

# Teachers' Attitude Toward Children with Attention-Deficit Hyperactivity Disorder (ADHD) at Primary Schools in Al-Nasiriyah City, Iraq

Saja Mahdi<sup>1</sup>, Ali Kareem Al-Juboori<sup>2</sup>

<sup>1</sup>Ministry of Health, Al-Nasiriyah, Iraq, <sup>2</sup>Professor, University of Karbala, College of Nursing, Karbala, Iraq

## Abstract

The aim of the current study is to identify teachers' attitude about attention-deficit hyperactivity disorder (ADHD) and its relation to their demographic characteristics. A descriptive study design was carried out among 250 teachers at primary schools in Nasiriyah city was selected by using convenience sample type. The data is collected by using Google classroom through distribution of the attitudes questionnaire to primary school teachers which composed of 22 items. The highest percentage 36.8% of teachers at age 41-50 years old, 52.8% were females, 70.8% were urban residence, 54.5% were married, 53.6% had barely sufficient income, 62.8% had bachelor graduated, 56.4% teach the classes (4-6) and 48.8% teach in male school. The majority 95.6% of teachers had neutral attitude toward ADHD and the grand mean was 1.93. There is significant statistical difference in teachers' attitude with regard to their gender. Majority of teachers had neutral attitude About ADHD among children. Teachers attitudes is affected by gender. It is important to teach teachers about how to deal with child who had ADHD. Assign work that suits the student's skill level, and give appropriate supervision to ADHD students.

**Keywords:** Teachers, Attitude, children, attention-deficit hyperactivity disorder (ADHD)

## Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is the most commonly studied and diagnosed psychiatric disorder in children, affecting 3 to 5% of children globally. Childhood ADHD can be a disabling illness. If severe forms are left untreated it interferes significantly with the child's education, interpersonal relationships and ability to maintain a generally positive sense of self. Ill effects of the illness go beyond the child, having detrimental effect on family relationships. ADHD is associated with significant psychiatric co-morbidity, 50-60% of affected children meeting criteria for at least one additional psychiatric disorder. Thirty to 50% of those diagnosed with ADHD in childhood continue to have symptoms into adulthood. <sup>(1,2)</sup>

Attention Deficit Hyperactivity Disorder is one of the most common psychiatric disorders among children and adolescents; the symptoms are hyperactivity, attention deficit and impulsiveness. ADHD co-occurs with some other disorders and the patients go through many problems at home, school and social environments. Based on a literature review, the prevalence of ADHD was 6.8% among children and adolescents. The overall prevalence is 9.7% among elementary school students of Tabriz, North-west of Iran, with a higher rate among the children of illiterate parents. <sup>(3)</sup>

The public stigmatizes children with symptoms of ADHD more than children without ADHD symptoms, adding a diagnostic label is associated with only marginally higher rates of stigma. <sup>(4)</sup>

Teachers play an additional role as gatekeepers to treatment and may elect to accept or deny access to evidence-based treatments for children. teachers not only struggle in the decision to consent to a medication trial, but often revisit their decision. Teachers report

---

**Corresponding author,**  
**Saja Mahdi** Research Scholar,  
Ministry of Health, Al-Nasiriyah, Iraq,  
E-mail : saja.mahdiii.92@gmail.com

fears of the long-term negative effects of stimulants, even if their child has a positive response to the medication. Furthermore, teachers report trial-stopping their children's medication without approval from the prescribing doctor. Clearly, some teachers are ambivalent about employing an evidence-based intervention for their children with ADHD, due to their concerns. <sup>(5)</sup>

Teachers attitudes are also important due to their effect on actual treatment-seeking behaviors and subsequent treatment adherence. Positive teacher's attitudes towards the benefits of stimulant medications for ADHD predict later adherence to medication and perceived medication acceptability. teachers are less willing to engage in both psychosocial and pharmacological treatments for their children if they do not feel knowledgeable about or endorse the acceptability of these treatments. Unsurprisingly, willingness to engage in treatment for children is positively related to teacher's views on the acceptability and helpfulness of treatment. These results further support the importance of teacher's knowledge in predicting treatment-seeking and adherence behaviors <sup>(6,7)</sup>.

Knowledge and attitudes may impact several important outcomes. For example, it has been suggested that gatekeepers who lack knowledge about ADHD may overlook behaviors signifying a child in need of assistance, and they may provide unreliable information to medical practitioners about the effects of medication. Similarly, it has been suggested that gatekeepers' attitudes about ADHD may influence their selection of a teaching approach, their willingness to implement interventions, their chosen behavioral management strategies, and classmates' perception of the child with ADHD <sup>(8)</sup>.

Teachers play a key role in many aspects of ADHD treatment planning and implementation. Insufficient knowledge and negative attitudes towards ADHD and its treatment among them result in a lack or improper implementation of management recommendations

leading to treatment failure. Another explanation for this problem is the teachers' knowledge about this disorder and their attitude toward treatment, as it has been seen that those teachers who had more knowledge about the disorder used pharmacologic and non-pharmacologic therapies more than the others <sup>(9)</sup>.

## Methodology

Descriptive study design carried out among 250 teachers at primary schools in Nasiriyah city, they are selected by using non probability sampling (convenience sample). The study instrument is a questionnaire designed according to the study purpose. The study instrument composed of 2 parts. 1<sup>st</sup> Teacher's Demographic Characteristics, 2<sup>nd</sup> attitude scale composed of 22 items. The attitude questionnaire had been scored and rated on three levels Likert scale, (3) points for agree, (2) points for not certain answer and (1) point for the disagree which assessed by cutoff point (0.66) due to scores (1, 2 and 3) respectively. Scores of responses are categorized according to the following level of attitudes: (1-1.66) = negative level of attitudes, (1.67-2.33) = neutral level of attitudes and (2.34-3.00) = positive level of attitudes. There are some items in reverse sentences in attitude questionnaire, in this case the score will be reversed (1) points for agree, (2) points for not certain answer and (3) point for the disagree. This items are (1,2,5,6,7,8, and 11).

The instrument face validity was determining through a panel of experts. The reliability of the questionnaire determined by Cronbach's alpha for the internal consistency reliability. The data is collected by using google classroom to communicated with the teachers and gathering information. The data is analyzed by using descriptive and inferential statistical analysis through using (SPSS).

## Results

**Table 1: Distribution of the sample according to their socio-demographic characteristics**

Variables		Frquency	Percentage
Age	21-30	32	12.8
	31-40	89	35.6
	41-50	92	36.8
	51-60	37	14.8
	Total	250	100.0
Gender	Female	132	52.8
	Male	118	47.2
	Total	250	100.0
Residence	Rural	73	29.2
	Urban	177	70.8
	Total	250	100.0
Marital status	Single	81	32.4
	Married	136	54.4
	Widowed	20	8.0
	Divorced	6	2.4
	Separated	7	2.8
	Total	250	100.0
Monthly income	Insufficient	24	9.6
	Barely sufficient	134	53.6
	Sufficient	92	36.8
	Total	250	100.0
Educational level	Diploma	89	35.6
	Bachelor	157	62.8
	Master and above	4	1.6
	Total	250	100.0
Class in teaching	Class 1-3	67	26.8
	Class 4-6	141	56.4
	Both	42	16.8
	Total	250	100.0
School type	Female	83	33.2
	Male	122	48.8
	Mixed	45	18.0
	Total	250	100.0

The result in table (1) shows that the highest percentage (36.8%) of teachers at age (41-50) years old, (52.8%) of them were females, (70.8%) of them were urban residence, (54.5%) were married, (53.6%) had barely sufficient income, (62.8%) had bachelor graduated, (56.4%) teach the class (4-6) and (48.8%) teach in male school.

**Table 2: The nature of teachers’ attitude about ADHD**

Items	Agree	Neutral	Disagree	Mean	Ass.
1-ADHD is a behavioral disorder that should not be treated with medication. R	186	17	47	1.44	-ve
2-Children who cannot sit still in class simply need to be disciplined or punished. R	44	8	198	2.61	+ve
3-I would feel frustrated having to teach an ADHD. R	189	5	56	1.46	-ve
4-ADHD is a legitimate educational problem. R	83	5	162	2.31	N
5-Having an ADHD child in my class would disrupt my teaching. R	188	4	58	1.48	-ve
6-DHD children should be taught by special education teachers. R	137	4	109	1.88	N
7-Most students with ADHD do not really disrupt classes that much.	156	1	93	2.25	N
8-Children with ADHD should be taught in the regular school system.	116	5	129	1.94	N
9-The extra time teachers spend with ADHD students is at the expense of students without ADHD. R	180	1	69	1.55	-ve
10-Other students do not learn as well as they should when there is an ADHD child in the class. R	136	5	109	1.89	N
11-ADHD children misbehave because they are naughty. R	177	2	71	1.57	-ve
12-ADHD children cannot change the way they behave. R	109	9	132	2.09	N
13-ADHD children misbehave because they do not like following rules. R	186	8	56	1.48	-ve
14-Combination of medication and behavior management is best for treating ADHD.	155	9	86	2.27	N
15-Family problems such as alcoholism or marital disorder often contribute to a child’s ADHD.	174	6	70	2.41	+ve
16-Some children develop ADHD because they want attention. R	169	-	81	1.64	-ve
17-Students with ADHD are just as difficult to manage in the classroom as any student. R	160	1	89	1.71	N
18-ADHD children are at a higher risk of truancy and escaping. R	164	2	84	1.68	N
19-ADHD children need psychological support	161	1	88	2.29	N
20-ADHD children’s IQ is more than that of non-ADHD children	127	7	116	2.04	N
21-ADHD children experience more difficulties in their relations with their Colleagues	168	8	74	2.37	+ve
22-ADHD children should receive less homework than others	132	4	114	2.07	N
Grand mean	1.93		Assessment	Neutral	

Ass.= assessment, R=reverse, -ve=Negative (1-1.66), N=Neutral (1.67-2.33), +ve=Positive (2.34-3)

**Table 2 shows that teachers had neutral attitude toward ADHD, the grand mean of scores was 1.93.**

**Table 3: distribution of teachers by mean score level of attitudes**

Level of assessment	Frequency	Percent
Negative (1-1.66)	11	4.4
Neutral (1.67-2.33)	239	95.6
Positive (2.34-3)	-	-
Total	250	100
Mean and standard deviation	1.93±0.151	

**Table 3 shows that 95.6% of teachers had neutral attitude toward ADHD .**

**Table 4: ANOVA for teachers' attitude with regard to their socio-demographic characteristics.**

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	.061	3	.020	.880	.452
	Within Groups	5.675	246	.023		
	Total	5.736	249			
Gender	Between Groups	.096	1	.096	4.204	.041
	Within Groups	5.641	248	.023		
	Total	5.736	249			
Residence	Between Groups	.026	1	.026	1.133	.288
	Within Groups	5.710	248	.023		
	Total	5.736	249			
Marital status	Between Groups	.121	4	.030	1.319	.264
	Within Groups	5.615	245	.023		
	Total	5.736	249			
Monthly income	Between Groups	.002	2	.001	.033	.968
	Within Groups	5.735	247	.023		
	Total	5.736	249			
Level of education	Between Groups	.020	2	.010	.427	.653
	Within Groups	5.716	247	.023		
	Total	5.736	249			
Class in teaching	Between Groups	.051	2	.025	1.101	.334
	Within Groups	5.685	247	.023		
	Total	5.736	249			

F=Fisher, d.f= degree of freedom, no significant ( $p>0.05$ ), significant ( $P\leq 0.05$ ), high significant ( $P\leq 0.01$ )

The results reveal that there is a significant statistical difference in teachers' attitude with regard to their gender, whereas no significant difference is found with regard to other socio-demographic variables at  $p \leq 0.05$  (table 4).

## Discussion

According to the socio demographic characteristics of the teachers in table (1). The findings indicate that most of teachers at age (41-51) years. Youssef, Hutchinson, & Youssef (2015) found that the mean of teachers age was at 39 years;<sup>(10)</sup> Aly, Mohammed, & Ahmed, (2015) found that most of the teachers at age less than 35 years;<sup>(11)</sup> Al Moghamsi, & Aljohani (2018) found that (53.8%) of teachers at age (31-40) years<sup>(12)</sup>. This finding not consisted with the present study finding.

According to gender more than half of teachers were females. Youssef, Hutchinson, & Youssef (2015) found that females more than males. Aly, Mohammed, & Ahmed, (2015) found that (61.9%) of teachers were females<sup>(11)</sup>. Khademi et al., (2016) found that 86.8% of teachers were females.<sup>(13)</sup> These result in same line with our finding. The finding of Amiri, Noorazar, Fakhari, Daroukoliaee, & Gharehgoz, (2017) consistent with current finding<sup>(14)</sup>. They found that majority of teachers were females.

Regarding to the educational achievement of teachers, more than half of the sample had bachelor graduated and teach in class 4-6 in male students' school. Aly, Mohammed, & Ahmed, (2015) found that most of teachers had high education level<sup>(11)</sup>. Khademi et al., (2016) found that (60.5%) of teachers had bachelor educational level<sup>(13)</sup>. Alfageer et al., (2018) found that (86%) of the teachers had bachelor and diploma degree and teaching pupils at grade sixth<sup>(15)</sup>. Al Moghamsi, & Aljohani (2018) found that (91.3%) of sample had bachelor educational level.<sup>(12)</sup> Khalil, Alshareef, & Alshumrani, (2019) found that (80.7%) of teachers had bachelor degree<sup>(16)</sup>. All these findings supported the present study results.

Regarding to teacher attitude about ADHD, the findings show that, they had neutral attitude toward ADHD, the grand mean was 1.93 in (table 2). Finally, majority of teachers had neutral level of attitude toward ADHD in (table 3). Youssef, Hutchinson, & Youssef

(2015) found that the attitudes toward children with ADHD were generally positive, although most teachers felt children with ADHD should be taught by specialist teachers<sup>(10)</sup>. Aly, Mohammed, & Ahmed, (2015) found that 55% of teachers had positive attitude toward ADHD<sup>(11)</sup>. Khademi et al., (2016) found that 65.1% of teachers had neutral attitude about ADHD<sup>(13)</sup>. Alfageer et al., (2018) found that Most of the participants in current survey tend to have a positive attitude toward ADHD<sup>(15)</sup>. These finding is supported the present study result. Amiri, Noorazar, Fakhari, Daroukoliaee, & Gharehgoz, (2017) found that almost half of the teachers believed that the educational system plays a very important role in perpetuating the symptoms of ADHD, while nearly half believed that special schools are needed. Although almost one third of teachers believed that the behavior of children with ADHD is deliberate in nature, fewer believed that punishment is needed and even fewer blamed the children's family for their behavior<sup>(14)</sup>. This finding is consistent with the present study.

## Conclusions

The study concluded that majority of teachers had neutral level of attitude toward ADHD, and teachers' attitude is affected by their gender.

**Ethical Clearance** : Taken from University of Kufa ethical committee

**Source of Funding** : Self

**Conflict of Interest** : Nil

## References

- [1] Van Cleave, J., Leslie, L. K. Approaching ADHD as a chronic condition: implications for long term adherence. *Journal of Psychosocial Nursing and Mental Health Services*. 2008 ; 46: 28-37
- [2] Molina, B. S., Hinshaw, S. P., Swanson, J. M. The MTA at 8 years: prospective follow up of children treated for combined-type ADHD in a multisite study. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2009 ; 48: 484-500.
- [3] Amiri, S., Shafiee-Kandjani, A. R., Noorazar, S. G., Ivrih, S. R., & Abdi, S. Knowledge and attitude of parents of children with attention deficit hyperactivity disorder towards the illness. *Iranian Journal of Psychiatry and Behavioral Sciences* .

2016 ; 10(2) : 122.

- [4] Ohan, J. L., Visser, T. A. W., Moss, R. G., & Allen, N. Parents' stigmatizing attitudes toward psychiatric labels for ADHD and depression. *Psychiatric Services* . 2013 ; 64(12), 1270-1273.
- [5] Brinkman, W. B., Sherman, S. N., Zmitrovich, A. R., Vissler, M. O., Crosby, L. E., Phelan, K. J., & Donovan, E. F. Parental angst making and revisiting decisions about treatment of attention-deficit/hyperactivity disorder. *Pediatrics* . 2009 ; 124(2), 580-589.
- [6] Bussing, R., Koro-Ljungberg, M., Noguchi, K., Mason, D., Mayerson, G., & Garvan, C. W. Willingness to use ADHD treatments: A mixed methods study of perceptions by adolescents, parents, health professionals, and teachers. *Social Science & Medicine* . 2012 ; 74(1): 92-100.
- [7] Hebert, J., Polotskaia, A., Joobar, R., & Grizenk, N. Adherence to psycho stimulant medication in children with attention-deficit/hyperactivity disorder: the role of attitudes. *Journal of the Canadian Academy of Child and Adolescent Psychiatry* . 2013 ; 22(4): 317-323.
- [8] Anderson, L. D., Watt, S. E., and Noble, W. Knowledge of Attention Deficit Hyperactivity Disorder (ADHD) and Attitudes toward Teaching Children with ADHD: The Role of Teaching Experience. *Psychology in the Schools* . 2012 ; 49(6) : 511-525.
- [9] Rodrigo, M. D., Perera, D., Eranga, V. P., Williams, S. S., & Kurupparachchi, K. A. The knowledge and attitude of primary school teachers in Sri Lanka towards childhood attention deficit hyperactivity disorder. *The Ceylon Medical Journal* . 2011 ; 56(2) : 51-54.
- [10] Youssef, M. K., Hutchinson, G., & Youssef, F. F. Knowledge of and Attitudes Toward ADHD Among Teachers: Insights From a Caribbean Nation. *SAGE Open*. 2015 ; 1-8.
- [11] Aly, S. E., Mohammed, F. M., Ahmed, Z. A. Teachers' Perception And Attitudes Toward Attention Deficit Hyperactivity Disorder In Primary Schools At Assiut City. *AAMJ* . 2015 ; 13(4):165-173.
- [12] Al-Moghamhsi, E. Y., & Aljohani, A. Elementary school teachers' knowledge of attention deficit/hyperactivity disorder. *J Family Med Prim Care* . 2018 ; 7:907-15
- [13] Khademi, M., Rajezi-fahani, S., Noorbakhsh, S., Leili Panaghi, L., Ashtiani, R. D., Razjouyan, K., & Salamatbakhsh, N. Knowledge and Attitude of Primary School Teachers in Tehran/Iran towards ADHD and SLD. *Global Journal of Health Science* . 2016 ;8(12):141-151
- [14] Amiri, D. S., Noorazar, S. G., Fakhari, A., Daroukolaei, A. G., & Gharehgoz, A. B. Knowledge and Attitudes of Preschool Teachers Regarding Attention Deficit Hyperactivity. *Iran J Pediatr*. 2017 ;27(1):e3834
- [15] Alfageer, H. H., Aldawodi, M. D., Al Queflie, S. A., Masud, N., Al Harthy, N. A., Alogayyel, N. Knowledge and attitude of male primary school teachers about attention deficit and hyperactivity disorder in Riyadh, Saudi Arabia. *J Nat Sc Biol Med* . 2018 ; 9:257-62.
- [16] Khalil, A. I., Alshareef, F. A., Alshumrani, H. G. Knowledge, Attitude, and Behavioural Practice of Elementary Teacher of ADHD Children: Impact of an Educational Intervention. *American Journal of Nursing Science*. 2019 ; 8(6):329-341.