

Innovative support for children with Autism

Autism Spectrum Disorder (ASD)

is a neurodevelopmental condition that affects how people communicate with and relates to other people and how they perceive and respond to the surrounding world. It is a spectrum condition which means that every person is different, and autism may affect them in many ways. Some people in the spectrum can function relatively independently but there are people with additional disabilities, and those will require ongoing support (The National Autistic Society, no date). People with ASD can display intellectual, emotional and behavioural issues (Totsika et al., 2011).

TRIAD of IMAPIMENTS:

- **SOCIAL COMMUNICATION** where people with ADS have difficulties to maintain eye contact, express their feelings and needs using verbal or non-verbal language or understand others' facial expression, tone of voice and intentions;
- **Deficit in SOCIAL INTERACTIONS and UNDERSTANDING** recognizing other people's feelings and managing their own behavior;
- **SOCIAL IMAGINATION** which can cause misunderstanding of other people's feelings, behavior and actions; People with ADS are unable to make sense of abstract ideas;

In addition, many children on the autism spectrum experience some form of sensory processing difficulties and also restricted and repetitive behaviours and interests (Cashin, 2009)

Early indication of Autism in children

- avoiding eye contact
- not responding to their name
- no interaction with others, ex. not smiling back when you smile at them
- overly focused on certain object
- getting upset when they do not like a certain taste, smell or sound (sensory difficulties)
- repetitive movements, such as flapping their hands, flicking their fingers or rocking their body back and forth;
- speech difficulties, not talking as much as other children or tend to repeat the same phrases

Signs of autism in older children include:

- difficulties to understand others' thinking or feelings
- finding it hard to express and describe their own feelings
- getting upset if their routine is interrupted
- having a strong desire about certain subjects or activities
- difficulties to make social interactions
- lack of understanding of metaphors, taking things literally (NHS, 2019)

ASD affects one out of every 100 children under the age of 18, with boys being diagnosed considerably more frequently than females (Baird et al, 2006).

DIAGNOSIS

Receiving an autistic spectrum disorder (ASD) diagnosis has a significant impact on an individual and their family (Crane et al., 2018). This is often the moment when they all can expect to receive support for an individual and the family (Mansell and Morris, 2004). It is crucial to consider parents' perspectives when it comes to diagnosis (Goin-Kochel et al., 2006). Parental dissatisfaction can be caused by delays in acquiring a diagnosis, and can obstruct the implementation of effective intervention and support solutions (Webb et al., 2014). Parents who have been waiting a long time for a diagnosis may lose faith in the healthcare professionals involved and are more prone to seek alternative treatments for their children that have no factual basis (Harrington et al., 2006).

A multidisciplinary team, including a psychologist, neurologist, psychiatrist, speech therapist, and other clinicians who diagnose and treat children with AUTISM is required for a full evaluation. The members of the team will conduct a thorough neurological examination as well as extensive cognitive and linguistic testing. Children with delayed speech development should also have their hearing evaluated because hearing difficulties can create behaviors that are mistaken for ASD (NINDS, 2021)

BARRIERS

Clearly, more has to be done to improve parental impressions of the diagnostic procedure and their experiences with it. Reducing the time, it takes from the moment when parents express concerns about their child's development to receiving an ASD diagnosis would be a significant step in improving parental experiences. However, it is vital to recognise that in some circumstances, professionals are simply unable to deliver a correct diagnostic label to a child at an early stage, necessitating reconsideration after a set period of time (Crane et al., 2016).

Studies show that there is still a lack of knowledge and autism awareness amongst professionals such as GP's and teachers or nursery staff. Lack of confidence to support individuals and their families. Tendency to focus on negatives rather than positive aspects of autism by professionals.

Lack of cooperation between parents and professionals (lack of sufficient training for staff) need for clear messages, use of clinical language. Not always appropriate assessment environment. Lack of appropriate support (Dillenburger et al. 2016).

Professionals do, however, highlight systematic difficulties, such as lack of funds and limited resources as an obstacle to providing effective support for their autistic patients and their families (e.g., Rogers et al. 2016; Unigwe et al. 2017; Ward et al. 2016).

tDCS NEUROSTIMULATION OF A BRAIN

is a non-invasive brain stimulation technology that uses a small hand-held device to provide a very mild electrical current to particular parts of the brain, promoting and enhancing brain plasticity (thinkingautism.org.uk, 2019). TDCS is a simple procedure to follow. After proper instruction/training and in the case of regular supervision or remote control of application, any patient or family member will be able to use tDCS on their own. The approach has a strong potential for usage in a home-based setting, enhancing patient compliance and lowering expenses by eliminating the need for clinic visits (Charvet et al., 2015, Kasschau et al., 2015, O'Neil et al., 2015).

In 2014, a group of Russian researchers presented their findings of beneficial changes after tDCS treatment in a small group of autistic patients seen in their clinic. Mood, verbal comprehension and communication, fine motor skills, and social integration all showed gains. (Kozhushko et al. 2014)

As a result, using tDCS on a brain in ASD is a very promising technique. The lack of a pharmacological treatment for ASD's fundamental symptoms, transcranial direct current stimulation (tDCS) appears to be a viable treatment option to improve social interaction and social cognition in ASD (Frith and Frith, 2010).

STATUTORY CODE

Local health boards, NHS trusts, local authorities, and their partners will receive this Statutory Code and associated guidelines from the Welsh Government to ensure that they are aware of their current duties in providing needs-based autism services. Support for carers is one of them, as is creating awareness among autistic persons about the resources available to them (Welsh Government, 2021)

CONCLUSION

According to WHO (2021) the role of governments is to act to improve the quality of life for autistic people, by improving environment and social awareness.

The more we know about the differences between people the more inclusive we become.



(Photo: Institute for learning, 2018)

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NAS Cymru - National Autistic Society

<https://www.autism.org.uk/what-we-do/wales>

Autism Alliance

<https://www.autism-alliance.org.uk/>

Child Autism UK

<https://www.childdautism.org.uk/>

Ambitious about Autism

<https://www.ambitiousaboutautism.org.uk/>