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## A STUDY ON ASD (AUTISM SPECTRUM DISORDER) DIAGNOSIS CHALLENGES: REFERRAL PATTERNS & PARENTAL IMPACT

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#### ABSTRACT

Diagnosing Autism Spectrum Disorder (ASD) often involves a prolonged process, particularly due to the lack of diagnostic tools in primary healthcare settings. In a case-control study involving 98 children, both with and without ASD, the study compared complaints and referral patterns. Autistic children tended to exhibit crying episodes and feeding difficulties more frequently than their counterparts without ASD. Moreover, patients commonly sought assistance from their general practitioners due to anxiety, enuresis, and sleep disturbances. Referrals for procedures such as tympanostomies and tonsillectomies were often initiated by physiotherapists and speech therapists. Additionally, the study observed a notable correlation between the condition of children with ASD and depression in their parents.

**KEY WORDS**: Autism Spectrum Disorder (ASD), Diagnostic challenges, Case-control study, Referral patterns, Parental depression.

#### INTRODUCTION

About 11,000 Dutch people are diagnosed with Autism Spectrum Disorder. Despite the idea that ASD is more common than previously believed, Delfos' research suggests it is not. There are profound changes in a family after the birth of a child. Due to the lack of symptoms associated with developmental impairments, parents and professionals find it more difficult to detect them. Genetic and biological disorders can be difficult to diagnose because diagnostic markers are inconsistent and unreliable. A child diagnosed with autism during childhood may have difficulty being diagnosed because it is a prenatal disorder describe identifying the symptoms early in life as the most challenging aspect of diagnosing Asperger's Syndrome. The relationship between diagnosis and treatment is inextricable. Children, parents, and families with autism can significantly benefit from a strong treatment approach. ASD children are more likely to recover if they are treated early. The plasticity of the young brain makes it more likely for children to follow a typical developmental trajectory. This may result in the avoidance or minimization of secondary, compensatory behaviors. Children with autism usually show signs of development after 12 months, but some children

seem to develop normally thereafter, according to Werner and Dawson. During the first few years of development, their language and social skills diminish, and then gradually decline as they grow older. The regression process typically occurs between 12 and 24 months in children with autism, according to studies. The prevalence of regression in ASD children varies according to their diagnosis, ranging from 20% to 49%. In the case of interventions implemented before this 'drop off' occurs, the impact on development will likely be greater. Even before a diagnosis is made, parents feel relieved after learning what their child has. An early diagnosis can increase parental satisfaction. ESAT-R, ITC-R, CHAT-R, and M-CHAT are commonly used diagnostic tools to diagnose autism spectrum disorder (ASD). Children suffer a great deal of frustration and delays when these instruments are used in secondary or tertiary healthcare settings. A relatively rare disease like autism makes it difficult for primary health practitioners to detect it at an early stage. There is a wide range of symptoms and presentations associated with this disease, as Berckelaer-Onnes (2004) explains. Three to nine is the most common age range for an abnormality in social and communication development.

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It was our goal to reduce the time it takes to diagnose children with autism spectrum disorders by checking whether they present with characteristic complaints to their GPs. The doctor's job is to detect illnesses, so improving a practice's detection profile can speed diagnosis. The Continuous Morbidity Registration (CMR) project compared ASD children to a control group based on prospective morbidity data collected over the years. Study participants without autism spectrum disorders and those with autism spectrum disorders were compared to determine the patterns of complaints and referrals.

#### METHODOLOGY

Generally, general practitioners summarize demographic information, morbidity, additional examinations, referrals, and hospitalizations using the International Classification of Health Problems in Primary Care (ICH- PPC-2). It is highly reliable since there are monthly discussions about coding problems. It is reported to general practitioners that ICHPPC-2 codes with unusual characteristics should be reported. A Dutch general practice serves over 12,000 patients, which represents the average number of patients at four participating CMR practices. ASD patients diagnosed with CMR were selected for the study ..

#### **Background Data**

Further information about the child is needed, such as his or her date of birth, gender, socioeconomic status, its family situation (whether he or she lives with his/her parents or with friends), and how many children he/she has in total. Behavioral disorders, addictions, and anxiety disorders were also identified in mental health screenings, along with anorexia and conversion disorder.

#### Morbidity

An analysis of the literature was conducted to determine whether any morbidity was associated with autism spectrum disorder. Crybaby (coli) is one of many complications related to pregnancy. Premature babies are those born before 37 weeks, according to the definition of premature babies. Three consecutive days of crying for over three weeks are symptoms of crybaby syndrome. The questionnaires included diagnostic items for atopy, traumata (fractures, dislocations, distortions, wounds, intoxications, and enuresis), phobias, anxieties, and obsessive-compulsive disorders, as well as for depression, personality disorders, addictions, insomnia, enuresis, encopresis, and trichotillomania. In accordance with the CMR criteria, all diagnoses were made. Morbidity is necessary for diagnosing ASD.

#### RESULTS

The research population consisted of 49 children. It was not reported that any respondents didn't respond or dropped out. Approximately 8.74 percent of boys were diagnosed (SD = 3.54) and 9.17 percent of girls were diagnosed (SD = 4.12). A small number of children have been diagnosed with Pervasive Developmental Disorder-NOS, and one has been diagnosed with Autism Spectrum Disorder.

There was no classic autism in any of the children. The eldest child is the eldest in most families (33.3%), and both parents live with them (65.3%). A total of fourteen (14), thirteen (13), and thirteen (13.4) years old were included in this study. In general, fathers were 34.5 years old at birth, while mothers were 31.9 years old. As shown in Tables 1-4, 40.0% of files containing parents' mental health issues contained psychiatric problems, while 31.0% of files with mothers' mental health issues contained psychiatric issues. Researchers found that depression is more likely to occur among fathers (7.85 odds ratio), and among mothers (1.71 to 1.77 odds ratio).

#### Morbidity

It was found that 82 percent of patients with preeclampsia and 2% of patients with eclampsia were affected, respectively, and 10.2% of them were premature. Preterm births occur in 12.2% of cases during the first trimester of pregnancy. In total, seven babies had Apgar scores. One out of two boys and one out of four girls are crybabies.

It was reported that 28.6% of girl mothers experienced feeding problems after giving birth, and 7.1% experienced feeding problems after giving birth. People with autism spectrum disorders are more likely to suffer from phobias, anxiety disorders, and obsessive-compulsive disorders (16.3% vs. 0.0%). The odds ratio for sleeping disorders was 8.74, 95% CI 1.97 to 61.77, and it was significantly higher for girls (42.9% vs 2.5%, 41.9% vs 2.5%).

Atopy was diagnosed in half of the boys, and treatment was given to the other half. Participants with ASD had a higher dislocation rate (20.4% vs. 3.0%; odds ratio 6.57; 95% confidence interval 1.79-31.13) than participants without, 45.5% vs. 20.4%. Injuries or wounds were reported by 76.2% of participants with ASD, but only by 45.5% of participants without the disorder. A comparison of the control group and fracture group did not reveal any differences in poisonings or fractures.

#### DISCUSSION

As compared with the general population, ASDs do not have a striking difference in pregnancy problems. There is a one in twelve chance of developing preeclampsia during pregnancy. Approximately 7.0 to 10.0% of the general population is affected, according to statistics. Pregnant women are more likely to experience eclampsia than nonpregnant women. OCD, phobias, and anxiety disorders are considerably more common than people think.

According to studies, obsessions and compulsive behaviors are also linked.

#### Table 1: Fathers of a child with ASD and population number

	Fathers of a child	Fathers in control	Odds ratio's	p value
	with ASD number	population number		
Depression	16	4	8.86	0.01*
Phobia/anxiety/obsessive-compulsive	6	0		0.04
disorder				
Addiction: alcohol/drugs/other	6	4	3.60	0.32
(tobacco excluded)				
Personality disorder	2	0		0.34
Autistic spectrum disorder	0	0		
Schizophrenia/psychosis	0	2		0.60

#### Table 2: Mothers of a child with ASD and population number

Depression		18	8.10	0.01*
Phobia/anxiety/obsessive-compulsive disorder		2	8.172	0.8
Personality disorder	4	0	0.7	
Anorexia nervosa/conversion	2	0	0.16	
disorder				

#### Table 3: Children with autism spectrum disorder and healthy children with comorbid conditions

Children with ASD number		Children without	Odds ratio's	p value
		ASD number		
Phobia/anxiety disorder/	16	0	0.01*	
obsessive-compulsive disorder				
Enuresis	18	4	9.72	0.01
Sleep problems	24	0		0.01*
Atopy	46	50	0.95	0.75
Fractures	8	16	0.80	0.75
Intoxications	8	4	1.48	0.14
Luxations/distortions	20	6	3.54	0.02*
Wounds/injuries	72	92	3.20	0.03

It is considered to be a sign of anxiety when a person exhibits rigidity and repetitive movements. The disorder may also make it difficult for autistic people to deal with stress. It is possible that anxiety disorder sufferers cannot identify situations that are likely to cause them anxiety, since anxiety disorders are complex. In the research on Detecting ASD in the GP's Practice, there is no mention of enuresis prevalence in the ASD group. This pattern of behavior may be explained by reduced instruction effectiveness or hypotonic pelvic floor in children with AS. There was a quarter more visit to the doctor for sleeping disorders in the control group than in the experimental group. Autistic children are frequently reported to have bowel problems. A diet adjustment may resolve these bowel problems. Atopy is more prevalent among children with autism spectrum disorders than among children without autism spectrum disorders. While postpartum feeding difficulties are higher in the control group, atopy rates are lower. There is a significant increase in traumata and dislocations and distortions among the ASD group. Mint et al. determined that 34% of children with ASD were motor apraxic, and 51% were hypotonic. Dislocations and distortions are common in hypotonic children. Multiple

referrals to specialists were required in many cases to diagnose ASD in children. In fact, physiotherapists are often referred to patients suffering from motor apraxia for a reason. In the absence of Asperger's syndrome, parents often refer their children to a speech therapist for verbal developmental delays. In 2005, Cohly and Panja found that parents of children with autism frequently reported bronchial infections to ENT doctors. Depression is more common among families with ASD children. Fathers and mothers were both affected by depression about one in five times and mothers and fathers were affected about one in three times. ASDs may also pose an undiagnosed risk for parents due to congenital components (Muhle et al. 2004; Santangelo & Tsatsanis 2005). This may be a sign of undiagnosed parenting autism, as suggested by Jacob et al. 2009. In contrast to PDD-NOS or Asperger's Syndrome, where girls and boys are diagnosed at 7.2 years and 3.9 years, respectively, autism spectrum disorders come into existence much later in life. Asperger's syndrome and PDD-NOS were prevalent among our study participants. These diseases are difficult to diagnose, so detecting profiles for them is essential and helpful. In addition, the primary care provider may record the patient's age when adding the ASD

code to their chart. Once the patient's psychiatrist receives the ASD diagnosis, the code is added to their file by the general practitioner. It is possible that this limitation will limit our study. Due to the fact that diagnosis and registration were performed by general practitioners in our study, they were also restricted. GPs regularly test their fellow GPs' registrations in order to ensure CMR registration's validity and reliability. Additionally, only 49 patients participated in the study. The small sample size made it impossible to detect small effects. The results of these studies are more likely to benefit clinical practice. Since there was no selective non-response or dropout in the CMR data, it also allows for a unique case-control comparison.

#### CONCLUSION

ASD children, especially girls, are more likely to crybaby. In addition, girls are more likely to suffer from feeding problems. A lot of tympanostomy tube placements and tonsillectomies are referred by physiotherapists and speech therapists. Depression is much more common in parents than you might expect. A diagnosis of autism spectrum disorder cannot be made based on each finding alone. It is nonetheless possible to detect Autism Spectrum Disorder by combining the characteristics. We must conduct a prospective study in order to validate our findings for the development of a primary care detection profile. In order to speed up the diagnosis process, a valid, reliable profile of autism symptoms must be developed as soon as possible.

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