

Behaviour modification

“The cure for Autism is solitude.”

(Garnett, M. 2012)



Behaviour modification

“Stress occurs proportionally to the number of people.”

Dr. Michelle Garnett is a clinician working with the psychology of Autism. She is the founder and director of the ‘Minds and Hearts’ website.



Behaviour modification

“When people with ASD are overly anxious the only ways of coping are:

1. Control
2. Disruption
3. Special interest



Behaviour modification

- 1 in 3 adolescents and adults with ASD have depression
- 2 out of 3 ASD children have a problem with anger

They express sadness and anxiety as anger

(T. Attwood, 2012)

Conditions related to Asperger's

Behaviour	% of ASD students
anxiety	85%
sadness	33%
anger	64%
solitude	82%
Avoid affection	66%
Rapid mood change	58%
More likely to be teased	71%
Have imaginary friends	18%
Develop unusual mannerisms	48%
Different accent to that of their family	28%
Experience difficulties with handwriting	73%
Experience blinking and tics(vocal or motor)	20%
Experience motor clumsiness	50%
Have problems with organisation and time management skills	81%

Emotional Toolbox

ASD students need an **Emotional TOOLBOX** (Attwood, T. 2012) that includes;

- Sensory tools/fidget toys
- Relaxation techniques
- Social tools
- Physical tools
- Understanding of inappropriate tools
- Map of safe and vulnerable places
- For 9-13 year olds – Understanding of sexuality versus friendship

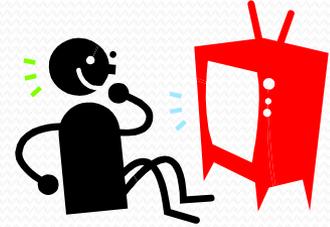
Emotional Toolbox

**“They need to know what to
do and why.**

This changes behaviour”

T. Attwood. 2012 Conference

View DVD: “*The Autism Puzzle*”. BBC



DISCUSS

What information was presented? Brainstorm within group.

Report back to class. Did it answer any of your questions?