

## Teaching Children with Attention Deficit Hyperactivity Disorder (ADHD) in selected primary schools in Jeddah, Saudi Arabia

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**Abstract:** Recently, there has been considerable interest in children with *ADHD* in Saudi Arabia. However, when analysing further, it is clear that this interest is only visible in medical areas, and is not given consideration in educational areas. This research discussed the educational status of children with ADHD, since several studies have confirmed that many of the children with this diagnosis face learning difficulties in reading and/or writing, maths, and more. The results emphasise that teachers adopt varying approaches to teaching, and these may be positive or negative. Moreover, advice was shared amongst teachers of such children, with the statement made that knowledge into ADHD is needed, further stating that a number of challenges are faced when seeking to deliver the most suitable learning environment. The study suggested that teachers should be afforded ADHD-relevant training, with advice on how to work with ADHD children's parents/carers.

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### 1. Introduction

There is evidence which shows that children with Attention Deficit Hyperactivity disorder (ADHD) have significant attention problems (Douglass, 1999; Barkley, 2006), otherwise referred to as 'attentional' problems. There is, in addition, converging evidence that the attentional problems which children with ADHD display might be reflected in their performance at school through their achievements and other academic difficulties; maintaining attention, failure to complete tasks, forgetfulness, and excessive physical activity are common case points (Rief, 2005). Because several of these symptoms are apparent in classroom settings, these attentional problems are said to affect school performance, and might even have an impact on comprehension, cognitive learning, and its course of development.

Although there are qualified teachers present and dedicated to learning disabilities in primary schools, they appear to notably give their attention to academic problems in isolation, apparently ignoring the developmental difficulties faced by the children. However, the government has decided to take proactive action, approving the national project when dealing with children with ADHD (the decision was made on 05-01-2009) (Saudi Press Agency, 2009). Among the most prominent features of this resolution is that the different ministries, such as education, high education and health, ought to work together in order

to provide the appropriate services for this category, and this, in itself, demonstrates the importance of gaining significant knowledge and up-to-date information with regards to children with ADHD.

The purpose of this research is to clarify the current educational situation of students with ADHD. In addition, the barriers to education have been explored, and some practical suggestions to overcoming each of them have been detailed.

### 2. Learning of Children with ADHD

ADHD is one of the most extensively researched psychiatric childhood disorders (APA, 2000). In the classroom, pupils diagnosed with ADHD have problems following instructions, maintaining attention on various tasks, and obeying the universal classroom rules. Due to these high rates of lack of attention to classroom instruction, one of the highest risks for children with ADHD is academic underachievement (Ervin, DuPaul, Kern & Friman, 1998; Phelps, Brown, Power & Whalen, 2003).

Although psycho stimulants are a frequently used intervention for a child diagnosed with ADHD, they do not contribute to academic gains in students with ADHD, even after one to two years of use (Westby and Cutler, 1994). Stanton and colleagues (2002) also confirmed that there is no empirical information supporting that psychotropics improve learning in the long-term. Likewise, Frankenberger and Cannon (1999) conducted a longitudinal study on

academic gains in children with ADHD who were taking psycho stimulants (e.g., Ritalin), comparing them against their classroom peers. They found that, in comparison, the children with ADHD were functioning at lower cognitive and academic levels compared to before they began taking medication. Additionally, once the course of medication was started, doses were frequently increased over the years. Results of the study also demonstrated that the children with ADHD and who were taking stimulant medications were consistently scoring significantly lower regarding their academic performance. Although children with ADHD are inclined to score in the average to above average range on intellectual functioning tests, they are also inclined to perform badly in school (Faraone et al., 1993). With this as a consideration, research which has been conducted with a keen focus on differences in academic abilities in children with ADHD has demonstrated diverse results.

Classroom teachers are one of the most beneficial resources with regard to the diagnosis of ADHD, purely because of their daily exposure to children where high demands are placed on children's regulatory skills and in an environment where the notable symptoms of the disorder are demonstrated. In addition, teachers play a significant role in the multidisciplinary team treating ADHD (Barkley, 1990); therefore, teachers ought to be open to the plethora of studies in order to deepen understanding of the notable interactions of the cognitive, biological and psychological factors of ADHD, in order to better help parents and psychologists in the identification and treatment of ADHD in the school environment.

There has been some isolation experienced regarding the way in which SEN students have been taught in Saudi (i.e. the existence of special schools for nearly forty seven years). However, there has recently been a significant change in terms of school settings and alternative supporting units, including resource rooms and speech therapy units. Currently, more than 90% of male students and approximately 65% of female students with SEN in Saudi are integrated into various programmes within the framework of ordinary schools (Al-Mosa, 2005). As a matter of fact, Saudi Arabia has been playing a prime role in the Arab world in promoting the integration of students with SEN in regular schools. To start with, in 1962 the Ministry of Education issued a policy outlines in order to establish the Department of Special Education as a Directorate General (Al-Zahrani, 2005).

The rationale of this paper was to explore the methods used by Saudi teachers to assist children with ADHD be successful in the classroom.

### 3. Material and Methods

#### *Design and Instrumentation*

This research applied a qualitative study design. It is held that the study nature, objectives, purpose and questions establish the type of interview (Gall, Gall & Borg, 2003). Accordingly, following careful consideration, the use of semi-structured interviews was considered most relevant, carried out on an individual basis with teachers. This type of interview is recognised as most appropriate for two main reasons: primarily, the researcher would have the opportunity to expand on answers, thus allowing the gathering of richer data; and secondarily, when question are prearranged, this can be useful in focusing the interviews towards the study objectives (Wengraf, 2001; Cohen, Manion & Morrison, 2007).

#### *Partecipants*

A stratified sampling approach was chosen in an effort to establish a teacher sample owing to the fact that there is much variation across individuals in different regions of Jeddah. In the KSA, educational facilities are segregated on a gender basis for both teachers and students. With this noted, the sample comprised 79 primary school teachers from 7 different public elementary schools, all located in Jeddah in the KSA. The response rate for the schools amounted to 52%.

#### *Procedure*

Visiting the Educational Local Authority in Jeddah was the first stage in securing an authorisation letter. This letter of consent officially outlined that all of the fieldwork data would be utilised only for academic purposes, and would be handled with autonomy, confidentiality and reflexivity, ensuring adherence to common modern-day ethical considerations.

Jeddah was the key focus of this research study owing to the researcher's professional position in the city years prior. Moreover, Jeddah is recognised as being the KSA's second-largest city, offering a population of 4 million people, and is therefore acknowledged as having a large number of ADHD students, as well as a number of both mainstream and special schools; this facilitated the researcher's ability to widen the study scope and carry out research at a deeper level.

### 4. Results

The demographic data of the 79 participated teachers are described in Table 1.

The demographic characteristics of the teachers involved in the survey of this research can be seen in Table 1. Altogether, 79 teachers participated. Notably,

53% of the sample were males whilst the remaining 47% were females. Notably, only 11% of them had undergone any form of ADHD-related training. In regard to qualifications, two-thirds (66%) held a Bachelor Degree, whilst the remainder held a Higher Diploma.

Table 1: Demographic information of teachers (N = 79)

Variable		Frequency (%) (N = 54)
<b>Gender</b>	Male	42 (53%)
	Female	37 (47%)
<b>Attended Training</b>	Yes	12 (11%)
	No	67 (89%)
<b>Qualifications</b>	Bachelor	52 (66%)
	Higher	27 (34%)
	Diploma	

Throughout the course of the interviews, it was emphasised by the teachers that managing and controlling the classroom is carried out in a number of different ways, including the following:

Positive methods:

- rewarding and punishment
- practical methods
- attractive teaching methods, such as activities, colouring and videos
- involvement in activities
- allowing children to sit at the front
- removing any objects that might prove to be a distraction
- working alongside and cooperating with parents
- ensuring the presence of a suitable learning environment
- completing physical activities
- providing encouragement to achieve involvement
- requesting support from peers
- ensuring they do not come into contact with gelatine and sweets
- breaks between lessons
- directing their attention and gradually increasing the period.

Negative methods:

- punishments and reprimanding

What needs to be learnt:

- ADHD, as an overall concept, should be taught
- the problems experienced by ADHD children should be taught and discussed

- interventions should be outlined
- dosages, times and side effects of medication should be highlighted

Advice for teaching ADHD children:

- do not allow children to feel like they are different but deal with them normally
- do not ignore their distractions
- ensure class acceptance
- ensure patience
- gain insight into the most suitable approaches to management through gaining knowledge and understanding
- share information and knowledge with other school and teaching staff
- always consider that parent-teacher partnerships are fundamental
- ADHD is not in the control of the child, meaning the child does not intentionally provoke or interrupt teachers/peers
- safety must be a fundamental priority at all times to ensure children are not hurt.

Obstacles potentially restricting the application of suitable learning approaches:

- the curriculum
- a lack of training
- resources
- time.

## 5. Discussions

Teachers might be able to implement various approaches in order to keep ADHD students focused on their task (Kapalka, 2005; Salend, Elhoweris & Garderen, 2003; Taylor & Larson, 1998; Wang, Bernas & Eberhard, 2004). Without question, teachers adopt a key role in the emotion regulation process by helping children to suitably manage and express the emotions experienced within the classroom setting (Pianta, 1999). Pianta & Steinberg (1992) further highlight that the quality of the link between the teacher and the child has an impact on the developmental outcomes from the time at which the child is enrolled in school. Teacher conflict ratings have been linked with behavioural and learning problems, as well as instances of greater retention.

The viewpoints of teaching staff regarding ADHD children could potentially have an impact on their own behaviours with such students (Glass & Wegar, 2000; Kos, Richdale & Hay, 2006). Factors related to the teacher—namely classroom behaviour tolerance, training level and treatment acceptability, amongst others—have been identified as having an impact on ADHD students' social and learning outcomes (Sherman, Rasmussen & Baydala, 2008). Importantly, it is believed that, if teaching staff

maintain the view that children are in control of their behaviours, they could expect children to display a level of classroom behaviours that is further than their ability in the absence of suitable supports. Such an unrealistic anticipation for ADHD children could ultimately result in low confidence and low self-esteem amongst such students, with the teacher also experiencing unnecessary levels of frustration.

It is believed that, with the aim of dealing with and managing ADHD students' educational achievements, teachers should seek to actively manage their educational difficulties (Purdie, Hattie & Carroll, 2002). Such a situation could be achieved if teaching staff are given understanding of how to deal with and overcome educational problems whilst taking into consideration the various obstacles facing an ADHD student. The majority of the students involved in the interviews were found to have a distain for school, predominantly owing to the fact that they are continuously reprimanded for displaying problematic behaviours and demonstrating poor academic performance. Teaching staff need to recognise the importance of establishing a relationship with ADHD children.

As supported in the literature, it is recognised that there are various factors behind the non-application of suitable interventions in the classroom environment, predominantly owing to a lack of sufficient resources and time, as has been noted on a regular basis (Elliot, 1988; Reid, Vasa, Maag & Wright, 1994; Reimers, 1987). In this research, various challenges associated with teaching ADHD students were also highlighted. Kos (2008) categorises these issues into themes, namely time, equity inside the class, size of classes and the involvement of parents. The obstacles were categorised in such a way as seen to be restricting teaching staff from suitable adopting approaches for ADHD students, and were consistently highlighted by roughly half of the sample (Kos, 2008). Classroom over-crowding also has a number of serious implications concerning the applications of definite strategies of behavioural management (Johnson, 1999).

Previous findings have suggested that teachers recognised ADHD students as being far more difficult to teach than those without ADHD, thus resulting in greater stress levels for the member of staff (Greene et al., 2002). Teachers emphasised that ADHD students take up a great deal more time than other children, with many disruptive students described as having ADHD, particularly owing to the increase of classroom size (Glass & Wegar, 2000; Havey, Olson, McCormick & Cates, 2005). Although ADHD students might be recognised as consuming a large portion of the teacher's time, many teaching staff are afforded little training in regard to the management of ADHD

(Barbaresi & Olsen, 1998; Bussing et al., 2002; Jerome, Gordon & Hustler, 1994). Accordingly, teachers might not be in possession of the correct information and knowledge relating to the disorder, which might limit the teacher's willingness to adopt a behavioural management technique. For example, if the view is held by the teacher that a child is intentionally choosing not to remain seated, they might be more likely to react with the voicing of harsh criticism as opposed to praising when the child seats correctly. A number of the teachers interviewed emphasised that they try not to teach ADHD students.

It is recognised that teaching staff might not feel able to deal with special needs training due to a lack of training and experience (Cook, Semmel & Gerber, 1999; Salend & Duhaney, 1999). Importantly, teachers who are eager to assist are encumbered by large classrooms, demanding curriculum and restricted time. With this in mind, teaching staff are continuously seeking to management and handle the demands and requirements associated with merely teaching the curriculum (Fisher, Sax, Rodifer & Pumpian, 1999).

As can be derived from the interviews, teachers are keen to involve parents and carers in the learning process so as to facilitate learning from one another, with teachers stating that they are happy to cooperate with parents regarding the child's learning development. On the other hand, however, some teachers comment that they will only give feedback if this is requested as many parents will not accept negative feedback. In some regards, teaching staff view parents as being unable to deal with their children, further holding the view that very few are informed as to how behaviours should be managed. On the other hand, some parents do want to seek out the comments of teachers. Notably, in another vein, frustration may be experienced by the parents, which in turn frustrates the teacher when parents state that the child is not learning well. Comparably, some parents experience frustration as they do not believe that the teacher is knowledgeable enough, or that they do not listen or take on board their comments.

In line with Baker (2003), the parent-teacher collaboration issue recognises that teaching staff commonly make the supposition that parents are well-informed as to how to help their children with tasks. In actuality, however, the view is posed by Baker (2003) that this might not be the case. Importantly, the way in which the child performs in school may be directly impacted by various home environment aspects (Danridge, Edwards & Pleasants, 2000). In this vein, it is pivotal that school and home ensure the presence of a positive relationship so as to facilitate children achieving the very best learning outcomes

(Lynch, Anderson, Anderson & Shapiro, 2006; Neuman, 2000).

In consideration to the study findings, it seems that teachers need to be presented with various programmes and initiatives in an effort to achieve greater understanding of and knowledge surrounding the various approaches applicable to ADHD students, as well as how to establish and maintain a good relationship with ADHD children's parents/carers (Abed, Pearson, Clarke & Chambers, 2014; Linder & Foote, 2003).

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