Autism Spectrum Disorders

Autism is a developmental disorder of the brain and can affect anyone, regardless of social status or intelligence. Autism is sometimes referred to as Pervasive Developmental Disorder (PDD) or Autistic Spectrum Disorder (ASD), and these are umbrella terms for some more specific disorders which all have many fundamental similarities, but also some subtle differences. Autism Disorder (also referred to as Kanner Syndrome or Classical Autism), Asperger Syndrome, Pervasive Developmental Disorder - not otherwise specified (PDD-NOS), Rett Syndrome, Childhood Disintegrative Disorder (Heller Syndrome) are all disorders that present with symptoms associated with autism.

Reports on the prevalence of autism vary considerably, with some reports giving a prevalence of ASD at around 6 per 1000 people. A recent CNN article (2008) claimed that there are 35 million people in the world who have autism. There appears to be an increase in the number of people being diagnosed, which some believe to be due to better diagnostic methods and awareness of the disorder, but many recent studies appear to be showing that there is a true increase in diagnosis. Autism is also more common in boys than girls (approximate ratio 4:1).

The exact cause of autism is still unknown although growing research has highlighted a number of possible causes. Parents do not cause autism by the way they interact with their child. However, there appears to be a genetic link in some cases with brothers and sisters sometimes being on the autistic spectrum, and often other members of the family have been diagnosed with autism or display autistic behaviours. There are a number of widely reported theories which discuss food allergies/additives, vaccinations or pharmacological treatments as a possible cause (see www.icommunicatetherapy.com for more information on the possible causes of autism). It may be that some individuals are more genetically prone to acquire autism and certain environmental factors act as a trigger. Autism is not a mental illness although it was likely to have been treated as such in the past. It is not curable but symptoms may change over time and a lot can be done to help a person with autism lead a more regular life. The most important factor in outcome is early educational interventions.

Autism was first described in 1943 by Leo Kanner. In 1944 Kanner renamed the disorder as Early Infantile Autism. Kanner described the main symptoms to be autistic aloofness, unable to relate to other people, and a fear of change in their environment. Hans Asperger described a similar disorder around the same time, but the children he described all had speech and language skills. Asperger Syndrome is now used to describe a particular type of autistic spectrum disorder.
Unfortunately, the understanding and appropriate treatment of autism took many years to develop and a common theory for acquisition of autism was the “refrigerator mother”, where a lack of maternal warmth was blamed. Individuals with autism were often institutionalised and treatments included shock therapy, punishment, and administering LSD. More recently applied behavioural analysis and behavioural therapy has been used more successfully to treat individuals on the autistic spectrum.

A better understanding of the disorder developed when, in 1979, Lorna Wing and Judith Gould proposed that individuals on the autistic spectrum generally presented with a 'triad of impairments'.

These impairments highlighted a number of difficulties:

1) **Social interaction**: Individuals have difficulty making friends, understanding what others are feeling and thinking, and working co-operatively with others. Social interactions range from aloofness to unusual social behaviour. Individuals may not make eye contact or respond when spoken to.

2) **Social communication**: Individuals comprehension is much poorer than expression, and expression is often echolalic (repeating words or learned scripts). There are difficulties using and understanding gesture, facial expressions, body language and intonation appropriately. Other social communication skills such as turn-taking may also be a problematic concept. Speech may be delayed and there is little attempt to communicate in other ways. Individuals with autism may rarely initiate communication.

3) **Imaginative thought**: Individuals have difficulties with empathy, imaginative play and become distressed when adjustments to a routine are made. Problem solving is difficult for individuals with autism and they may often take a literal perspective. Jokes, metaphor and sarcasm are not understood. Some individuals may display repetitive movements (hand flapping, or spinning objects etc) and have obsessions or attachments with certain objects. They may also have elaborate routines that they follow in certain environments.

Wing and Gould also noted that many individuals displayed sensory sensitivities to sound, light, smell, taste and touch. Some individuals were also more prone to inappropriate and challenging behaviour, especially if they become distressed.

Many individuals with ASD will have coexisting developmental difficulties which may include learning difficulties, speech and language delay, hyperactivity, and epilepsy.

Some individuals may only show mild examples of the above impairments.
The triad of impairments will be noticeable to some level in all forms of autistic spectrum disorder. Autistic Spectrum Disorders range in severity, and different types of disorder present with certain characteristics.

**Autistic Disorder** (also sometimes referred to as Classical Autism or Kanner’s Syndrome) is likely to present with a more severe manifestations of autism. Individuals are likely to have learning difficulties, communication delay, ritualistic and repetitive behaviours and be socially withdrawn. Many children will have sensory sensitivities and often epilepsy.

Individuals with **Asperger’s Syndrome** tend not to have language delays and have good literacy and reading skills, and above average IQ. However, they still struggle with the social aspects of communication, social skills and understanding abstract language.

**Pervasive Developmental Disorder - not otherwise specified (PDD-NOS)** has symptoms similar to Asperger’s syndrome, but these individuals are more likely to have a language delay, as well as many of the typical social language difficulties of other individuals on the autistic spectrum.

**Rett Syndrome** is a progressive genetic disorder affecting girls. Development usually occurs normally until 6 - 18 months and then the child’s cognitive and physical skills deteriorate. The condition may stabilize over a number of years but the child is left with severe disabilities.

**Childhood disintegrative disorder (also known as Heller’s Syndrome)** is a rare condition where a child develops normally till around 3 - 5 years, and then the child’s skills decline. When the decline stabilizes the child usually presents with impairments that resemble autistic disorder.

**Diagnosis**

There is no medical test to diagnose autism, although Rett Syndrome and Childhood disintegrative disorder may be confirmed with a genetic test. Diagnosis is performed by a trained professional (usually a paediatrician in the case of a child), who observes the behaviour and characteristics of an individual. Diagnosis can be a traumatic moment for parents, but a relieving moment for many adults who are diagnosed after a lifetime of confusion and difficulties. See www.icommunicatetherapy.com for more information about what to do and how to cope following diagnosis.
Treatment
There are a number of different treatments and therapies for autism, but it is important to realise that every autistic person is different, and to have a holistic view of treatment. Often a combination of treatments is better than focusing on one approach only. Prior to intervention we need to know the abilities and strengths of the individual and how they learn new information. We must also be aware of the goals of the individual, as well as making functional goals that will allow them to generalise their new skills.

Applied Behaviour Analysis (ABA) - skills are taught by breaking tasks into small steps and working through these steps. Prompting, Shaping and Rewarding are used to motivate the individual to complete the steps. ABA can be part of a comprehensive program, or used to attempt to teach individual tasks.

Using Visuals - many individuals with autism are visual learners and so the use of pictures, visual schedules and social stories with pictures can be a successful way to teach and communicate with individuals with autism. Visuals enable some non-verbal individuals with autism to initiate communication using pictures.

Social Stories - developed by Carol Gray, these stories can be in word or picture form and help to show the individual how to respond in various social situations.

Social skills training and groups - these groups usually work better with the higher functioning individuals with ASD, often using role play, or re-enacting situations, to help train the individual about social skills and appropriate responses.

Speech and Language Therapy - most individuals with autism have some form of communication delay and many have cognitive difficulties. A speech and language therapist/pathologist will work on speech and language delay, literacy difficulties social skills, alternative forms of communication, and usually be involved in any ongoing therapy programs. Ongoing input from a speech therapist is a vital part of most autistic individual’s developmental program.

Occupational therapy - occupational therapists will help individuals develop daily living skills and self care skills. Occupational therapists will also be part of certain therapy approaches such as Sensory Integration.

Programs and Approaches
There are a number of programs dedicated to facilitating the communication and social skills of individuals on the autistic spectrum. Before embarking on any program investigate whether there is evidence based research to show that the program has merits and has actually been used successfully with other people. Some popular programmes and approaches include RDI, Floortime, Intensive Interaction, TEACCH, Lovaas, PECS, Physiological therapies, special diets, and medication. For a more detailed description of some of the treatments mentioned see www.icommunicatetherapy.com
For more information on communication approaches with individuals with an autistic spectrum disorder, and the use of visuals and social stories go to www.icommunicatetherapy.com

To learn more about Autism, language and communication click this link to see our Book Shop to look at, and purchase books.

Suggested Reading:

**Ten Things Every Child with Autism Wishes You Knew** by Ellen Notbohm and Veronica Zysk

**Autism Spectrum Disorders: The Complete Guide to Understanding Autism, Asperger's Syndrome, Pervasive Developmental Disorder, and Other ASDs** by Chantal Sicile-Kira and Temple Grandin

**Playing, Laughing and Learning With Children on the Autism Spectrum: A Practical Resource of Play Ideas for Parents and Carers** by Julia Moor

**Look Me in the Eye: My Life with Asperger's** by John Elder Robison

**Overcoming Autism: Finding the Answers, Strategies, and Hope That Can Transform a Child's life** by Lynn Kern Koegel and Claire LaZebnik

**Changing the Course of Autism: A Scientific Approach for Parents and Physicians** by Bryan Jepson, Katie Wright, and Jane Johnson

**Louder Than Words: A Mother's Journey in Healing Autism** by Jenny McCarthy


**Helping Children with Autism Learn: Treatment Approaches for Parents and Professionals** by Bryna Siegel


**My Social Stories Book** by Abbie Leigh White, Carol Gray, and Sean McAndrew

**The Social Skills Picture Book Teaching play, emotion, and communication to children with autism** by Dr. Jed Baker