Psychological and social characteristics of children with Autism .Ghail Bawazier. Hadhramout

Omar Mubarak Bameer, Abdulla S Bin Ghouth , Saleh Ahmed bin Shihnah, Salem Ahmed Bafatoom

Abstract:

Background: Autism is the most complex developmental disability problem facing the world. Western countries have a number of research, diagnosis and care centers for children with autism while Arab countries suffer from a lack of databases, research, services and specialized centers for autistic children with complete absence of awareness of the autistic children problem and its consequences.

The interest in this disorder began recently in Yemen and some centers have been established. However, there are still many problems facing this new area, most important is the identification with this problem , its diagnostic process, treatment and rehabilitation.

Objectives: To identify the psychological and social characteristics of children with autism according to their parents estimating and to determine individual differences of in autistic children related to age and gender.

Methodology: Children with autism in Ghail Bawazeir district were evaluated by clinical methods using Childhood Autism Rating Scale (CARS) and interview based questionnaire was the tool to collect the socio-demographic characteristics of the studied children from their parents in Center of Autistic children in Ghail Bawazeir city in Hadhramout in 2015.The data has been coded and categorized and analyzed using the SPSS Version 20.

Results: The main results of the study showed that children were diagnosed with autism characterized with linguistic, perception and social deficits, respectively, where autistic children aged 4-6years suffered from significant limitations in the characteristics of language compared with children aged 7-12 years. While autistic children aged 7-12 years suffered from significant limitation in characteristics of social interaction compared with children aged (4-6) and (13-17) years.

Conclusion: Use of diagnostic measures for autism helped us to identify and determine the degree of deficit of autistic children characteristics and it is necessary intervene as early as possible to develop the language and verbal communication skills of children with autism especially in early childhood years (4-6 years) through develop of individual and collective programs to heal their linguistic deficiencies, because the language is the basis of knowledge and social interaction.

Keywords: Autistic disorder, social, linguistic, perceptive, repetitive behavior characteristics.

Corresponding author :

Omer Mubarak Bameer, College of medicine. Hadhramout University, Mobile : 00967 712 972 686

E-mail; Obamair@yahoo.com

الخصائــــص النفسيــــة والاجتماعيــــة لأطفــــال مركز التوحد وفقا لتقديرات أبائهم و أمهاتهم

د .عمر مبارك بامير ، أ. د عبدا للَّه سالم بن غوث

د . صالح احمد بن شحنه ، د. سالم احمد بافطوم

ملخص البحث

الخـلـفـيـة: يعتبر التوحد من أكثر مشكلات الإعاقة النمائية تعقيدا التي تواجه العالم. وفي حين أن الدول الغربية أنشأت العديد من مراكز البحث والتشخيص والرعاية للأطفال المصابين بالتوحد، مازالت البلدان العربية تعاني نقصا في قواعد البيانات والبحوث والخدمات ومراكز متخصصة للأطفال المصابين بالتوحد وسط غياب تام بمشكلة أطفال التوحد و النتائج المترتبة عليها.

بدأ الاهتمام بهذا الاضطراب مؤخرا في اليمن وأنشأت بعض المراكز. ومع ذلك ، لا تزال هناك العديد من المشاكل التي تواجه هذا المجال الجديد ، والأكثر أهمية هو تعريف وتحديد المشكلة ، وعملية التشخيص والعلاج والتأهيل.

الإهداف: تهدف الدراسة الحالية إلى التعرف على الخصائص النفسية والاجتماعية للأطفال المصابين بالتوحد حسب تقدير والديهم وتحديد الفروق الفردية بينهم وعلاقة ذلك بالعمر والجنس.

المـنهجية : تم في هذا البحث استخدام التشخيص السريري خلال مقياس تقييم التوحد في مرحلة الطفولة (كارس) ، والمقابلات لجمع البيانات الديموغرافية والاجتماعية ، وذلك في مركز الأطفال المصابين بالتوحد في مدينة غيل باوزير، حضرموت في عام 2015. تم ترميز البيانات وتصنيفها و تحليلها باستخدام الحزمة الاحصائية للعلوم الاجتماعية (النسخة رقم 20).

الصدمة الدماغية تزداد مع العمر والنوع الإنقاري وجد اكثر بين الكبار بينما النوع التزني اكثر عند الشباب. الذكور بشكل عام اكثر عرضة للمرض، ولكن النوع الإنقاري اكثر بين الإناث بينما النزني بين الذكور. لا فوارق بين الجنسين . لا فوارق مهمة بين الجنسين في نسبة عزامل الخطوره ماعدا التدخين الذي وجد مرتفع عند الذكور.

النـتائـج : من نتائج البحث تم تشخيص و تحديد درجات التوحد عند الأطفال وتبين أن أهم خصائص القصور لديهم تمثلت في الخصائص اللغوية و الإدراكية والاجتماعية على التوالي، واظهر الأطفال في سن (4 – 6) قصورا واضحا في خصائص اللغة مقارنة بالأطفال ممن هم في سن (7–12) سنه. في حين اظهر الاطفال في سن (12–7) قصورا واضحا في خصائص التفاعل الاجتماعي مقارنه بالأطفال من هم في سن (4 – 6) وسن (13 – 17) .

الاستنتاج : إن استخدام المقاييس التشخيصية للتوحد مهم جدا في تحديد درجة التوحد وتحديد خصائص العجز عند الأطفال المصابين به ، لهذا من الضروري التدخل المبكر لتطوير مهارات التواصل اللغوي واللفظي لدى أطفال التوحد وخاصة في مرحلة الطفولة المبكرة (6–4) من خلال تطوير البرامج الفردية والجماعية لعلاج أوجه القصور اللغوية ،لأن اللغة هي أساس المعرفة والتفاعل الاجتماعي.

الكلمات المفتاحية: اضطراب التوحد ، الخصائص الاجتماعية ، اللغوية ، الإدراكية ، السلوك النمطي المتكرر.

Introduction:

Autism is a neuro-developmental disorder characterized by impaired social interaction, verbal and non-verbal communication, and repetitive behavior. Parents usually notice signs in the first two years of their child's life.[1] These signs often develop gradually, though some children with autism reach their developmental milestones at a normal pace and then regress.[2] The diagnostic criteria require that

symptoms become apparent in early childhood, typically before age three.[3].

The New Latin word autismus (English translation autism) was coined by the Swiss psychiatrist Eugen Bleuler in 1910 as he was defining symptoms of schizophrenia. He derived it from the Greek word autós (αὐτός, meaning "self"), and used it to mean morbid self-admiration, referring to "autistic withdrawal of the patient to his fantasies, against which any influence from outside becomes an intolerable disturbance".[4]First took its modern sense in 1938 when Hans Asperger of the Vienna University Hospital adopted Bleuler's terminology autistic psychopaths in a lecture in German about child psychology. [5]

Autism is caused by a combination of genetic and environmental factors.[6] Some cases are strongly associated with certain infections during pregnancy including rubella and use of alcohol or cocaine.[7]Controversies surround other proposed environmental causes;[8] for example the vaccine hypotheses, which have been disproved. Autism affects information processing in the brain by altering how nerve cells and their synapses connect and organize; how this occurs is not well known.[9] In the Diagnostic and Statistical Manual, Fifth Edition (DSM V), autism is included within the autism spectrum (ASDs), as is Asperger Syndrome Disorder, which lacks delays in cognitive development and language, and pervasive developmental disorder, not otherwise specified (commonly abbreviated as PDD), which was diagnosed when the full set of criteria for autism or Asperger syndrome were not met.[10]

Globally, autism is estimated to affect 24.8 million people as of 2015.[11]. As of 2010, the number of people affected is estimated at about 1–2 per 1,000 worldwide. It occurs four to five times more often in boys than girls.

Arab countries suffered from a lack of database, services available with a complete absence of information about this problem. There are some simple attempts in some Arab countries about autistic children 's statistics, for example in Lebanon it is estimated that 1 in 67 children have autism. In Egypt, the General Secretariat for Mental Health estimated the magnitude of autism is about 800,000 persons or 1% of the population. In Saudi Arabia conducted a study that showed that autistic children up to 120 thousand. [12] In Hadhramout, there are no evidence about the true estimate of the disease.

It should be noted that global studies show a significant increase in the number of autistic children who have been diagnosed. In 2000, the ratio was 1 for every 150 children according to the latest Autism and Developmental Disabilities Monitoring (ADDM) studies in 2010.[13]

The main goals when treating children with autism are to lessen associated deficits and family distress, and to increase quality of life and functional independence. In general, higher intelligence quotient (IQ)are correlated with greater responsiveness to treatment and improved treatment outcomes. [14][15] No single treatment is best and treatment is typically tailored to the child's needs. Families and the educational system are the main resources for treatment.

Regarding prognosis of autism, there is no known cure. [9][16] Children recover occasionally, so that they lose their diagnosis of ASD;[17] this occurs sometimes after intensive treatment and sometimes not. It is not known how often recovery happens; reported rates in unselected samples of children with ASD have ranged from 3% to 25% (reference). Most children with autism acquire language by age five or younger, though a few have developed communication skills in later years.[18] Most children with autism lack social support, meaningful relationships, future employment opportunities or self-determination. Although core difficulties tend to persist, symptoms often become less severe with age.

Few high-quality studies address long-term prognosis. Some adults show modest improvement in communication skills, but a few decline; no study has focused on autism after midlife.[19] Acquiring language before age six, having an IQ above 50, and having a marketable skill all predict better outcomes; independent living is unlikely with severe autism.[20] Most people with autism face significant obstacles in transitioning to adulthood.[21].

This study is an attempt to be a window through which specialists, interested and the family can view the mysterious world of autism by drawing a general picture of diagnosis and characteristic. Therefore,

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the present study aims to identify the psychological and social characteristics of children with autism according to their parents estimating and to determine individual differences in autistic children related to age and gender.

Materials and methods:

This study is a clinical descriptive approach, where children with developmental disorders needed to be diagnosed. It is a comprehensive sample of all the 31 children with autism (26 males and 5females), from the Center of Autistic children in Ghail Bawazeir. Hadhramout during period of September-December 2015 were enrolled in the study. The Childhood Autism Rating Scale(CARS)was used for clinical assessment of autism. CARS is a diagnostic assessment method that rates children on a scale from one to four for various criteria, ranging from normal to severe, and yields a composite score ranging from non-autistic to mildly autistic, moderately autistic, or severely autistic[22].The scale is used to observe and subjectively rate fifteen items.[23]Data was collected by interview parents of autistic children. Descriptive statistical methods used are percentages, arithmetic means, standard deviations, inferential statistical methods used is one way analysis variance(ANOVA) and significant level was set at the level of $\leq$ 0.05. The tool used for data entry, analysis was the Statistical Packages for Social Sciences (SPSS version 20).

Results:

The total number of children with autism enrolled at autistic children center in Ghail Bawazeir are 31children, 26 boys (83.9%) and 5 girls (16.1%), their aged 4-13 years old (Table 1). About 25.81% of autistic children have severe autism disorder, 51.61% have moderate autism, and 22.58% of them have simple degree of autism (Table 2). The mean deficit score in the psychological characteristics of autistic children are; language deficit mean score 40.54, perception deficit mean score 35.25, social interaction deficit mean score 30.48, repetitive behavior deficit mean score 27.03 and play deficit mean score 19.48, which means the deficiency in language, perception and social interaction are the most common characteristic in children in Ghail Bawazeir.(Table 3)

The mean deficit scores in either psychological nor social characteristics are not different between boys and girls as there are no statistical significant differences (P-value <0.05) (social, language, perception, repetitive behavior and play) Table 4. But the signif-

icant difference exist between the three age groups as follow: there are statistical significant differences (P-value <0.05) between autistic children age (4-6) years in characteristics of language mean deficit score (46.00) compared with mean score of the age group 7-12 years (35.25) , which means children with autism age 4-6 in Ghail Bawazier suffered from significant limitation in linguistic characteristics. While the autistic children age (7-12) years suffered significantly from deficit in characteristics of social interaction (mean score 31.66) compared with autistics children at age group of 4-6 (mean 31.62) and age group of 13-17(years mean score 19.66) Table 6.

Table 1: Distribution of the sample according to the variables of the study In autistic children center. Ghail Bawazier

Variable		No	%
Gender	Boys	26	83.9
	Girls	5	16.1
Age	4 - 6	16	51.6
	7 - 12	12	38.7
	13 - 17	3	9.7
Total		31	100

Table 2: Degree of autistic disorder in the sample study in autistic children center. Ghail Bawazier

Degree of Autism	No	%
Simple	7	22.58
Moderate	16	51.61
Sever	8	25.81
Total	31	100

Table 3: Psychological and social deficit mean scores of children with autism in center of Autistic children Ghail Bawazier

Characteristics	N	Mean deficit score	SD
language	31	40.54	15.89
Perception	31	35.25	17.51
Social interaction	31	30.48	13.54
Repetitive behavior	31	27.03	10.74
Play	31	19.48	7.28

Table 4: Psychological and social mean deficit score of children with autism according to gender

Characteristics	Sex	N	Mean deficit score	SD	P value
social	Boy	26	28.73	12.63	0.101
	Girls	5	39.60	15.99	
language	Boy	26	38.92	16.67	0.199
	Girls	5	49.00	7.10	
Repetitive behavior	Boy	26	26.30	10.86	0.421
	Girls	5	30.80	10.32	
play	Boy	26	18.84	7.36	0. 274
	Girls	5	22.80	6.57	
perception	Boy	26	35.23	17.87	0.985
	Girls	5	35.40	17.44	

* The mean difference is significant at the 0.05 level.

Table 5: One way ANOVA analysis of the Psychological and social mean deficit scores of children with autism according to three age groups

Characteristics	Age	N	Mean	SD
social	4-6	16	31.62	10.34
	7-12	12	31.66	16.11
	13-17	3	19.66	18.14
	Total	31	30.48	13.54
language	4-6	16	46.00	15.00
	7-12	12	35.25	15.23
	13-17	3	32.66	18.00
	Total	31	40.54	15.89
Repetitive behavior	4-6	16	30.12	10.34
	7-12	12	25.83	10.36
	13-17	3	15.33	6.80
	Total	31	27.03	10.74
play	4-6	16	20.50	6.85
	7-12	12	18.41	7.46
	13-17	3	18.33	11.01
	Total	31	19.48	7.28
perception	4-6	16	39.12	16.51
	7-12	12	30.50	18.22
	13-17	3	33.66	21.73
	Total	31	35.25	17.51

Table 6: Results of one way ANOVA analysis of psychological and social mean deficit scores of children with autism according to age using Schafee test.

Characteristics	Age	Mean	Age	Mean deficit score	Sig
Social interaction	4-6	31.62	7-12	31.66	.885
			13-17	19.66	.078
	7-12	31.66	4-6	31.62	.885
			13-17	19.66	.048
	13-17	19.66	4-6	31.62	.078
			7-12	31.66	.048
language	4-6	46.00	7-12	35-25	.046
			13-17	32.66	.128
	7-12	35.25	4-6	46.00	.046
			13-17	32.66	.884
	13-17	32.66	4-6	46.00	.128
			7-12	35.25	.884
Repetitive behavior	4-6	30.12	7-12	25.38	.240
			13-17	15.33	.603
	7-12	25.38	4-6	30.12	.240
			13-17	15.33	.999
	13-17	15.33	4-6	30.12	.603
			7-12	25.38	.999
play	4-6	20.50	7-12	18.41	.953
			13-17	18.33	.476
	7-12	18.41	4-6	20.50	.953
			13-17	18.88	.601
	13-17	18.33	4-6	20.50	.476
			7-12	18.41	.601
Perception	4-6	39.12	7-12	30.50	.137
			13-17	33.66	.684
	7-12	30.50	4-6	39.12	.137
			13-17	33.66	.935
	13-17	33.66	4-6	39.12	.684
			7-12	30.50	.935

- the significant level is < 0.05.

Discussion:

Characteristics of linguistic deficits in children of autism, the development of language is slow and may not develop at all, words are used differently from other children, associated with an unusual sense of these words, communicate through signals rather than words, and attention and focus are a short, The problem of communication involves verbal and non-verbal skills. The language may be absent altogether and may grow without maturity and by installing, a rudimentary language with repeating words such as repeating the last word of the sentence he hears and the wrong use of pronouns. For example the child uses the pronoun "you" when he wishes to say "I" Says "I want to drink" But uses his name and says "Ali want to drink" with inability to name things and inability to use abstract terms, autistic child has a special pronunciation of meanings and words, only those around him know what he said.[30].

There is also found a lot of abnormal features at the beginning of the conversation among children of autism, the child may repeat what he hears just at the same moment as an echo of what is said and known as the phenomenon of (Echolalia) and talk with confusion in the order of words, as that non-verbal communication such as facial expressions and gestures are absent or rare.[31].

It is possible to attribute to what is characterized by the autistic child of hyperactivity , distraction , preoccupation with other activities and interests that make it unable to achieve communication with others, and this is a fundamental feature of autism, which is confirmed by many studies, including the study Koren, (40% of autistic children do not have a spoken language, cannot speak, and some of them have misunderstandings. In another study Nasr (2002) reported that about 50% of the Autistic children do not have a language that is understood to communicate with others, but some of them have more difficulty photos of communication[32], Amar(1999) who aimed to diagnose some cognitive and non-cognitive variables in autistic children, sample consisted of (7) children, most important findings were IQs of children of autism at level of mental retardation 71,this study also showed they have disturbance in attention and severe language disturbance[33].These results are in agreement with our obtained results particularly about linguistic deficiency in autistic children in this study.

Deficits in characteristics of autistic individuals often appear to be slow to acquire sensory experiences and show inconsistent forms of sensory responses, ranging from very low activity to very high activity levels, and many are unaware of more than one sensory channel at the same time, the autistic child appears to be suffering from auditory, visual or toxic problems, but at the same time shows rapid and alert responses to certain stimuli such as faint sound or sudden light, which impedes the presence of an auditory or visual impairment[34].

Sometimes autistic child behaves as if he has no experience with the sounds, shapes and smells surrounding him. He does not feel the things he touches and may not respond or ignore the person who knows him well before, and may not show indifference to the hot or cold[35]. In this study there is deficiency in the perceptive characteristics of autistic children at the Gail Bawazeir Center for Autistic Children where is in agreement with the study of Jasmine et al(2009) which aimed to determine the effect of sensory-motor skills on the performance of daily life skills for 35 children with autism, the results showed lack of sensory-motor responses and severe lack of skills Daily life, sensory avoidance , excessive reactions to motor stimuli and the study also found the lack of sensory-motor skills has an impact on the independence of autistic children[27][28].

According social interaction Riyad (2008) reported lack of communication and social interaction is one of the most prominent characteristics of autistic children, and sagging feelings, children with autism do not respond to any attempts to show compassion and love. Parents often complain with indifference or not response to trying to kiss or hug them . And may not find him interested in their presence or absence, and may he spend a lot of time alone and does not care about the exit or the presence of others with him[29]. For example, an autistic child cannot smile at someone else who smiles at him or applauds when the others applaud. In any case, it is clear that the source of the failure of autism is social behavior is their inability to share feelings in social attitudes or at least in the inability to understand the nature of reciprocity in social interaction.[24][25]

Macintosh & Dissanyake (2006) conducted a study of social skills and behavior problems of a sample of autistic children (20),the study found a lack of social skills and the prevalence of behavioral problems in children with autism[26].

Al-Khameisi (2012) reported that females are more disturbed in the dimensions of social interaction and nonverbal communication, while males are more disturbed in verbal communication[12].

As for the existence of differences of statistical significance according toage (4 - 6) years in characteristics of language, this result is an agreement with the findings Al-Khamiesi (2012) that children autistic (4-7) are more turbulent compared to Children at the age (8-11) in verbal communication, perception characteristics and stereotypical behavior, therefore it is necessary exposure to early intervention to develop the language and verbal communication skills of children with autism especially in early childhood (4-6) years through develop of individual and collective programs to heal their linguistic deficiencies.

Conclusion:

Use of diagnostic measures for autism helped us to identify and determine the degree of disability of autistic children characteristics. Therefore, the study found that the most severe deficient in the psychological and social characteristics among autistic children are the lack of linguistic, perception and interaction characteristics , where children aged 4 –6 years , are more deficient in linguistic character comparison with children of 7- 12 years, while autistic children at 7- 12 year suffered from deficit in social interaction compared with autistic children in(4-6) and (13-17) years.

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