**Autism** is a neurological disorder, that typically appears during the first 3 years of life. It affects functioning of the brain what causes physical, social and language skills.

Autism interferes with the normal development of the brain in the areas of reasoning, social interaction and communication skills.

The disorder makes it hard for autistic people to communicate with others and relate to the outside world.

They are withdrawn and self preoccupied.

Autism knows no social, racial or ethnic boundaries.

It is four times more prevelant in boys than in girls.

Autism is the third most common developmental disability – more common than Down's Syndrome.

Although, the majority of public, including many professionals in the medical, educational and vocational fields are still unaware of how autism affects people and how to work effectively with induviduals with autism.

Our understanding of this disorder has grown tremendously since it was first described in 1943, but it is still incompletely understood.

# Historical background

In the past autism was called "*Dementia Praecox*" (= early mental deficiency) Induviduals with autism were excluded from the outside world and put in madhouses.

In 1914 Eugen Bleuer (swiss psychatrist) coined the term AUTISM (greek "autos" = self)

30 years later *Hans Asperger* (Austrian psychatrist) and *Leo Kanner* (German psychatrist) took the term "autism" up again.

Both described, independent from each other, for the first time the syndrome.

Aspergr and Kanner observed children with peculiar behaviour, children who were preoccupied and withdrawn.

They collected their observations in two essays:

Leo Kanner called his book:

"Early Childhood Autism"

Hans Asperger

"Autistic Psychopathy"

Those two studies layed the faundations for all later examinations and cognitions on autism.

## What causes AUTISM?

One specific cause is not known, but there are different explainations for the various forms of autism (there is no standard "type" or "typical" person with autism).

But it is certain, that there is a disorder of the preception synthesis.

Researchers have als revealed abnormalities in the brain structure, particulary the *cerebellum* (posture, sense of balance ...) and the *limbic system* (anatomical complicated part of the brain, has influence on our experiences and conduct; if sth. is full of relish or without relish decides the limbic system).

Those abnormalities likely occur during our early brain development.

Researchers have also noted a deficiency of large nerve cells, called Purkinje cells, and an excess of *Serotin*, a neurotransmitter. (Neurotransmitter: = important substance in the nervous system)

(Serotin: influences f. ex. sleep, sexuality, learning, motor functions, pain ...)

The *Endorphinsystem* in the brain is also disturbed (lower sensitivity for pain). Multicausal Genesis: Autism is no uniform disease, ätiology is multicausal!!!

## **Symptoms**

Children with autism often appear relatively normal in their development until the age of 24 – 30, when parents or experts may notice delays in social interaction, language or play.

### Speech and Communication:

Speech develops slowly and abnormally, or sometimes even not at all.

It is characterized by meaningless, noncontextual *echolocia* (= constant repetition of what is said by others), and they give unusual responses.

They also may exhibit repeated body-movements, such as hand flapping or rocking.

Autistic people often communicate with gestures instead of words, they have a short attention span.

Even if the person with autism has a lot of speech they would probably use this to talk "at" you rather than "with" you.

They do not really know the meaning of mimic or tone of voice.

### **Social Interaction:**

People with autism often appear aloof and indifferent to other people.

They prefere spending time alone rather than with others, they show little interest in making friends.

Autistic people show less responsible to social clues, such as eye-contact or smiles.

The more able people with autism will passively accept social contact and even show some signs of pleasure, but they will rarely make spontaneous approaches.

### **Sensory Impairment:**

Autistic people may show unusual reactions to physical sensations (such as being overly sensitive to touch or under-responsive to pain)

Sight, hearing pain smell and taste may be affected to a lesser or greater degree.

## Play/ Imagination:

People with autism are usually unable to play imagiatively with objects, toys, with other children or adults, They do not imitate other actions and they do not initate pretending games. They pay more attention to trival things arround them (f. ex. an earring rather than the person wearing it, or a wheel instead of the whole train).

#### Fear:

People with autism do not know the term "fear" in our meaning.

Fear is rather some kind of "anger" (f. ex..: They may not be scared to cross a much used road; but they would be extremely angry/ scared if something in their routines is changed, like finding their bed on a diffferent place in their room).

Another remarkable symptom is, that <u>inappropriate attachments</u> to objects may occur.

They resist any changes in routines, they desire to prevent environmental change.

### How is autism diagnosed?

There are no medical tests for diagnosing autism.

A diagnosis must be based on observations of the child's communication, behaviour and

developmental levels.

A doctor has to complete various medical tests to rule out other possible causes, because

many of the behaviours associated with autism are shared by other disorders.

Ideally a child should be examinated by a medical team, which include a neurologist,

psychologist, developmental pediatrician, speech/ language therapist and a learning consultan

or other professionals knowledgeable about autism.

<u>Is there a cure for autism?</u>

As yet there is no cure fore autism!!!

But exberts are finding better ways to understand the disorder and help people cope with the

various symptoms of the disability.

Specialised education and structured support can help maximise a child's skills and minimise

any behaviour problems, even to the point that the child or adult may appear to the untrained

person to no longer have autism.

However, the majority of children and adults may exhibit some symptoms of autism to some

degree throughout their entire life.

Differentialdiagnosis:

There are a few diagnosis which should deny, that autism is the right diagnosis for the autistic

child.

But they are proven false:

<u>Deprivationssyndrom (= Hospitalism)</u>

= seperation from mother or the person to whom the child relates most closely.

DIFFRENCE: Normal children can easily make up delays in their development.

Childish Schizophrenia

DIFFRENCE: This disorder is extremely rare (only 0,1% be taken ill with childish

schizophrenia).

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Schizophrenia is usually diagnosed at puberty/adolescence.

Autistic children have no "productive symptoms" like hallucinations or delusions.

### Speech Disorders

Both can easily proven false by ordinary tests

### Sense Handicaps

(like deafness, blindness)

## <u>Is there more than one type of autism?</u>

Autism is defined by a certain set of behaviour.

But children and adults can exhibit any combinations of the behaviour in any degree of severty (Two children, both with a diagnosis of autism can act very diffrently from one another).

Professionals use four diagnosis to describe individuals who manifest some, but not all, of the autistic characteristics.

#### 1) **PDD** (Pervasive **D**evelopmental **D**isorder)

Several autism-related disorders

#### 2) **PDD-NOS** (Pervasive Developmental Disorder not otherwise specified)

This diagnose may be made when a child exhibits fewer symptoms than in autism, although those symptoms may be exactly the same as a child with autism diagnosis. Some experts believe that the destinction between autism and PDD- NOS is not Significant.

#### 3)Asperger Syndrome

Asperger syndrome is a form of autism, a disability which affects the way a person communicates and relates to others.

However people with Asperger syndrome usually have fewer problems with language than those with autism, they are often speaking fluently.

People with Asperger syndrome also do not have the accompanying learning disabilities often associated with autism.

In fact people with Asperger syndrome are often of average or above average

intelligence.

Asperger syndrome shares many of the same characteristics as autism but certain traits, such as motor clumsiness, are typical of people with Asperger syndrome.

<u>Symptoms:</u> *Difficulty with social relationship:* Unlike people with classic autism, who often appear uninterested in the world around them, many people with Asperger syndrome try hard to be sociable and do not dislike human contact.

Difficulty with communication: People with Asperger syndrome may speak very fluently but they may not take much notice of the reaction of people listening to them and may appear insensitive to the other persons feelings. Despite having good language skills, people with Asperger syndrome may sound over-precise or over literal when they speak. Also they may take too litterally- jokes can cause problems.

*Lack imagination:* As people with autism, people with Asperger syndrome have a lack of imagination. They often excel at learning facts or figures, but they find it hard to think in abstract ways.

*Special interests:* People with Asperger syndrome often develop an almost obsessive interest in a hobby or collection.

*Motor clumsiness:* Motor clumsinessseems to be a particular feature of people with Asperger syndrome. They may have particular difficulties with skills which require co-ordination, such as riding a bycicle. Like other people with autism, they may als have odd postures induldge in repetive movements, such as rocking or swaying.

Routine and Love: Any unexpecting change in routine can be upsetting for people with Asperger syndrome. They may impose their own routines, such as insisting on always walking the same route to school. At school, they may get upset by sudden changes.

#### Is there a cure?

As yet there is no cure for Asperger syndrome.

But with time and patience people with Asperger syndrome can be taught to develop the basic skills needed for everyday life, such as how to communicate appropriately with people.

### What causes Asperger syndrome?

The exact cause of Asperger syndrome has not been fully established yet.

It is evident that Asperger syndrome may not result from a single cause.

There is strong evidence, that Asperger syndrome can be caused by a variety of physical factors, all of which affect brain development.

Because Asperger syndrome is often less obvious than of someone with autism, a person with Asperger syndrome is, in a sense, more vulnerable.

They can be an easy target for teasing or bullying at school.

As they get older, they may realise that they are diffrent from other people and feel isolated and depressed,

People with Aspergr syndrome often want to be sociable and are upset by the fact that they find it hard to make friends.

#### 4)Rett's Syndrome

Rett's syndrome was first recognized by Andreas Rett in 1966 and is a neurological disorder affecting primarily females.

Autopsies on the brains indicate a pathology different than autilsm, however, children with Rett's syndrome often exhibit autistic-like behaviours.

Other typical characteristics are: Breathing difficulties (hypervntilation, swallowing air)

Hyperactivity

Retarded growth and small head

The cause of Rett Syndrome is not known; it is likely to be a genetic disorder.

In most cases there is a regression in cognition, behaviour, social and motor skills throughout their lifetime.

Myths and Misunderstandings

Children with autism never make eye contact.

They do not look at you.

They do not smile at you.

Many children with autism establish eye contact. It may be less or different from the typical child, but they do look at people, smile at people and eypress many other wonderful non-verbal communications.

Inside a child with autism is a genius.

The myth that a genius is hidden in a child with autism may exist because of the uneven nature of the skills that many children exhibit.(A child may remember the birthday of every child in his class at school, yet be unable to determine when use the pronouns "you" or "me") Children with autism exhibit a full range of IQ scores. Most children exhibit significant delays in some areas of mental processing.

A very small percentage exhibit above normal intelligence; an equally small percentage of children exhibit very low intellectual functioning.

Children with autism can not show affection.

Children with autism <u>can</u> and <u>do</u> give affection.

Sensory stimulation is processed differently by some children with autism, causing them to have difficulty expressing affection in conventional ways.

Giving and receiving love from a child with autism may require a willingness to accept and give love in the child's term.

Children with autism do not speak.

Many children with autism develop good functional language, but they do not know how to use it.

Progress means that the child doesn't have autism.

Autism can be outgrown.

Autism can't be cured.

Autism is a mental illness.

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Underneath all of the difficult behaviours is a normal child.

When a child with autism does not respond to a question to which he has shown previous correct response, he is being stubborn or non-compliant.

No!

Children with autism are not "unruly" kids, who choose not to behave!

Autism is hereditary

Children with autism do not participate in physical affection.

Children with autism do not want friends.

Children with autism do not relate to adults.

Children with autism do not notice others.

# Rights of People with Autism or Asperger's syndrome

- People with autism and Asperger's syndrome have the same basic legal civil and human rights as other citiziens, but much of society remains ignorant about the capabilities and rights of people with autism and Asperger syndrome.
- <u>Individuals with autism and Asperger's syndrome have the right to be protected from decisions made by guardians or parents when these decisions threaten their health, safety, or general well-being.</u>
- People with autism or Asperger's syndrome who need supports, services and protections
  to fully exercise their rights and responsibilities should have them.