Attention Deficit Hyperactivity Disorder Among Sample of Elementary schoolchildren in The Southern District in Babylon province

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ABSTRACT

ADHD (attention deficit hyperactivity disorder) is one of the most common chronic childhood illnesses and the most common neurobehavioral disorder in children, characterized by inattention and impulsivity. This study aims to measure the prevalence of Attention Deficit Hyperactivity Disorder in a sample of primary school children in the southern district of Al- Hilla city and identifying some of its correlates. Result shows that the most of the sample are increase in the rate in men more than women, ADHD include (11%) male while (3%) female and shows that (10%) of the sample have smoking positive with ADHD while(4%) have smoking negative with ADHD, also the result shows that most of the sample study (8%) low school performance with ADHD ,while (6%) HAVE normal with ADHD. The study recommend for further comprehensive scientific studies are needed to assess the extent of this problem in Iraq and establishing child psychiatrist unit in Babylon province to manage ADHD cases and giving drugs freely.

Keywords: ADHD, Elementary, schoolchildren, Babylon province

Introduction

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common chronic conditions of childhood and the most common neurobehavioral disorder in child health that involves problems with inattention and hyperactivity-impulsive. Rates are higher for boys than for girls .Boys are four to nine times more likely to be diagnosed ([1]).

An understanding of the epidemiological aspects of ADHD may provide insight into its distribution and etiology as well as information for planning the allocation of funds for mental health services. Behavioral disorders in children are increasingly coming into focus as serious treatable conditions. Disabilities.([2])

These problems are generally identified by parents at home or by teachers at school. Symptoms generally interfere with academic and behavior functioning at school, and often disrupt family and peer relationships .One-third of all children with ADHD have learning problems. Childhood hyperactivity is also associated with subsequent onset of other psychiatric disorders. Several literature reviews have reported highly variable rates worldwide, ranging from as low as 1% to as high as nearly20% among school-age children. The variability of ADHD prevalence([3])

estimates may be best explained by the use of differences definitions. In spite of the importance of ADHD in school age children , there are little studies in the Arab countries concerning this disorder versus what happen in other countries ([4]).

Objectives: This study aims to measure the prevalence of Attention Deficit Hyperactivity

Disorder in a sample of primary school children in the southern district of Al- Hilla city and identifying some of its correlates. : One hundred primary school- age children were conveniently selected of both genders {50 males and50females), from three primary schools in the southern district of Babylon province, they were clinically assessed by the semi-structured interview questionnaire whish was derived from American Academy of Pediatrics and translated from English to Arabic by well-known translators to assess the child behavior .School children were considered having attention deficit and hyper activity disorders when confirmed by both teachers and parents.

Results

Table (1) Distribution of ADHD among 100 pupils by gender

Gender	Health NO(%)	ADHD NO(%)	Total No(%)
Male	78 (39)	22(11)	100(50)
Female	94 (47)	6 (3)	100(50)

Chi Square =5.3156 df=1 P<0.05

Table (1) shows that the most of the sample are increase in the rate in men more than women, ADHD include (11%) male while (3%) female.

Table(2) Frequency distribution of pupils by ages

Age (years)	Number of pupils	NO of (ADHD) Pupils	Percentage
7	35	8	%22
8	35	4	%11
9	30	2	%6
Total	100	14	%14

Chi Square =3.4628, df=2, P<0.05

Table (2) shows that (22%,11%,6%) of the sample with the age group (7,8,9,years respectively)

Table 3- frequency distribution of ADHD according to parents smoking habits

Smoking of Parents (fathers)	ADHD NO(%)	Healthy children NO(%)	Total NO(%)
Smoking Positive	10 (71)	31 (36)	41 (41)
Smoking Negative	4 (29)	55 (64)	59 (59)
Total	14 (100)	86 (100)	100(100)

Chi square=6.231, df=1, p<0.05

Table (3) shows that (10%) of the sample have smoking positive with ADHD while(4%) have smoking negative with ADHD ...

Table(4): frequency distribution of family history of ADHD in school children

Family history	(ADHD) NO (%)	Healthy NO (%)	Total NO (%)

Positive	11 (79)	9 (10.5)	20 (20)
Negative	3 (21)	77 (89.5)	80 (80)
Total	14 (100)	86 (100)	100 (100)

Chi square=34.9045 df= 1 p<0.05

Table (4) shows that the most of the study sample (21%) were negative with ADHD , While (11%) was positive with ADHD ...

Table 5 - Frequency distribution of school children with ADHD and their school performance

Low school performance	ADHD No (%)	Healthy No (%)	Total No (%)
Low school performance	8 (57)	16 (18)	24 (24)
Normal	6 (43)	70 (82)	78 (78)
Total	14 (100)	86 (100)	100 (100)

Chi square=9.8036 df= 1 p<0.05

Table (5) shows that most of the sample study (8%) low school performance with ADHD ,while (6%) HAVE normal with ADHD

Discussion

Overall, we found that the most information about long-term outcomes applies to boys ages 7 to 9 years at intervention([5]). Preschoolers with diagnosed ADHD, girls, teenagers, and adults have rarely been the focus of intervention research. In general, safe and effective interventions have been identified. Parent behavior training for preschoolers is efficacious and benefits appear to last, although many parents drop out of treatment([6]). Medications can be efficacious in preschoolers, but are not as well tolerated as in children over 6 years of age, or in adults. In addition, parents show decreasing adherence to medication use for their children over 12 months despite effectiveness([7]). For children over 6 years of age, teenagers, and adults, medications remain the most thoroughly researched interventions, with most studies sponsored by industry. In addition to psychostimulant medications, two additional pharmacologic agents, atomoxetine (ATX) and guanfacine extended release (GXR), have been studied and appear effective and safe for one or more years at a time, with differing adverse event profiles. Classroom teacher-based interventions can improve academic and classroom behavior outcomes for both preschoolers and primary school children, but difficulties re-emerge 1 to 2 years following discontinuation of the intervention([8]). For some subgroups of children, additional benefit may derive from combined medication and behavioral interventions, but not for all. There remains a lack of clarity about how long treatment may be required, of what type, and for whom. For some, incremental improvement accrues with continued intervention over years; for others, medication interventions can be discontinued without symptom relapse. However, these observations are difficult to evaluate due to the absence of information regarding specific subgroups receiving treatment and details regarding co-interventions([9]).

Conclusion:

1. There is a high prevalence rate of attention deficit and hyperactivity disorders in schoolchildren .
2. There is a significant difference between males and female in relation to prevalence rate of ADHD.

3. There is a positive association between ADHD and family history of this disorder .
4. There is a positive association between ADHD, smoking habits of parents and low school performance .

Recommendation:

1. Further comprehensive scientific studies are needed to assess the extent of this problem in Iraq .
2. It is important to have an educational psychologist as a constant staff in all primary schools in order to achieve early diagnosis, counseling and behavior rectification .
3. Establishing child psychiatrist unit in Babylon province to manage ADHD cases and giving drugs freely.
4. The curriculum of teachers colleges and institutes in Iraq must include training materials regarding ADHD children .
5. Public education is needed to increase the level of parent and public awareness about prevention ,early diagnosis and proper dealing with the affected children with mass media training courses for parents.
6. Non-government organization working with this field can be supported by ministry of education and ministry of health to help those children.

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