

Evaluation of Elementary School Teachers' Knowledge about Attention Deficit Hyperactivity Disorder (ADHD)

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ABSTRACT

Objectives: This study aimed to evaluate elementary school teachers' knowledge about Attention Deficit Hyperactivity Disorder in AL-Diwaniyah City.

Methods: A quantitative research, descriptive correlational design was used in this study, the study conducted on teachers at elementary schools in AL-Diwaniyah City from (20th September 2021 to 30th June, 2022) to evaluate of elementary school teachers knowledge about attention deficit hyperactivity disorder. The sample consist of (354) elementary school teachers were participated in the study. A non-probability sampling (convenience sample). The sample size was detected by using the sample size formula which is obtained from Steven K. Thompson, (2012). To determine the effect sample size regarding the population size.

Results: The findings indicates that 68.6% of teachers show fair level of knowledge about attention deficit hyperactivity disorders (23.90 ± 6.989).

Conclusion: Considering the results discussion and their interpretations, the study concludes that the knowledge of the elementary school teachers in AL-Diwaniyah City at fair level regarding ADHD.

Keywords: Evaluation, elementary schools, teachers, knowledge, attention deficit disorder with hyperactivity

Introduction

Children's health and illnesses have an effect on the well-being of society as a whole as well as on the well-being of future generations. As a result, taking care of children's mental health helps increase their growth and fertility once they reach maturity. Conditions of mental illness will worsen if insufficient attention is paid to early development issues.¹

The attention deficit hyperactivity disorder (ADHD) is one of the most common behavioral disorders. According to a number of studies related to ADHD, ADHD affects approximately five percent to ten percent of school-aged children and approximately two and a half percent of adults. In the United States, ADHD affects approximately one to two students in each classroom.²

In a recent study that was carried out in Najaf, Iraq, on several primary schools, the prevalence rate among school children was approximately (25 percent), according to reports teachers'. The estimated prevalence rate of ADHD among elementary school children in Baghdad, Iraq, is approximately (10 percent).^{3,4}

Overt, physician-diagnosed, comorbid mental health illnesses including depression, anxiety, and behavior disorder can result from these challenges. Among youngsters with ADHD, social and emotional issues are prevalent. Social challenges can manifest itself in a variety of ways, resulting in friction within the family or with one's classmates. Poor emotional self-regulation, aggressiveness, and a lack of empathy are all common symptoms of emotional distress.²

Studies of people with ADHD have found that around half of them also suffer from depression and anxiety in community samples. This leads to a decline in children's functional performance as well as poorer educational results for them.⁵

A number of studies have demonstrated that children with ADHD are more likely to acquire negative attitudes about

learning and the school environment. This can have a significant impact on a person's future career path and limit their options as an adult. Having low self-esteem can lead to mental health issues such as depression and anxiety.⁶

Many studies have shown that most children with ADHD have normal or above-average intellect, but their impulsive nature makes it difficult for them to utilize their knowledge in everyday circumstances. More than that, they are more likely to have learning difficulties, which can have a negative impact on academic achievement.⁷

Effective and suitable intervention options are needed for children with ADHD in order for them to perform well in a classroom setting. As a result, teachers must be well-versed in this condition so that they may create successful behavior adjustment tactics for their students. Students who are diagnosed with attention deficit hyperactivity disorder (ADHD) in school are more likely to be successful in their treatment.⁸

Teachers and other school workers are frequently the first to notice strange behavior on a child or abnormal motions, and they are able to convey these things to professionals to assist in diagnosis.⁹ Therefore, it is crucial for instructors to have knowledge of disorders and an understanding of the key abilities required in order to work effectively with students within the context of a typical classroom environment. To aid future kids with ADHD in their classrooms, teachers must learn more about ADHD and how it affects pupils both academically and socially. Children's ability to bounce back from setbacks and develop a good self-image might benefit from this as well.¹⁰

Because of everything that has been discussed up until this point, it is important to bring attention to this issue and work toward improving the knowledge and attitude of primary school teachers regarding ADHD in children. This will enable the teachers to recognize the disorder and take the appropriate steps when dealing with children who have it.

Methodology

Design of the Study

A quantitative research, descriptive correlational design was used in this study, the study conducted on teachers at elementary schools in AL-Diwaniyah City from (20th September 2021 to 30th June, 2022) to evaluate of elementary school teachers knowledge about attention deficit hyperactivity disorder.

Administrative Arrangements

Prior to the collection of the study results, official permits were obtained from the relevant authorities as follows: University of Baghdad/College of Nursing Council. Ministry of Planning (CSO) 'Central Statistical Agency' Official Permits. AL-Diwaniyah Educational Director to access the schools to facilitate the data collection.

Ethical Considerations

The involvement in the study was voluntary. The participant sign the consent form for voluntary participation in the study, they were given an anonymous questionnaire to preserve absolute confidentiality for the participants.

Settings of the Study

The study was conducted at governmental primary schools in AL Diwaniyah City, Iraq. The total number of primary schools was (20) governmental primary schools involved in the study, selected randomly from the total number (173) governmental primary schools in AL-Diwaniyah City.

Sample of the Study

The sample consist of (354) elementary school teachers were participated in the study. A non-probability sampling (convenience sample). The sample size was detected by using the sample size formula which is obtained from Steven K. Thompson, (2012). To determine the effect sample size regarding the population size.

Data Collection

The collected of the data was started from 3rd March, 2022 to 15th April, 2022. The study and the objectives were explained

to the study sample by the student researcher, the teacher's verbal consent has been taken and the answering of questions has been done by using the self-administrated method.

Results of the Study

The descriptive analysis in **Table 1** shows that teachers are with average age of 40.68 ± 7.748 years in which 41.2% of them are seen with age group of 30- less than 40 year and 38.7% of them are with age group 40- less than 50 year. The gender refers that 61.3% of teachers are females and 38.7% of them are males. Regarding residency, 53.1% of teachers are resident in rural and 27.1% are resident in urban.

The **Table 2** indicates that 68.6% of teachers show fair level of knowledge about attention deficit hyperactivity disorders (23.90 ± 6.989).

The **Figure 1** shows that 68.6% of teachers have fair level of knowledge.

Discussion

The findings shows that two fifth of the teachers are seen with age group of 30- less than 40 year and more than one third of them are with age group 40- less than 50 year. Low rate of employing in the education field, as we did not find young teachers and those who are in their twenties except very small ages. These findings are supported in the literature with many evidences, as the result of Zan (2020) who declared approximately similar %ages while they were doing their research in different settings around the world.

The findings show that the number of the females in the sample of the study are more than the males, this can be explained as the educational field are preferable in Iraq among the females' gender due to the social trends. Another supportive evidence found in the literature by Zan (2020) who stated that the vast majority of his sample were females.

Regarding residency, more than half of teachers are resident in rural areas and slightly more than one quarter of them are resident in urban. These residential distributions can be discussed as the nature of the community where the study was undertaking is rural in general so logically, we will get high

Table 1. Distribution of sample according to their socio-demographic characteristics

List	Characteristics		f	%
1	Age (M ± SD = 40.68 ± 7.748)	less than 30 year	15	4.3
		30 – less than 40 year	146	41.2
		40 – less than 50 year	137	38.7
		50 ≥ year	56	15.8
		Total	354	100
2	Gender	Male	137	38.7
		Female	217	61.3
		Total	354	100
3	Residency	Urban	96	27.1
		Rural	188	53.1
		Suburban	70	19.8
		Total	354	100

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation.

Table 2. Overall evaluation of teachers' knowledge about Attention Deficit Hyperactivity Disorders (ADHD)

Level of knowledge	f	%	M	SD	Eval.
Poor	107	30.3			
Fair	243	68.6	23.90	6.989	Fair
Good	4	1.1			
Total	354	100			

f: Frequency, %: Percentage, M: Mean for total score, SD: Standard deviation. Poor = 0–20, Fair = 20.1–40, Good = 40.1–60.

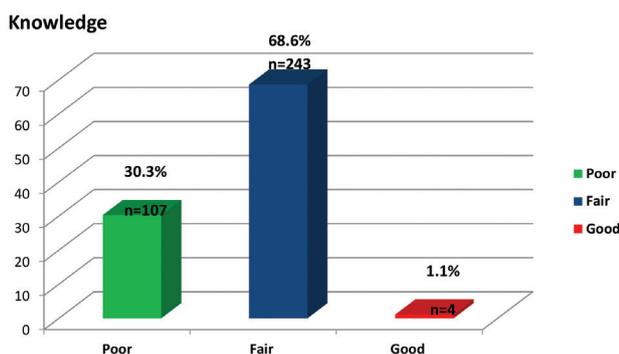


Fig. 1 Levels of teachers' knowledge about ADHD (N = 354).

level of rural teachers working in the educational settings. These results come in contrast with Al-wily (2020) who conducted a study in Mosul governorate and found that the urbanized teachers are more than those who residing in rural areas.¹¹ Also, Zan (2020) found that his sample were majorly from urban areas.

The findings concerning overall evaluation of teachers' knowledge about attention deficit hyperactivity disorders (ADHD) indicates that slightly less than two thirds of teachers show fair level of knowledge about attention deficit hyperactivity disorders. This result is less than the required especially in the Iraqi communities, as teacher take high responsibilities toward students far from their homes.

The study findings come in the same context with Alshehri and his colleagues (2020) who indicated that the majority of teachers were unaware of the number of children with ADHD.¹² When asked if an ADHD child who can display prolonged attention to video games or television can also demonstrate sustained focus for at least an hour of classwork or homework, 52% of respondents say yes, 27% say no, and 21% do not know. The answer was inaccurate, demonstrating that the majority of teachers have a misunderstanding of how the symptoms of ADHD vary depending on tasks and environments. The majority of responders provided an erroneous response. Only 18% of responders provided the correct response.

In another study, the instructors showed an accurate understanding of the effectiveness of the classroom interventions, which is consistent with the findings of prior studies. These findings are encouraging since, after all, it is of the highest significance that the educators be aware of behavioral approaches that may be effective in creating a pleasant learning environment for the children who have been impacted by this condition. However, further research is required to determine the extent to which these strategies are implemented in the day-to-day operations of schools.¹³

This underscores the significance of ADHD as a multi-system disturbance that requires complete examination, whatever the initial disease that led to treatment entrance. This is true regardless of the primary ailment that led to treatment entry. When taking into account co-occurring disorders in treatment planning for ADHD, further care is required. It is possible that the use of stimulant drugs without proper diagnosis of concomitant anxiety or bipolar illness might lead to an aggravation of such conditions.¹⁴

According to Alshehri et al. (2020) who conducted a study on two groups, a study and control group to investigate the teacher's knowledge about ADHD immediately after the intervention, the total knowledge of instructors in the test group regarding ADHD improved dramatically, according to the data.¹² Then, these knowledge benefits diminished marginally, but they persisted for three months and remained superior to those in the control group. The substantial improvement in teachers' knowledge of ADHD as a result of the intervention in the present study is consistent with the findings of multiple studies employing educational or training methods, which all demonstrated a rapid improvement in teachers' knowledge of ADHD, with benefits lasting up to six months.

Another study conducted in Mosul, Iraq, found that two-fifths of teachers lacked enough knowledge of ADHD in general, more than half lacked adequate knowledge of the signs and symptoms of ADHD in children, and 45% lacked adequate knowledge of the causes and diagnosis of ADHD in children.¹¹

The findings of Zan (2020) showed that the majority of the participants have a low level of understanding. Recently, several studies have been conducted that suggest that this result may be due to the fact that teachers do not know about this disease as well as how to deal with the child who suffers from it. Additionally, it is unable to appreciate how important it is, which results in the child being neglected. Our findings are supported by a few research, which discovered that the majority of educators lacked enough knowledge about general information on ADHD, in addition to insufficient understanding regarding general information on symptom diagnosis and treatment.

Conclusion

Considering the results discussion and their interpretations, the study concludes that the knowledge of the elementary school teachers in AL-Diwaniyah City at fair level regarding ADHD.

Recommendations

Enhance teachers, parents, and community awareness about ADHD through mass media. The nurse, family and teachers should be cooperate to detect what exact problems are facing child with ADHD and give proper intervention. There should be collaboration with educational psychologists in the course of teachers' training. University curriculum of teachers should include subject on early screening for children with ADHD.

Conflict of Interest

None. ■

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