AUTISM SPECTRUM DISORDERS

FACT SHEET

INTRODUCTION

Autism is a life long developmental disability that affects an individual's understanding of what is seen, heard and sensed. It results in problems with social relationships, communication and behaviour.

A BRIEF HISTORY

Autism was first named in 1943 by Dr Leo Kanner, an American psychiatrist. The children he observed shared several symptoms, the most notable of which was extreme isolation, or withdrawal from human contact, beginning in the first year of life. Kanner named the condition "early infantile autism" because he was convinced that it was present from birth or very soon after.

However, during the next 20 to 30 years many professionals believed that autism was a result of poor parenting – a cold parent who caused the child to withdraw and exhibit a condition similar to schizophrenia. They viewed autism as a mental health problem.

Starting in the 1960's advances were made in the diagnosis and treatment of autism. Researchers identified the particular features of autism that differentiate it from other conditions and concluded that autism was a likely result of neurological and biochemical causes. It is understood as a disturbance or dysfunction in sensory and language processing.

The exact cause is still unknown. It is thought to have several possible causes including genetic and metabolic factors, viral infection and pre- and post-natal complications. It is clear that no factors in the child's psychological or family environment cause autism.

WHAT IS AUTISM?

Autism is a spectrum of severe neuro-biological disorders of development. It is a disorder of the brain that causes a life long disability. Autism seriously affects how children learn, communicate, perceive their environment and relate to others. There is no cure for autism, although early diagnosis and intervention can enable improvement in symptoms and quality of life. Children with autism – like all children – vary widely in their abilities and behaviour. This means that each symptom or sign may appear differently, both in nature and severity, in each child.

THE SIGNS OF AUTISM

Failure to Develop Normal Socialisation

Children with autism have major problems in knowing how to relate to other people and their environment. They often don't interact at all and appear very isolated with difficulty understanding and expressing emotion.

Children who develop normally interact with their parents and others from infancy. This enables them to develop a framework to understand the world, the motivations and actions of others and to anticipate and predict the behaviour of others.

The child with autism has difficulty developing these skills and appears socially inept, lacking in empathy and social awareness. This results in an impaired ability to interpret other people, their feelings and their behaviour. Children with autism have difficulty knowing how to socially engage others, process "people information" and anticipate and understand the reactions of others.

The social cues provided by others – smiles, waves, frowns, may have no meaning to the child with autism. Children with autism often don't play or interact with others and may use people as "objects" or "tools" when they do interact.

The socialisation of the child with autism is characterised by difficulties in:

- understanding social relationships,
- relating to others (may seem to 'tune out'),
- establishing/maintaining eye contact,
- forming friendships,
- understanding other people's thoughts and feelings,
- co-operative play,
- a lack of appreciation of what others can be expected to know (theory of mind),

- an impaired ability to predict the intentions and behaviours of others,
- difficulties with all forms of abstract or inferred meaning,
- poor understanding of social communication,
- poor understanding of how others think and feel,
- an impairment in the social use of language,
- an impairment in understanding social conventions and nuance,
- impairment in the awareness of other people and their needs,
- an impairment in imagination and pretend play.

Disturbances in Speech, Language and Communication

Frequently one of the first signs of autism noted by parents is the child's failure to begin talking. Research suggests that their language development may be abnormal from as early as two months of age. Babies with autism may not babble at all, may show less variety in their sounds, or may make primarily high pitched squealing sounds. Delays in language development are usually apparent by twelve months of age. Babies with autism often haven't learned words and can't be coaxed into imitating sounds. Between the ages of 4 and 5 the child with autism may start to learn some words by rote but may have only limited capacity to use them to communicate. By age 4, only around 1 in 4 children with autism can use speech meaningfully and then generally only to express an immediate need.

Around 40 per cent of children with autism don't speak at all. Others are echolaliac – repeating what has been said to them.

There is a distinct pattern in the language/ communication development of children with autism that makes it discernible from other specific language disorders and delays. This difference centres around the use of language for social purposes.

The child with autism:

- doesn't necessarily pay attention to the human voice
- has poor or absent body language/non-verbal communication
- doesn't seek to engage the attention of others
- may have a flat or monotonous voice, or may have no apparent awareness of or control over pitch or volume
- has a literal and concrete understanding of language (without the ability to determine the intent of the speaker) and doesn't incorporate abstract concepts or symbolism
- has poor comprehension (even if expressive language seems fluent)
- speaks to enable concrete needs to be met. This may extend to lengthy speech on topics of obsessional interest. Speech is not used for "two way communication"
- may not develop language beyond the labelling/ naming of objects
- may exhibit echolalia (immediate or delayed)
- may reverse pronouns (e.g. you/I), use words or phrases out of content and invent words.

Abnormal Relationship to Objects and Events

Children with autism are usually unable to relate normally to objects and events. Many children have a 'need for sameness' and become agitated and very distressed if their environment or routines are varied. They tend to have a very restricted range of activities and interests.

The way children with autism 'play' may be unusual. Sometimes there is no recognisable play at all, or there is limited imaginative 'pretend' or dramatic play. Toys and play materials are often used in unusual and repetitive ways e.g. repeated block dropping or arrangement by colour, size or shape. Children with autism frequently demonstrate repetitive movement and activities or behaviours e.g. hand flicking, rocking, spinning, toe-walking.

Abnormal Responses to Sensory Stimulation

Sensory stimulation is provided by things in the environment that we touch, smell, feel, see and hear. We learn to filter unimportant stimuli and focus on what is relevant or important. Children with autism have difficulty with screening out irrelevant stimuli. They may over- or under-react to sensory stimulation. For example, a child with autism may be fascinated or fearful of lights, shapes, sounds, textures, smells or tastes. They may respond in an unusual way to motion and particular places and objects. In general children with autism seem to rely on taste and smell more than hearing and vision to learn and explore. They may also demonstrate reactions to heat/cold and pain that are abnormal e.g. insensitivity or lack of responsiveness.

Developmental Delays and Differences

Child development is relatively evenly paced and most children achieve milestones of development in

a regular sequence even if they have a developmental delay. A child's skills – gross motor, fine motor, cognition, language, social and self help – may vary widely in comparison with others yet still be well within 'normal developmental limits'. For children with autism, this developmental process is more uneven. Their rate of development is quite different – particularly social, cognitive and communication skill development. In contrast, motor development may be relatively normal. The sequence of development within any skill area can also be unusual with evidence of "splinter skills" and incomplete learning/skill acquisition.

Many children with autism have some degree of intellectual impairment.

Children with autism often experience delays in acquiring self help skills such as using the toilet, good feeding/eating habits and establishing regular sleeping patterns.

Age at Onset

Autism is a life long condition present at birth. Signs of autism begin during infancy or early childhood. It occurs in (approx) 1 in 1000 births and is four times more common in boys than girls. Autism occurs across all races, nationalities and social classes.

TYPES OF AUTISM

Autism in children ranges from mild to severe in impact and there is tremendous variation in the severity of each symptom or sign for any individual, e.g. a child with severely impaired social skills may have 'normal' cognitive skills – being socially aloof but able to learn. Children with autism spectrum disorders may have different diagnoses with such "labels" as autism, pervasive developmental disorder (PDD), "autism-like" disorder, atypical PDD, Apsergers Syndrome, and so on.

DIAGNOSIS OF AUTISM

There are no medical tests that detect autism. Diagnosis is made according to the criteria established in the American Psychiatric Association's *Diagnostic & Statistical Manual of Mental Disorders* (DSM-IV).

These criteria relate to:

- qualitative impairment in reciprocal social interaction (the way the child relates to people)
- qualitative impairment in verbal and non-verbal communication
- markedly restricted activities and interests and impaired imaginative play
- evident in the first 30 months of life.

In Western Australia a child will generally be referred to either Princess Margaret Hospital (Developmental Paediatric Department) or to the State Child Development Centre. This starts the assessment process which enables the *Central Diagnostic Panel for Autism (CDP) to* "officially" arrive at a diagnosis. After diagnosis, the child is referred for services to a recognised service provider. These services focus on early intervention, respite for parents and carers, consultancy for schools, advocacy and some services for adolescents and adults.

There is no known cure for autism and most people with autism will need some level of assistance throughout their lives. However, young children benefit greatly from individualised and highly structured specialist help therefore early identification and diagnosis enable the best outcome for the child.

INCLUDING A CHILD WITH AUTISM IN CHILD CARE

Children with autism understand their environment best when they have lots of visual information. They rely heavily on routine and structure to support their understanding. Remember to keep things REAL, REGULAR and REPETITIVE to best support the inclusion of children in Child Care.

Ideas for the Caregiver – General Points

- Maximise your use of visual cues and prompts.
- Be aware of sensory difficulties and minimise visual and auditory distractions.
- Don't take misbehaviour personally – recognise what the behaviour is communicating, e.g. stress.
- Be concrete and literal with information and instructions.
- Avoid verbal overload, e.g. use visual aids, and sequential diagrammatic instructions.
- Prepare the child for changes in the environment, tasks or routine, e.g. use a visual timetable with photographs or pictures of objects.
- Be consistent.
- Avoid non-productive actions or conversations.

- Provide structure and organisation, e.g. clear physical and visual boundaries.
- Get to know the child as an individual with likes and dislikes, abilities and needs.

Suggestions to increase comprehension and understanding.

- Gain the child's attention – (don't insist on eye contact if the child is not yet ready!).
- Use short sentences.
- Emphasise the key words, e.g. 'Put your plate on the table'.
- Introduce one part of an instruction at a time. Break things into small steps.
- Speak slowly using normal volume and tone. Don't shout!
- Use gesture and facial expressions, e.g. pointing, holding your hand out to receive something. (These will need to be exaggerated to aid understanding).
- Be prepared to repeat the instruction.
- Talk to the individual not the group.
- Use gentle physical prompts as necessary.
- Children will learn familiar instructions involved with routines first, e.g. mat time, home time.

Suggestions to increase expressive language

- Recognise and acknowledge all attempts at communication.
- Programme joint play that includes imitation e.g. felt board stories.
- Pair language and play routines e.g. repetitive phrases to start transitions.
- Programme lots of interactive games, songs and stories.
- Teach signals to indicate frustration, anger etc.

Suggestions to enhance social interaction skills

A child with autism may require help to:

- Start, maintain and end play.
- Be flexible when unexpected changes occur.
- Join in play activities.
- Tolerate the intrusion of others in their personal space.

To aid the development of social interaction skills:

- Teach the child how to use play equipment by modelling different ways to 'use' toys/equipment. Find something the child likes to do.
- Use other children as models.
- Teach the child to ask for help e.g. use visual cues/pictograms if needed.
- Encourage turn-taking and imitation e.g. interactive/repetitive songs and games.
- Provide some structured play situations with and without space intrusion.
- Encourage friendships.
- Encourage tolerance of intrusion by a gradual approach.
- Remember the child may need some time alone or away from others to enable them to tolerate the group care environment.

Suggestions to help with transitions

Children with autism have difficulty processing information that is new and unpredictable. They prefer to interact with people and objects in a stable, predictable environment. For these children, changes including transitions are unknown and uncontrollable events and they tend to become confused or upset.

- Give the child plenty of warning of changes of activity.
- Try to introduce changes slowly.
- Give children individual instructions – don't rely on general directions.
- Accompany verbal instructions with visual cues (or physical prompt if necessary).
- Provide the child with a timetable, using words or pictures.
- Provide a transition object to act as a reminder.
- Allow the child to make some choices about activities or objects.
- It is sometimes easiest for the child with autism to be either "first or last" in the process.
- If waiting is necessary have a favourite toy or activity available.

Suggestions to guide behaviour

- Identify all things that are reinforcing to the child.
- Identify which re-inforcers are practical in your service.
- Identify things which are definitely not reinforcing (cuddles, pats on the back etc., physical closeness) and avoid them.
- Reinforce/reward all appropriate behaviour.
- Be rewarding to the child. Smile. Behave and speak as though you like him/her.

Caution: If now and then a behaviour that you don't want is unintentionally rewarded, this behaviour is likely to continue for a long time.

To change behaviour

It is important that the approach to behaviour change is consistent with the child's individual programme and home management plan. Talk with parents, relevant therapists, SUPS workers and any significant others to determine a consistent appropriate strategy.

With some behaviours, strategies that enable graded/gradual change may be appropriate, e.g. difficulties with being part of a group, obsessional attachment to objects.

If there has been deterioration in behaviour or regular episodes of inappropriate behaviour, it is important to determine the cause of the behaviour.

Check:

- Has there been a change in routine?
- Is the behaviour a form of communication?
- Is it a reaction to intrusion from another?
- Is it because of changes in our approach?
- Is it a failure to predict / understand / anticipate our behaviour?
- Is it a way of interacting with others?
- Is it due to sensory overload?
- Is it because the environment is unstructured?
- Is the child is stressed, (e.g. are demands too high / tasks too hard?)
- Is the child sick?

Support available to assist Inclusion in Child Care Services

When planning to include a child with autism in your service, contact your Regional SUPS team for assistance and advice. They will help you determine the appropriate level of support required e.g. current information about autism, staff training and skill enhancement, and practical ideas and suggestions. They will ensure that all the people involved including the families, medical practitioners and therapists, liaise closely to enable the best possible outcome for the child and the service. If you are unsure which SUPS team covers your service, contact RUCSN for further advice.

RECOMMENDED READING

Allwood, T. (1994) Why Does Chris Do That? Dept of Family Services & Aboriginal & Islander Affairs, Brisbane.

Autism – Information & Management The Association for Autistic Children in Western Australia.

Autism: The Puzzle: Are the Pieces Starting to Fit? (1992) Proceedings – National Conference, Melbourne.

Dodd, S. (1994) Managing Problem Behaviours: A Practical Guide for Parents and Teachers of Young Children with Special Needs MacLennan and Petty, NSW.

Frith, U (Ed) (1991) Autism & Aspergers Syndrome Cambridge University Press, Cambridge.

Powers, M. (Ed) (1989) Children with Autism – A Parent's Guide Woodbine House, Maryland.

AUTISM: RELEVANT WEST AUSTRALIAN AGENCIES AND DEPARTMENTS

- Princess Margaret Hospital (Developmental Paediatric Department): **08 9340 8886**
- State Child Development Centre (SCDC):

EARLY SYMPTOMS OF AUTISM (NEWBORN TO FIVE YEARS)

NEWBORN TO 6 MONTHS

- May be too good
- May be irritable, easily distressed
- Doesn't reach to be picked up
- Doesn't babble
- Lack of social smile
- Lack of eye contact
- Motor development may appear normal

6 MONTHS TO 12 MONTHS

- Doesn't cuddle, may be limp or rigid when held
- Relative indifference towards parents
- Doesn't play simple social games (peek-a-boo, Bye-bye)
- Doesn't begin to use words
- Doesn't seem interested in baby toys
- May be fascinated with own hands
- Uneven or delayed motor development
- May not chew or accept solid foods

2 YEARS TO 3 YEARS

- Interpersonal interest remains limited, may show some improvement
- Uses other people as 'tools'
- Limited eye contact
- May sniff or lick objects
- Doesn't cuddle, may be limp or rigid when held
- Relative indifference towards parents

4 YEARS TO 5 YEARS

- If speech develops may be echolaliac (repeats in rote fashion what others say, either immediately or later)
- Odd voice quality (e.g. high pitched or monotone)
- Very upset by changes in routine
- Eye contact still limited although may show some improvement
- Gradual increase in affection, but still limited
- Tantrums and aggression continue, but may gradually improve
- Self-injures
- Self-stimulation

Table reprinted from: Harris, S. *Your Child's Development* p. 151/152 in Children with Autism M. Powers (Ed)

HAVE YOU EVER WANTED AN 'EASY WAY' OF EXPLAINING AUTISM? TRY THIS!

Approximately 1 in every 2,500 * children have Autism with three in every four children affected being boys. A child is born with autism but it is very difficult to diagnose until the child is at least three years old. Autism is a brain disorder – there is still a lot of research to be done to find out why it occurs.

A person with autism has major difficulties:

- using and understanding speech and body language;
- with social skills, such as understanding the rules of friendship, joining in, acceptable behaviour and the feelings of others, and
- with play activities and using their imagination.
- As a result of these difficulties, they may develop many (sometimes strange) rituals – sort of like making their own rules, for example:
- obsessions with particular subjects, places, clothing, objects;
- developing certain fixed routines or order of doing things;
- unusual body actions like flapping their hands or walking on their toes; and
- unusual fears of places, sounds objects, events.

Reprinted from:
Autism News, March1992,Victorian Autistic Children's & Adults Association

RUCSN Note: more recent international population studies place this figure at 1 in every 1,000 births.

08 9426 9444

- Mildred Creak Early Intervention Service: **08 9472 1598**
- Disability Services Commission**: 08 9426 9200**
- Autism Association of Western Australia (AAWA): **08 9489 8900**
- Intervention Services for Autism & Developmental Delay (ISADD): **08 9397 5970**

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