

Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported by Their Teachers.

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ABSTRACT

Attention deficit hyperactivity disorder (ADHD) is a neglected illness in both developing and developed countries; it represents a growing public health concern because of its long-term adverse effects, long-term treatment and the significant financial impact on families, schools and community. This study **aimed** to assess the prevalence of attention deficit hyperactivity symptoms among Al dawadmi primary schools children as reported by their teachers and assess prevalence of symptoms according to children social characteristics. 52 students were included in the study from 6 primary schools in Al dawadmi city (3 males & 3 females) were chosen according all students suffer from ADHD symptoms as reported by their teachers and by their parents who accepted to their children participate in the study research. Data were collected during March 2015. **Finding and conclusion:** Nearly one third of the studied subjects suffer often from attention deficient symptoms aged from 10->12, it was often manifested by female student (38.5%) more than male (30.7%) also hyperactivity/ impulsivity symptoms were often manifested by first child. More than half of studied subjects always had learning difficulties (55.8%) and avoid tasks which need concentration or mental effort (69%). One third of the studied subject has not guilt feeling. **Recommendations:** Early detection of the manifestations in affected children at early stage is significantly recommended to develop specific psychological intervention for them. All primary school children should be examined for prevalence of the manifestations.

Key words: Attention Deficit Hyperactivity symptoms and Al Dawadmi primary schools.

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INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is the most frequently encountered childhood - onset neurodevelopment disorder in the primary care settings. It is defined by features of inattention (Inattention, which includes behaviors such as being easily distractible, disorganized, and forgetful), over-activity/impulsivity (which includes behaviors such as having difficulty sitting still, being "driven by a motor," and having difficulty awaiting turn) and combined type (is a combination of symptoms that are active in both ADHD, predominantly

hyperactive-impulsive type and ADHD, predominantly inattentive type **Chinawa, et. al., (2014)**. ADHD is a chronic disorder that impacts functioning at school, at home, and in the community. As a result of the significant impairment experienced by children diagnosed with this disorder and its high incidence rate, ADHD is recognized as a major public health concern (**American Academy of Pediatrics 2001**).

It is one of the most prevalent developmental disorders affecting 3–5% of school-aged children Alqahtani, (2010) . In Saudi Arabia, ADHD manifests in about 4 -12 % of children aged 6 to 12 years **Abu**

Taleb& Farheen (2013) .Symptoms usually emerges before seven years of age

Chinawa, et. al., (2014). ADHD can profoundly affect the academic achievement, well-being and social interactions of the affected children **American Academy of Pediatrics, 2011 and Al-Hamed, et. al.,(2008)**. It can be identified by its main characteristics; impulsivity, hyperactivity, cognitive, behavioral, and emotional deficits, and inattention. It is normally affects preschool age children, although it can extend beyond childhood, adolescence and adulthood. A higher prevalence reported in males children than female children and there is unconfirmed link between socioeconomic factors and ADHD in children as reported by **Linnet, et al., in 2005**.

ADHD is an important health problem among school children, and information about its prevalence among Arab communities, especially the Gulf countries, has limited, in the United Arab Emirates, 29.7%. In Qatar, the prevalence rate of ADHD was reported to be 11.1% **Bu-Haroon, (1999)**. In Saudi Arabia **Al-Hamed et. al.,(2008)** reported ADHD prevalence of 16.4%, an ADHD inattentive (IA) type of 16.3%, and a hyperactive-impulsive (HI) type of 12.4%. **Al Qahtani, (2010)** found the prevalence was 2.7%. (**Jenahi, Khalil and Bella, 2012**). ADHD manifests in approximately 4-12% of children between the ages of 6 and 12 years. Several studies estimated the prevalence of ADHD, in USA 4-8%, Korea 7.6% - 9.5%, and India 20% **Al-Hamed, et. al.,(2008)**. In Egypt **Al-Haggar, et. al., (2006)** reported prevalence of ADHD among children from Delta region was 20.4%. **El- Nemer , Badr, & Salem, (2015)** found the prevalence of probable ADHD in a group of children were attended the general pediatric outpatient

clinic of Menoufia University Hospital, aged (5-12 year) was 19.7%.

The exact cause of attention deficit disorder were unknown but studies on its etiology have included neurobehavioral, biological/gestational, and genetic origins **Jenahi, Khalil and Bella, (2012)**. It is thought that ADHD is the result of complex interactions between genetic, environmental, and neurological factors. This disorder is attributed to genetic factors in about 80%. Various environmental factors as pregnancy and birth related risk factors play a role in the disease. It is commonly associated with other psychiatric and neurological conditions. Diagnosis depends on parent and teacher reports, no laboratory tests reliably predict ADHD. Early diagnosis can provide early intervention and diminish the negative impact of the disorder **El- Nemer , Badr, & Salem, (2015)**. Studies show that with adequate and timely management, a high percentage (90%) of patients with ADHD show good recovery **AbuTaleb& Farheen (2013)**. Proper diagnosis and effective treatment can dramatically improve children ability to function successfully in the classroom setting, relate to family members &friends, and to develop a positive sense of self (**Jenahi, Khalil and Bella, 2012**).

Children with ADHD have troubles in paying attention, act without thinking about what the result will be, and, in some cases, they are overly active, they face many difficulties in school. ADHD children show behavioral and academic problems due to the conflict between the academic requirements of the schools and the specific characteristics of the disorder **Homidi, Obaidat and Hamaidi , (2013)**. Also theses children at risk of depression, school failure and dropout and failed relationships. Adolescents with ADHD are at risk of workplace underachievement,

Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported by their Teachers.

substance abuse and low self-esteem **Al-Hamed, et al., (2008)**. Attention deficit hyperactivity disorder represents a growing public health concern because of its long-term adverse effects, long-term treatment with behavior-modifying drugs, and the significant financial impact on family, schools and communities **Homidi, Obaidat and Hamaidi, (2013)**.

Two major modalities of treatment are available for treatment of ADHD: behavioral interventions and pharmacotherapy. However, multimodality treatment that includes both is often considered optimal **Al-Hamed, et al., (2008)**. There are several effective and evidence-based options to treat people with ADHD. The American Academy of Pediatrics recommends different treatment program depending on the age of the child being treated; for those aged 4–5, the Academy recommends evidence-based parent - and / or teacher-administered behavior therapy, with the addition of methylphenidate only if there is continuing moderate - to - severe functional disturbances, those aged 6–11, the use of medication in combination with behavior therapy is important and for those aged 12–18, medication prescribed with the consent of the treated adolescent, in combination with behavioral therapy. Other approaches like psychotherapy and working memory training may be used. Improving the surrounding home and school environment with parent's management training and classroom management can improve the behavior of the affected child **Wolraich, Brown & Brown 2011 and Willcutt, (2013)**

Magnitude of the problem:

Attention deficit hyperactivity disorder is a major public health concern and constitute a source of stress on the

diseased child and their families also there is lack of awareness about the disorder symptoms among teachers and parents so this study consider a baseline about distribution of symptoms among primary school children in Al dawadmi city and will assist the physicians whom have a high index of suspicion to diagnose ADHD for early management of diagnosed cases.

Aims of the study:

This study aimed to assess the prevalence of attention deficit hyper activity symptoms among Al dawadmi primary schools children as reported by their teachers and assess prevalence of symptoms according children social characteristics.

Subjects and Methods:

Research questions:

1. What is the prevalence of attention deficit hyper activity symptoms among Al dawadmi primary schools children as reported by their teachers?
2. What is the prevalence of symptoms according the children social characteristics?

Type of the study: Cross sectional study.

Subjects:

A convenient sample of 52 students divided into 26 male students and 26 female students affiliated to primary schools in Al Dawadmi, Saudi Arabia, chosen according all students suffer from ADHD symptoms as reported by their teachers and by their parents who accepted to their children participate in the study research. Exclusion criteria: None completed questionnaire and students whom did not complain from ADHD symptoms.

Setting description:

Al dawadmi is one governorate in Riyadh city, Saudi Arabia. The study was conducted at 6 primary schools in Al dawadmi 3 for females schools (al ninth, al second and al fifth) and 3 for males schools (Othman Bin Affan, Agial al Dawadmi and Royad al Dawadmi) as chosen by Al dawadmi educational supervision office.

Tools for data collection:

1. Socio demographic questionnaire which include data about the studied subjects age , sex and birth order.
2. Teacher questionnaire sheet: It was formulated by the researchers after reviewing the related literature, the questionnaire include 3 parts; 1st part it has 18 items about attention deficit symptoms, 2nd part it has 19 items about hyper activity/ impulsivity symptoms and 3rd part it has 15 items for combined type of ADHD symptom all parts contained 52 items. The questionnaire was filled by the teachers. A scoring system was used, total score were summed as follows: Rarely means children engage in the behavior one to several times per month it take 1, little means children engage in the behavior one to several times per week it take 2, often means children engage in the behavior one to several times per day it take 3 and always means children engage in the behavior one to several times per hour it take 4. Total score were summed for each item. The questionnaire liability and validity were tested by two assistant professor in public health medicine and pediatric nursing.

Pilot study

A pilot study was carried out to test applicability and clarity of the questionnaires and to estimate the time

needed to fill them. The questionnaire was handed to 10 teachers and collected at the same time. Based on the findings of the pilot study, minor changes were done by rewording some items. Time consumed for filling the questionnaire was ranged between 15 – 20 minutes. The teachers whom participated in the pilot study were omitted from the main study.

Procedures

The study questionnaire was distributed at March 2015 and collected from the teacher after one week. All teachers whom participate in study were asked to fill the questionnaire sheet for only students who complaining from ADHD symptoms after explaining the meaning of attention deficit hyper activity symptoms to them.

Ethical considerations

To fulfill the aims of the study an official permission was obtained from the vice dean of the faculty who agree for conducting this study. And referencing letter for educational supervision office who choose the primary schools, where the study was conducted. The teachers were informed that their participation is voluntary and assured that their responses will be confidential and will not affect them and used only for the research purposes.

Data Analysis

The collected data were organized, tabulated and statistically analyzed using SPSS version 19 (Statistical Package for Social Studies) created by IBM, Illinois, Chicago, USA. Data were analyzed using frequency and percentage.

Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported by their Teachers.

Chi square test were used $(x)^2$ and p level <0.05 was considered significant.

Results and discussion:

Table 1: Distribution of the studied subjects Attention deficit symptoms according to their social characteristics.

Variables	Attention deficit symptoms								X ²	p
	Rarely (1-18)		A little (19-36)		Often (37-54)		Always (55-72)			
1) Age:	No	%	No	%	No	%	No	%	19.548	0.145
• 6-	1	1.9	1	1.9	4	7.7	2	3.8		
• 8-	0	0.0	1	1.9	2	3.9	1	1.9		
• 10-	2	3.8	2	3.8	16	30.7*	2	3.8		
• 12-	1	1.9	2	3.8	13	25	2	3.8		
2) Sex:									1.444	0.486
• Male	3	5.7	2	3.8	16	30.7*	5	9.6		
• Female	1	1.9	2	3.8	20	38.5*	3	5.7		
3) Birth order									10.256	0.418
• 1 st	1	1.9	1	1.9	14	27 *	4	7.7		
• 2 nd	0	0.0	4	7.7	5	9.6	1	1.9		
• 3 rd	1	1.9	1	1.9	8	15.4	0	0.0		
• 4 th	1	1.9	1	1.9	5	9.6	3	5.7		
• 5 th -	0	0.0	0	0.0	2	3.8	0	0.0		

Table 1: Distribution of the studied subjects Attention deficit symptoms according to their social characteristics ; it was clear from this table that nearly one third of the studied subjects(30.7%) who suffer often from attention deficient symptoms aged from 10->12 and attention deficit symptoms were often manifested by female student (38.5%) more than male (30.7%). Regarding birth orders attention deficit symptoms were often manifested by first child (27%) with no significant differences were found regarding all items of children social characteristics.

Table 2: Distribution of the studied subjects hyperactivity /impulsivity symptoms according to their social characteristics.

Variables	hyperactivity /impulsivity				X ²	P
	Rarely	A little	Often	Always		

	(1-19)		(20-38)		(39-57)		(58-76)				
1) Age	No	%	No	%	No	%	No	%			
6-	1	1.9	2	3.8	3	5.7	2	3.8	15.68	0.333	
8-	2	3.8	3	5.7	2	3.8	5	9.6			
10-	1	1.9	6	11.5	15	28.8*	6	11.5			
12	1	1.9	2	3.8	1	1.9	0	0.0			
2) Sex										1.973	0.373
Male	3	5.7	6	11.5	14	27*	3	5.7			
Female	0	0.0	6	11.5	12	23*	8	15.4			
3) Birth order:										7.341	0.693
1 st	2	3.8	6	11.5	10	19.2*	5	9.6			
2 nd	0	0.0	3	5.7	6	11.5	1	1.9			
3 rd	1	1.9	2	3.8	5	9.6	2	3.8			
4 th	0	0.0	1	1.9	4	7.7	4	7.7			
5 th -	0	0.0	0	0.0	0	0.0	0	0.0			

Table 2: demonstrates the distribution of the studied subjects hyperactivity /impulsivity symptoms according to their social characteristics. It was clear from this table that nearly one third from the studied subjects(28.8 %) whom suffer often from hyperactivity/ impulsivity symptoms aged from 10->12 and hyperactivity / impulsivity symptoms were often manifested by male student (27%) more than female students (23%). Regarding birth orders hyperactivity/ impulsivity symptoms were often manifested by first child(19.2%) with no significant differences were found regarding all items of social characteristics.

**Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported
by their Teachers.**

Table 3: Distribution of the studied subjects combined deficit symptoms according to their social characteristics.

Variables	Combined symptoms								X ²	P
	Rarely (1-15)		A little (16-30)		Often (31-45)		Always (46-60)			
1) Age:	No	%	No	%	No	%	No	%	11.829	0.620
6-	1	1.9	4	7.7	3	5.7	0	0.0		
8-	1	1.9	6	11.5	1	1.9	4	7.7		
10-	0	0.0	14	27*	11	21	3	5.7		
12-	0	0.0	2	3.8	2	3.8	0	0.0		
2) Sex:									2.185	0.335
Male	2	3.8	4	7.7	16	30.7*	4	7.7		
Female	1	1.9	11	21	11	21*	3	5.7		
3) Birth order:									6.811	.743
1 st	3	5.7	9	17.3*	5	9.6	3	5.7		
2 nd	2	3.8	4	7.7	3	5.7	1	1.9		
3 rd	2	3.8	5	9.6	3	5.7	0	0.0		
4 th	1	1.9	3	5.7	3	5.7	3	5.7		
5 th -	1	1.9	1	1.9	0	0.0	0	0.0		

Table 3; represents the distribution of the studied subjects combined symptoms according to their social characteristics. It was clear from this table that nearly one third from the studied subjects(27 %) who suffer little from combined type of ADHD symptoms aged from 10->12 and it were often manifested by male students (30.7%) more than female students (21%). Regarding birth orders combined type of ADHD symptoms were little manifested by first child (17.3%) with no significant differences were found regarding all items of social characteristics.

Table 4: Distribution of the studied subjects according their attention deficit symptoms.

Attention deficit symptoms	Rarely		A little		Often		Always	
	No	%	No	%	No	%	No	%
1. Distractible.	13	25	8	15.4	8	15.4	23	44.2*
2. Need effort to follow teacher instruction.	1	1.9	24	46.2	16	30.8	11	21.2
3. Complaining of confusion.	0	0.0	8	15.4	23	44.2	21	40.4*
4. Not complete the task.	5	9.6	26	50.0	14	26.9	7	13.5
5. Aimless float from idea to another.	6	11.5	21	40.4	18	34.6	7	13.5
6. Not attend to others	4	7.7	17	32.7	20	38.5	11	21.2
7. Not able to follow details.	1	1.9	24	46.2	16	30.8	11	21.2
8. Not able to understand relations	8	15.4	12	23.1	24	46.2*	8	15.4
9. Cannot concentrate.	7	13.5	22	42.3	21	40.4	2	3.8
10. Had learning difficulty .	2	3.8	17	32.7	4	7.7	29	55.8*
11. Complaint from fantasy.	14	26.9	18	34.6	17	32.7	3	5.8
12. Over whelmed with self.	15	28.8	24	46.2	8	15.4	5	9.6
13. Easily forget important things.	8	15.4	14	26.9	19	36.5	11	21.2
14. Not Able to organize and order task.	5	9.6	20	38.5	20	38.5	7	13.5
15. Avoiding task which needs concentration or mental effort.	4	7.7	10	19.2	32	11.5	36	69*
16. Risk for injury due to distractibility.	4	7.7	25	48.1	17	32.7	6	11.5
17. Loss his equipment	2	3.8	26	50.0	19	36.5	5	9.6
18. Not interested in learning	4	7.7	14	26.9	22	42.3	12	23.1
N. are not exclusive								

Table 4: reflects the distribution of the studied subjects according their attention deficit symptoms; It was clear from this table that 44.2 % and 40.4% of the studied subjects always complaining from distraction and confusion during their class times respectively, 46.2% were often not able to understand relations during class time. Also more than half of them always had learning difficulties (55.8%) and avoid tasks which need concentration or mental effort (69%).

**Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported
by their Teachers.**

Table 5: Distribution of the studied subjects according their hyperactivity/ impulsivity symptoms.

Hyperactivity/impulsivity symptoms	Rarely		A little		Often		always	
	No	%	No	%	No	%	No	%
1. Move from the class many time.	14	26.9	20	38.5	15	28.8	3	5.8
2. Interrupted behavior	10	19.2	15	28.8	15	28.8	12	23.1
3. Restlessness and feeling of boredom during class.	6	11.5	11	21.2	20	38.5*	15	28.8
4. Cause noisy.	8	15.4	21	40.4	12	23.1	11	21.2
5. Interrupt other children.	4	7.7	15	28.8	20	38.5*	13	25.0
6. Uncooperative with teachers.	7	13.5	11	21.2	20	38.5*	14	26.9
7. Not respond for instruction.	8	15.4	14	26.9	17	32.7	13	25.0
8. Appear behavior of stubborn and contradict.	6	11.5	20	38.5	14	26.9	12	23.1
9. No interest to learn.	12	23.1	11	21.2	22	42.3*	7	13.5
10. Pushing students in row.	8	15.4	22	42.3	13	25.0	9	17.3
11. Not participate in activity.	11	21.2	25	48.1	9	17.3	7	13.5
12. Impaired communication.	16	30.8	23	44.2	12	23.1	1	1.9
13. Always accused others.	9	17.3	27	51.9	12	23.1	4	7.7
14. Absent from school without excuse.	10	19.2	19	36.5	15	28.8	6	11.5
15. Violate rules and routines	24	46.2	15	28.8	9	17.3	4	7.7
16. Refuse to excuse or to say sorry	17	32.7	21	40.4	8	15.4	6	11.5
17. His behavior non expected.	14	26.9	29	55.8	5	9.6	4	7.7
18. Other students easy to lead him	12	23.1	22	42.3	13	25.0	5	9.6
19. Talkative in abnormal way.	17	32.7	20	38.5	11	21.2	4	7.7
N. are not exclusive								

Table 5; reflects the distribution of the studied subjects according their hyperactivity/impulsivity symptoms, this table indicates that more than one third(42.3%) of the studied subjects often not interested to learn, followed by about 38.5 often complaining from restlessness and feeling of boredom, interrupt other children and uncooperative with their teacher during class session.

Table 6: Distribution of the studied subjects according their combined type of ADHD symptoms.

Combined ADHD symptoms.	Rarely		A little		often		Always	
	No	%	No	%	No	%	No	%
1) Unable to control his behavior.	18	34.6	17	32.7	8	15.4	9	17.3
2) Outburst.	12	23.1	26	50.0	10	19.2	4	7.7
3) Sensitive to criticism.	19	36.5	21	40.4	10	19.2	2	3.8
4) Easily to cry without cause.	23	44.2	19	36.5	8	15.4	2	3.8
5) Answer questions before ending.	21	40.4	19	36.5	12	23.1	0	0.0
6) Easily get angry.	27	51.9	15	28.8	8	15.4	2	3.8
7) Interest in something not related to him.	14	26.9	20	38.5	14	26.9*	4	7.7
8) Interrupted others during their talk.	20	38.5	15	28.8	14	26.9*	3	5.8
9) Unable to stop his repetitive movement	15	28.8	17	32.7	10	19.2	10	19.2
10) Can't meet his needs.	13	25.0	22	42.3	10	19.2	7	13.5
11) Deny mistakes.	12	23.1	16	30.8	15	28.8*	9	17.3
12) Obey with force only.	7	13.5	21	40.4	14	26.9	10	19.2
13) No guilt feelings	13	25.0	17	32.7	17	32.7*	5	9.6
14) Slapping other.	25	48.1	17	32.7	6	11.5	4	7.7
15) All times running and jumping.	9	17.3	15	28.8	17	32.7*	11	21.2
N. are not exclusive								

Table 6; clarifies distribution of the studied subjects according their combined type of ADHD symptoms. It was clear from this table that about one third (32.7) of the studied subjects often have not guilt feeling and all times running and jumping, followed by (28.8) deny their mistakes,(26.9) often obey orders with force only and were interested in something not related to them and interrupted other students during their talk.

Discussion:

Attention deficit hyperactivity disorder (ADHD) is the most common neurobehavioral disorder of children and can profoundly affect the academic achievement, well being and social

interaction. This study aimed to assess the prevalence of attention deficit hyper activity symptoms among Al dawadmi primary schools children as reported by their teachers and assess prevalence of symptoms according children social characteristics.

Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported by their Teachers.

From the study results it was clear that nearly one third of the studied subjects who suffering often from attention deficit hyperactivity symptoms aged 10->12. These result agree with **Al Hamed et.al., (2008)** whom reported ADHD manifests in approximately 4-12% of children between the ages of 6 and 12 years. **Dopfiner, et. al.,(2008);Buckley, et. al.,(2008) and Faisal, et. al. (2002)** supported the current study finding whom mentioned ADHD is more prominent in the age of 6-11 and that is symptoms start regressing at or after age of 12 years. These results disagreed with **Homidi et. al., (2013)** whom found that prevalence of ADHD for the children with the range of 6-9 years was 1.4% whereas the percentage for children with range of 10-12years was 0.8% so his results indicated that younger children have a higher percentage than older group regarding ADHD . Also the current finding contrasted with **Jenahi, Khalil and Bella, (2012)** who referred to ADHD decreases with age.

The current study indicated that ADHD were often manifested by female students (38.5%) more than male students(30.7) these founding contradicted with **Homidi et. al., (2013)** whom found that ADHD prevalence among male participant was higher than female participant . Also these result in contrast with **El-Nemr et. al., (2015)** whom reported that the distribution between male and female was 2.7:1. In addition **Chinawa et. al., (2014)** reported that ADHD does not vary by gender. This the same with other studies lacked significant difference between ADHD and gender **Kashal et. al., (2005);Nava et. al., (2007)**. According birth order the current finding indicated that ADHD were often manifested by first birth order (27%) with no significant were found. This result agreed with **Frey, et. al., (1995)** whom reported that more ADHD

symptoms among first birth order. This result supported with **Abu Taleb & Farheen,(2013)** whom reported that the highest percentage of positive results were observed among students who were first born followed by those who were last born. However, birth order was not significantly associated with higher or lower rates for ADHD screen positive among school children but **Berger et. al., (2009)** disagree with the current finding where he reported the chances of first, middle, or later born children, as well as single children, to suffer from attention-deficit hyperactivity disorder are almost equal and birth order has no effect in relation to attention-deficit hyperactivity disorder.

In relation to hyperactivity / impulsivity disorder; the current study the finding reported that about one third of the studied subjects who often suffered from hyperactivity / impulsivity symptoms aged from10->12. This finding was supported with **Peneda, et al.,(1999)** study's in Colombia whom mentioned that hyperactivity /impulsivity were more frequent in 6-11 years. The current results showed that hyperactivity /impulsivity symptoms often manifested by male students (27%) more than female students (23%) which in the same with **Homidi, et. al, (2013)** whom found that hyperactivity /impulsivity prevalence for male participant was 1.6% and 0.6% for female participant.

Regarding combined type of attention deficit hyperactivity disorder the current study revealed that it was often manifested by male students. These results similar to **El Tallawy et. al., (2005)** who reported that combined type of ADHD manifested by male (n=54, 3.6%), more than female (n=37, 2.4%). Also This was in partial agreement with **Sandberg (1996)** who reported that male to female ratio is 2.5:1,

and **Tannock (1998)** who reported that an over-representation of boys by approximately 3:1, also **Hudziak & Todd (1993)** agreed with the current study finding where they reported males to have ADHD 2-9 times as frequently as females. The current finding revealed that there is no significant relationship between birth order and combined type of ADHD. This was disagreement with **Jenahi et al., (2012)** whom reported that ADHD seriousness increased with the order of the birth.

The current finding referred to that more than half (55.8%) of students with attention deficit symptoms have learning difficulties and (69%) of them avoid tasks which need concentration and or mental effort. This finding agreed with Volpe et al., (2006) whom reported that about 20% - 30% of students with attention deficit have specific learning difficulties. Growing evidence indicates that the inattentive are strongly associated with academic problems as mentioned by Rabiner & Core, (2000). These finding similar with Green, et. al., (1999) who reported that approximately 12% to 22% of children presenting with inattentive subtype of ADHD complaining from learning difficulties and academic problems. American Psychiatric Association, (2014) supporting the current finding; Children with Attention Deficit Hyperactivity Disorder have problems sustaining situation-appropriate attention. These problems can include hyperactivity, alertness, arousal, and distractibility. Also Baum, Olenchak and Owen (1998), claim that the attention problems are exacerbated by tasks that are dull, repetitive, and boring. Impulsivity, academic difficulties, and poor motor skills are other behaviors characterizing children with ADHD. Children with ADHD frequently fail to complete assignments in school or at home, exhibit disruptive behavior in the

classroom, and have difficulty relating to their classmates. A majority of these students have learning deficits in spelling, math, reading, and handwriting. Semrud, (1992) , Barkely, (1990) and Spencer, (2006) reported children with combined ADHD are roughly three to four times more likely to exhibit Learning Difficulties than their healthy peers .

Ramsay (2007) supported the current study finding where he mentioned ;an individual with inattention have some or all of the following symptoms : Be easily distracted, miss details, forget things, and frequently switch from one activity to another, have difficulty maintaining focus on one task, become bored with a task after only a few minutes, unless doing something enjoyable, have difficulty focusing attention on organizing and completing a task or learning something new, have trouble completing or turning in homework assignments, often losing his things (e.g., pencils, toys, assignments) needed to complete tasks or activities, not seem to listen when spoken to daydream, become easily confused, and move slowly, have difficulty processing information as quickly and accurately as others and struggle to follow instructions .

In the present study more than one third of the studies subjects complaining hyperactivity/ impulsivity symptoms often not interested to learn as referred from table 5, one third of the studied subjects often have not guilt feeling and all times running and jumping, followed by (28.8) deny their mistakes, (26.9) often obey orders with force only as illustrated from table 6; these finding the same with American Academy of Pediatrics (2000 & 2001) which indicated that children who are complaining hyperactivity/ impulsivity often interrupts others, feel restlessness and unable to play quietly. Also these result in accordance with a **Pennington et. al.,**

Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported by their Teachers.

(2005) whom reported that children with hyperactivity/ impulsivity symptoms often uninterested to learn, complaining restlessness and interrupt other children. Regarding the current study results about two thirds of children often interrupt other during talking, can't meet their needs, has no guilt feeling and all times running and jumping as referred from table 6 this finding agree with Ramsay (2007) also National Institute of Mental Health (2008) reported that; An individual with hyperactivity may have all of the following symptoms, fidget and squirm in their seats, talk nonstop, dash around, touching or playing with anything and everything in sight, have trouble sitting still during dinner, school, doing homework, and story time, be constantly in motion, have difficulty doing quiet tasks or activities.

Study limitations:

The study limitations related to assessment of ADHD symptoms among studied subjects form only teacher views they should be assessed from parents view. Also another limitation is studying of the impact of some socio-demographic factors in intensity of symptoms not all socio-demographic factors were studied.

Conclusion:

The current study results revealed that attention deficit symptoms were almost manifested by female students more than male students but hyperactivity /impulsivity and combined symptoms were almost manifested by male students more than female students. Attention deficient, hyperactivity / impulsivity and combined symptoms were almost manifested by children aged from 10-> 12 years and first birth child as concluded from the current study results.

Recommendations:

From the study results it is recommended that:

- ☒ The study should be conducted on large number of primary school children.
- ☒ All primary schools children should be examine for appearance of ADHD manifestation to get the right prevalence of this disorder among Saudi children.
- ☒ Adequate educational training for primary schools teachers and parents are very important to increase their awareness about ADHD symptoms among children at early stage for recommended referral.
- ☒ Well prepared programs for detecting manifestations of ADHD symptoms in the primary schools pupils at early stage is significantly important to develop early psychological and clinical intervention.

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**Attention Deficit Hyperactivity Symptoms among Al Dawadmi Primary Schools Children as Reported
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