

Knowledge and Awareness of Parents About the Difference Between Attention Deficit Hyperactivity Disorder and Childhood Absence Epilepsy in the Paediatric Population Makkah, Saudi Arabia: A Cross-Sectional Study

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Rahaf S. Alotaibi¹, Ghadi A. Alghamdi¹, Anas Alloqmani¹, Nada S. Almontashiri¹, Khaled A. alharbi¹, Jamil A. Samkari², Abdullah A. Tawakul³, Omar Babateen⁴

1. Medicine, Umm Al-Qura University, Makkah, SAU 2. Family and Community Medicine, King Abdulaziz University Faculty of Medicine, Jeddah, SAU 3. Neurology, Umm Al-Qura University, Makkah, SAU 4. Surgery, Umm Al-Qura University, Makkah, SAU

Corresponding author: Ghadi A. Alghamdi, dr_ghadixx@outlook.com

Abstract

Introduction: Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder, mainly in children. The signs and symptoms of ADHD include inattention, impulsivity, and hyperactivity. Consequently, Childhood Absence Epilepsy (CAE) tends to present in children with sudden and recurrent episodes of loss of awareness alongside symptoms that occasionally include clonic, atonic, and simple automatisms. The present study evaluates parents' knowledge in Makkah regarding the difference between ADHD and CAE.

Methodology: The study was conducted among Saudi Arabian parents living in Makkah. Data were collected in April 2022 through the use of an online survey that was distributed electronically via social media platforms. The inclusion criteria entailed parents from different socio-economic backgrounds. In contrast, the exclusion criteria entailed parents who had not been involved in raising their children and those with children with intellectual disabilities. A group of consultants was tasked with validating all data collected through an original questionnaire. To effectively calculate the study sample size, OpenEpi Version 3.01 was used. Lastly, all statistical analyses were conducted with Stata Social Sciences (SPSS®) software for Mac, version 26 (IBM Corp., Armonk, NY, USA).

Results: A total of 633 participants completed the survey. Of the total respondents, approximately 1% indicated having a good knowledge level, 15.17% indicated having moderate knowledge, and the remaining 84% indicated poor knowledge of the subject under study. Approximately 46% of the participants reported that social media was the primary source of information. One significant issue regards the observation that the parent's level of education was statistically associated with the level of knowledge.

Conclusion: There is limited awareness of the difference between (ADHD) and (CAE) among parents in the pediatric population. These findings highlight an opportunity to raise awareness using well-organized education programs in Makkah City.

Categories: Internal Medicine, Neurology, Pediatrics

Keywords: childhood absence epilepsy (cae), makkah, saudi arabia, level of awareness, attention deficit hyperactivity disorder (adhd)

Introduction

Attention deficit hyperactivity disorder (ADHD) is a common neurodevelopmental disorder that affects children and often continues into adulthood. The symptoms of ADHD include patients experiencing difficulties paying attention and the inability to control impulsive behaviors by acting without thinking about the consequences or hyperactivity [1]. The present study was conducted in Saudi Arabia, and data was collected from 708 primary school pupils attending grades 1-3 (7-9 years old) by teachers and parents in 2007. The study findings indicated that 2.7% of the children have ADHD [2].

Consequently, CAE refers to the sudden and recurrent episodes of loss of awareness infrequently accompanied by clonic, atonic, or simple automatisms or autonomic components. Two types of CAE exist, namely, typical and atypical. Approximately 10% of children with epilepsy tend to have typical CAE. The prevalence rate of CAE in the general population is 5 to 50/per 100,000. Comparable figures have been disclosed by studies conducted in the US (Connecticut) and Europe-based (Scandinavia, France) [3].

As previously mentioned, CAE and ADHD are two completely different disorders. For instance, the observed

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differences include the view that in the CAE, the episodes are always accompanied by eyelid fluttering and jerky muscle movement [4]. In ADHD, the patients do not portray motor symptoms [5]. However, there are also similarities between ADHD and CAE, including the observation that the two conditions negatively influence students' school performance, attention, and cognitive abilities [6,7]. Considering that parents are the principal caregiver of their children and their knowledge regarding their medical history and well-being is vital to providing them with the most suitable management, the parents' ability to differentiate between ADHD and CAE is critical. As such, the present study's aims include an evaluation of the current knowledge of parents in Makkah about ADHD and CAE, as well as to understand the cardinal difference between ADHD and CAE and their sources of information.

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Materials And Methods

Study population and sampling methodology

The present study is a community-based cross-sectional descriptive research conducted in Makkah City, Saudi Arabia, among parents living there. Parents from different socioeconomic statuses, both males and females, who agreed to partake in the study were included. Further, participants who were not involved in raising their children and parents with children suffering from intellectual disabilities were excluded. Data were collected in April 2022 using an original online questionnaire that a selected group of consultants validated. The survey was formulated in Arabic and English and completed using Google Forms. The survey was also distributed electronically through various social media platforms. A total of 632 participants completed and delivered the study.

The questionnaire was organized into sections that included the participants' sociodemographic data, the assessment of the participant's knowledge of ADHD and CAE, and the participants' source of information about both conditions. The responses from the participants were collected as either yes or no, multiple choice, and written answers. Still, the knowledge levels were categorized as a poor level of knowledge (0-60%), moderate knowledge level (60 - 79%), and good knowledge level (80 - 100%). The original questionnaire used in this study is provided in the appendix section.

Data analysis

For the present study, data were analyzed using the Statistical Package for Social Sciences (SPSS®) software for Mac, version 26 (IBM Corp., Armonk, NY, USA). To analyze the numerical variables, the authors used the t-test and chi-square test in analyzing the categorical data. The 95% confidence intervals and P-values were reported for every variable included. Moreover, the present study's P-value was < 0.05 for statistical significance.

Ethical considerations

For the present study, ethical approval was provided by the Institutional Review Board (IRB) of UQU (No. HAPO-02-K-012-2022-04-1049). Further, consent was obtained electronically from all participants following an explanation of the study's aims and objectives.

Results

Demographics

A total of 632 study participants completed and returned their questionnaires. Females formed the most significant proportion of the participants at 68.2%. Most of the study participants, 33.86%, were aged between 18 and 28. Concerning the participants' place of residence, 82.75% reported that they were residing in Makkah. Still, 85.13% of the participants reported being married, even as 67.25% noted they held a bachelor's degree. A more significant proportion of the participants, 42.25%, were employed even as 31.06% reported having incomes ranging between 5000 and 10000SR. Table 1 below shows the demographic attributes of the study population.

Demographic characteristics of the responders		
	Freq	Percent%
Age category		
18-28	214	33.86
29 - 39	160	25.32
40 - 50	169	26.74
51-61	79	12.5
62 and above	10	1.58
Gender		
Female	431	68.2
Male	201	31.8
Residence		
Mecca	523	82.75
Outside Mecca	109	17.25
Education		
Bachelor's degree	425	67.25
General high school / middle school	142	22.47
Master's degree	58	9.18
illiterate	7	1.11
Marital status		
Divorced	43	6.8
Married	538	85.13
Widow	51	8.07
Income		
10000 - 15000 SR	163	25.83
5000 - 10000 SR	196	31.06
Less than 5000 SR	117	18.54
More than 15000 SR	155	24.56
Employment status		
Unemployed	63	9.97
Employed	267	42.25
Retired	43	6.8
Student	127	20.09
Unemployed	132	20.89

TABLE 1: Demographic data

Awareness levels

The awareness levels of CAE and ADHD were divided into three categories: good, moderate, and poor.

Gender

The study's findings indicated that, of the female participants, 82.59% had poor awareness levels, 16.47% showed moderate awareness levels, and 0.92% portrayed good awareness levels. None of the male participants' groups showed an excellent awareness level, even as 12.43% showed a moderate awareness level and 87.56% showed poor awareness.

Social status

Regarding marital status, of the divorced participants, 0.55% indicated good knowledge and awareness levels, 16.35% indicated moderate knowledge and awareness, and 83.08% indicated poor knowledge and awareness levels. Consequently, among the married participants, none indicated good familiarity and awareness levels, 9.3% indicated having moderate knowledge and awareness levels, and 90.69% indicated poor knowledge and awareness levels. Further, 1.96% of the widows' participants had good knowledge and awareness levels, 7.84% had moderate knowledge, and 90.19% had poor knowledge and awareness. The P value was 0.237. Nevertheless, the overall results showed that 0.79% presented good familiarity and awareness levels even as 15.17% had moderate knowledge and awareness levels, and 84.4% had poor knowledge and awareness levels.

Age category

The number of participants who displayed a poor level of awareness was highest among participants aged between 18 and 28 years at 85.51%. Consequently, 13.55% and 0.93% of the participants showed moderate and reasonable levels of awareness, respectively. Similar results regarding participants aged 29 to 39 were observed, given that 0.62% indicated good awareness levels, 15.62% showed moderate awareness, and 83.75% displayed poor awareness. A more significant proportion of participants aged between 40 and 50 indicated an insufficient level of awareness at 84.02%. In comparison, a small proportion portrayed a moderate level of understanding at 15.38%, and 0.59% portrayed an excellent level of awareness. None of the participants aged between 51 and 61 indicated a good level of understanding, even as 17.72% of them portrayed moderate awareness levels and 82.27% indicated poor awareness levels. Additionally, none of the participants above 62 years of age had a good level of awareness, even as 20% showed moderate awareness levels, and the remaining 80% indicated poor awareness levels.

Home residence

Regarding residency awareness among individuals residing in Makkah, the results indicated no participant had good awareness levels. In contrast, 11.92% of the participants portrayed moderate knowledge levels, and 88.07% had poor knowledge levels. However, among the participants residing outside Makkah, 0.76% had good knowledge levels, 15.86% had moderate knowledge levels, and 83.36% had poor knowledge levels. The p-value was 0.369.

Educational level

The highest proportion of participants who displayed a poor awareness level included those with general high school/middle school education at 85.17%, followed by those bachelor's degree education level at 85.91%, those with master's degree and above education level at 72.41%, and lastly the illiterate at 85.71%. Also, the highest proportion of participants who displayed a moderate awareness level was general high school/middle school level of education at 14.58%, followed by bachelor's degree level of education at 13.38%, master's degree and above level of education at 24.13%, and the illiterate at 14.28%. However, participants with master's degrees education level presented the highest rate of a good level of awareness at 3.44%, which was followed by bachelor's degree holders at 0.73%, general high school/middle school level of education at 0.23%, and the illiterate at 0%. The above result was analyzed and found to be statistically significant ($P < 0.045$)

Income and employment status

Regarding the existing correlation between income and awareness levels, it was noted that 0.85% of participants who were employed with incomes that ranged from 10000 to 15000 SR presented good knowledge and awareness levels, 9.4% of them presented moderate knowledge and awareness levels, and 89.74% presented poor knowledge and awareness levels. Consequently, regarding the employed participants with incomes ranging from 5000 to 10000 SR, it was noted that 0.51% presented good knowledge and awareness level, 15.81% showed moderate knowledge and awareness level, and 83.67% showed poor knowledge and awareness level. Nevertheless, regarding participants whose earnings were below 5000 SR, it was noted that 1.22% presented good familiarity and awareness levels, 17.17% showed moderate knowledge and awareness level, and 81.59% showed poor knowledge and awareness level. Although none of the participants earning incomes above 15,000 SR presented good familiarity and awareness levels, 16.77% portrayed moderate knowledge and awareness level, while 83.22% showed poor knowledge and awareness level. The p-value was 0.433.

Still, regarding the participants' employment status, it was noted that no unemployed participant portrayed

good knowledge and awareness level, even though 13.33% of the unemployed participants presented moderate knowledge and awareness level, and 86.66% portrayed poor knowledge and awareness level. Consequently, 0.74% of the employed participants showed good knowledge and awareness level, 15.73 presented moderate knowledge and awareness level, and 83.52% portrayed poor knowledge and awareness level. Regarding the students, it was observed that 0.78% showed good knowledge and awareness levels, 14.17% had moderate awareness levels, and 85.03% had poor awareness levels. Lastly, 2.32% of the retired participants presented a good awareness level, 23.25% had a moderate awareness level, and 74.41% portrayed a poor one. The p-value was 0.384 (Table 2).

Correlations between the demographic data and the awareness level					
Sex	Good	moderate	poor	Total	P value
Male	4	71	356	431	0.154
Female	0	25	176	201	
Total	4	96	532	632	
Age category	Good	moderate	poor	Total	P value
18-28	2	29	183	214	0.985
29 - 39	1	25	134	160	
40 - 50	1	26	142	169	
51-61	0	14	65	79	
62 and above	0	2	8	10	
Total	4	96	532	632	
Residence	Good	moderate	poor	Total	P value
Mecca	0	13	96	109	0.369
Outside Mecca	4	83	436	523	
Total	4	96	532	632	
Education	Good	moderate	poor	Total	P value
illiterate	0	1	6	7	0.045*
Bachelor's degree	1	19	122	142	
General high school / middle school	1	62	362	425	
Master's degree and above	2	14	42	58	
Income	Good	moderate	poor	Total	P value
10000 - 15000 SR	1	11	105	117	0.433
5000 - 10000 SR	1	31	164	196	
Less than 5000 SR	2	28	133	163	
More than 15000 SR	0	26	129	155	
Employment status	Good	moderate	poor	Total	P value
Unemployed	0	26	169	195	0.384
Employed	2	42	223	267	
Retired	1	10	32	43	
Student	1	18	108	127	
Marital status	Good	moderate	poor	Total	P value
Divorced	3	88	447	538	0.237
Married	0	4	39	43	
Widow	1	4	46	51	

TABLE 2: Association of demographic data with awareness level

Source of information

A larger proportion of the study participants, 45.87%, listed social media as their main source of information on CAE and ADHD. Other sources closely followed this, including relatives and friends at 12.97% and school/university at 7.59%. The other sources of information listed by the participants included awareness campaigns (5.85%), doctors (2.69%), television and newspapers (3.64%), and personal experience (0.63%). Nevertheless, 20.73% of the participants needed information regarding these topics (Table 3).

Source of information	Freq	Percent
Social media	290	45.87
School/university	48	7.59
Awareness campaigns	37	5.85
Relative/ friend	82	12.97
Doctors	17	2.69
Television/newspapers	23	3.64
No information about these topic	131	20.73
Personal experience	4	0.63
Total	632	100

TABLE 3: Source of information

Discussion

ADHD and CAE are different disorders affecting children, and increased awareness and knowledge regarding the conditions can result in better healthcare outcomes and early diagnosis among patients. The present study findings have proven that the awareness level of parents residing in Makkah about ADHD and CAE was significantly poor, corroborating the findings of previous literature [8-10]. For instance, the study conducted by Khalid Al Awad et al. (2022) [10]. "The Extent of Parents' Awareness towards Absence Seizure among Children in Al Baha Region, Saudi Arabia" disclosed that only 30.8% of the study participants had acquired information regarding CAE even though 69.2% did not have any information regarding the condition. Thus, the general evaluation of CAE awareness disclosed that the parents had very poor awareness levels, with a larger proportion of the participants (91.5%) portraying inadequate awareness about CAE and just 1% presenting adequate knowledge regarding the condition. Consequently, Khaled et al. (2017)[9].studied Awareness of the "Saudi Population in Madina Region about Attention Deficit Hyperactive Disorder (ADHD) in Children" and disclosed that the awareness level of ADHD in Madina society was very low, as only 25.1% knew about the condition through experience with ADHD from patients that they know while 14.7% became aware of ADHD by reading on it on medical websites, even as 7.3% became aware of it through social media and print media. A study by Alanazi and Al Turki (2021)[8]. Which focused on "Knowledge and attitude of Attention-Deficit and Hyperactivity Disorder (ADHD) among male primary school teachers in Riyadh City, Saudi Arabia," disclosed that, despite a larger proportion of teachers (76.7%) indicating that they attended ADHD training, only 40.4% indicated that they acquired adequate information regarding the condition. Further, the study findings have disclosed that a larger proportion of the participants comprised females and individuals aged between 18 and 28 years, and this has been attributed to their frequent and increased ease of access to the internet, as well as the observation that internet services are offered to the public at lower rates and the provision and access, is not linked to an individual's income and social status, aspects that corroborate previous study findings conducted in the country [11].

The female participants were reported to have portrayed good and moderate awareness levels compared to their male counterparts, despite displaying higher rates of poor knowledge levels. Further, participants aged between 18 and 28 presented the highest good and moderate awareness levels compared to participants in other age groups. This was attributable to the observation that, compared to other age groups, individuals aged between 18 and 28 years are highly prone to portray more interest in knowledge acquisition in varied fields, and as a result of increased access to digital information and learning, and also through social media, which has been acknowledged to be the main source of information for the participants.

The present study has disclosed the existence of a significant correlation (P-value = 0.045) between educational level and the awareness level of ADHD and CAE. For instance, master's degree holders were

observed to have the highest rate of good awareness level status (n=2). In contrast, individuals with general high school/middle school education had the highest rate of moderate awareness level (n=62). They were followed immediately by participants with a bachelor's degree education level who portrayed a moderate level of 19 out of 142. In this regard, it can be noted that master's degree holders have solid academic backgrounds and knowledge acquired through their careers, including various scientific research methods and academic appraisal of various research papers and sources. Such academic accomplishments and career experiences have been acknowledged to generate increasingly knowledgeable individuals capable of effectively applying such skills in various situations. This is also a strong indicator of the reason underlying higher ratings regarding good ADHD and CAE awareness levels.

A larger proportion of the younger age participants fell into the general high school/middle school education level category, which clarifies why they were highly rated in the moderate awareness level status category, as previously observed. On the contrary, the bachelor's degree holders were rated second in the moderate awareness level category despite making up the biggest proportion of the study sample, at 67%. The underlying rationale for the rating includes the divergent learning approaches between the two groups, even as the younger generation is increasingly open to accessing and acquiring information outside their fields. Generally, poor awareness level rates were observed in every group, corroborating previous studies' findings [8-10]. For instance, Alanazi and Al Turki (2021) [8] observed that in recent studies conducted in Makkah and Riyadh, the awareness regarding ADHD among elementary school teachers was lower at 58.9% and 17.2%, respectively. Consequently, the study by Khalid Al Awad et al. (2022) [10]. They disclosed that the poor knowledge and awareness among the study participants (parents), particularly about the absence of seizure causes, symptoms/clinical manifestations, and diagnosis, was attributable to the condition's rarity in Saudi Arabia.

Owing to the observation that the target group was mainly individuals/parents residing in Makkah City, for the present study, a four-fold increment in the responses from Makkah was observed compared to responses received from participants living outside Makkah. The researchers discovered no considerable correlations between ADHD and CAE awareness levels and the other demographic data, including age, sex, residence, income, employment status, and marital status. As indicated by the study findings, 84% of parents residing in Makkah City presented poor awareness and knowledge levels, despite the observation that social awareness is a vital aspect impacting early diagnosis of ADHD and CAE in children, leading to improved education performance and general well-being. Such low awareness levels may be improved with future awareness campaigns alongside health awareness programs. Further, the study findings have disclosed that a larger proportion of the participants utilized social media as the main source of information that could be used to spread knowledge regarding ADHD and CAE awareness.

Limitations

The notable limitations of the present study include the observation that it was conducted using an original online questionnaire, which might affect the validity of the responses. Also, there needs to be more previous research and literature regarding these two topics, especially CAE, which carted a need for comparison data. Finally, the study sample size is small compared to the general Saudi population, so the results can only be generalized to some Saudi populations.

Conclusions

From the outcomes of the present study, one may conclude that the awareness and knowledge about ADHD and CAE among parents residing in Makkah City remain suboptimal. Such poor awareness and knowledge of the two conditions are likely to have a negative effect on children suffering from the condition, their communities and families, and the education and healthcare systems. As such, there is an urgent need to increase and regulate awareness campaigns on ADHD and CAE through mass media and various educational programs. This will enable filling gaps within the community knowledge regarding ADHD and CAE.

The researchers recommend a country-wide study to attain more valid and generalizable results. Further, it is recommended that prospective studies should include larger sample sizes and populations drawn from different parts of Saudi to increase the validity and generalizability of the findings.

Appendices

English version:-**A.consent form**

This survey is part of a study conducted by a group of researchers from Umm Al-Qura University, it is conducted on parents in Makkah, Saudi Arabia. To get an understanding of their level of knowledge of the cardinal differences between Childhood Absence Seizures (CAE) and Attention Deficit Hyperactivity Disorder(ADHD) in the paediatric population. All information will be used for scientific research only, participating in this study is voluntary, knowing that you can withdraw any time by closing the survey tab.

For contact:

Principal investigator Dr Omar M. Babateen(ombabateen@uqu.edu.sa)

Note: the correct answer are highlighted with yellow

B.Demographic section:

- 1.questionnaire filler gender
 - Male
 - Female
2. filler's age
 - 18 - 28
 - 29 - 39
 - 40 - 50
 - 51 - 61
 - 62 and older
- 3.Place of residence
 - Makkah
 - Outside Makkah
- 4.level of education
 - Illiterate
 - High school/middle school
 - Bachelor's degree
 - Master's degree
- 5.the employment status
 - Unemployed
 - Employed
 - Retired
 - Student
- 6.family income
 - Less than 5000 SR
 - 5000-10000 SR
 - 10000-15000 SR
 - More than 15000 SR
- 7.the marital status
 - Married
 - Widowed
 - Divorced
- 8.how many children do you have ?
 - (Written answer)
- 9.age of your youngest child
 - (Written answer)
- 10.are both parents involved in the child raising?

FIGURE 1: Questionnaire

Questionnaire

- Yes
 - No
- 11.If not, with whom the child lives ?
- The mother
 - The father
 - Grandmother/grandfather
 - Eals ?(written answer)
- 12.does your child suffer from intellectual disability?
- Yes
 - No
- 13.do you have a child diagnosed with ADHD?
- Yes
 - No
- 14.do you have a child diagnosed with absence seizures?
- Yes
 - No
- C.Assessment of knowledge of CAE**
- 1.Have you ever heard about CAE ?
- Yes
 - No
- 2.What Do you think about CAE?
- naturally present in children and will go away with time
 - Is a life-threatening condition
 - **Good outcome if treated properly**
 - It is an abnormal disease that can affect the brain
 - I do not know
 - Other
- Mention it
- 3.An CAE is more common in:
- **Female**
 - Male
 - Both
 - I Don't know
- 4.Which age group does CAE common in
- **Childhood**
 - Adult
 - Elderly
 - I don't know
- 5.What is the cause of the CAE?
- Video games
 - parental neglect
 - neglecting education
 - **Genetic propensity**
 - Unknown cause
 - I do not know
- 6.What triggers a CAE?
- Lack of sleep.
 - Breathing heavily
 - Sounds, flashing lights, bright sunlight.
 - Not taking medications as instructed by your healthcare provider.
 - **All of the above**
 - I do not know
- 7.Does a febrile seizure(convulsions in a child that's caused by fever)history increase the risk of a CAE?
- **Yes**
 - No
 - I do not know
- 8.Do you think that family history of CAE plays a role in the development of the disease ?
- **Yes**
 - No
 - I do not know
- 9.Pick out the following: what do you think is related /describe the CAE ?(all are true it is a percentage question, when more items are picked a higher level of knowledge the person have)
- **Brief spells of loss of awareness (4-30 seconds)**
 - **Child doesn't recall incidence**
 - **Comes and goes in episodes (10-30 A day)**
 - **Eye flirting accompany the episodes**
 - **Mouth movement can accompany the episodes**
 - **Child returns back to normal after the episode**
 - **The child does not awaken from episode with distraction**
 - **Starts with staring episodes**
 - I do not know
- 10.From the previous symptoms, which one do you worry about the most ?
- (Choose one option from previous question)
- 11.Who do you think is the best medical field to deal with children with CAE?
- Psychiatric
 - **Neurology**
 - Paediatric
 - All of the above

FIGURE 2: Questionnaire

Questionnaire

- I don't know
- 12.What Do you think is needed to treat a patient with a CAE?
- **Medication**
 - Parent and teacher attention
 - Psychotherapy
 - Rely on self
 - I do not know
- D.Assessment of knowledge of ADHD**
- 1.Have you ever heard about ADHD ?
- Yes
 - No
- 2.What do you think about ADHD?
- naturally present in children and will go away with time
 - Child's brain defect
 - **Psychiatric problem**
 - I do not know
 - other (Mention it)
- 3.There's only one type of ADHD.
- Yes
 - **No**
 - I don't know
- 4.CAE and ADHD is
- Same disease
 - CAE and then progress to ADHD
 - ADHD and then progress to CAE
 - **Different disease**
 - I do not know
- 5.ADHD is more common in:
- Female
 - **Male**
 - Both
- I don't know
- 6.Which age group is ADHD common in?
- **Childhood**
 - Adult
 - Elderly
 - I don't know
- 7.What is the cause of ADHD?
- **Genetics**
 - Video games
 - problem in childhood raising
 - trauma in the brain
 - Unknown
 - I do not know
- 8.Do you think that family history of ADHD plays a role in development of the disorder?
- **Yes**
 - No
 - I don't know
- 9.Pick out the following: what do you think is related /describe ADHD symptoms ?(all are true it is a percentage question ,when more items are picked a higher level of knowledge the person have)
- **The child is hyperactive compared to children his age**
 - **The child has difficulty in staying concentrated**
 - **The child can not keep his friendship nor start new ones**
 - **The child grades are affected**
 - **Often does not seem to listen when spoken to directly**
 - **The child often jumps from a task to another without finishing it correctly**
 - **Disorganised**
 - **Often loses items that are necessary to finish a task (pencils,books)**
 - **Impulsive**
 - **Impatient**
 - I don't know

FIGURE 3: Questionnaire

10. From the previous symptoms, which one do you worry about the most?
(Choose one option from previous question)
10. Who do you think is the best medical field to deal with children with ADHD?
- Psychiatric
 - Neurology
 - Paediatric
 - All of the above
 - I don't know
12. What are the best treatment options for ADHD patients?
- psychoeducation
 - Medication
 - Behavioural management
 - Combination of different methods
 - No needs to treat
 - I don't know
13. Complete the following sentence (Medical and behavioural therapy has an effect on the child's prognosis it ...)
- decrease the symptoms as the child grew up
 - increase the symptoms as the child grew up
 - does not have an effect
 - cure the disorder completely
 - I do not know
14. How often does hyperactivity accompany difficulty in concentrating?
- Always
 - Sometimes
 - Rarely
 - Never
 - Not related
 - I do not know
15. Do you think that hyperactivity has an effect on the child's ability to focus?
- Not related
 - Low affect
 - Medium affect
 - High affect
 - I don't know
16. In your opinion, what is the reason that will prevent parents with (ADHD or CAE) children from seeking medical help? (no correct answer)
- social stigma
 - financial cause
 - disbelieve in the medical field
 - they think that these conditions are incurable
 - I do not know
- E.source of information about ADHD and absence seizures (no correct answer)
- Social media
 - School/university
 - Awareness campaigns
 - Relative/ friend
 - Doctors
 - Television/newspapers
 - I have no information about these topic
 - Other : please mention the source
- التسعة العربية:
المؤلفات:
هذا الاستبيان هو جزء من دراسة يتعرف فريق من الباحثين من جامعة أم القرى ، كلية التمريض في الأمل في مدينة مكة المكرمة ، المملكة العربية السعودية . هذا البحث يهدف لقياس معرفتهم عن الفروقات بين اضطراب فرط الحركة ونقص الانتباه و نوبات الصرع المصحوبة بغيبوبة في الأطفال . جميع المعلومات مستخدم لمرض البحث العلمي فقط والشاركة في هذا البحث هي تطوعية ويمكنكم الانسحاب في أي وقت عن طريق إلقاء بطاقة الاستبيان

FIGURE 4: Questionnaire

التواصل
البحث الرئيسي د. عمر بابهين (البريد الإلكتروني ombabateen@uqu.edu.sa)
القسم الأول : المعلومات الشخصية والاجتماعية

1. الجنس

- ذكر
- أنثى

2. العمر

- 18 – 28
- 29 – 39
- 40 – 50
- 51 – 61
- 62 فما فوق

3. مكان الإقامة

- مكة المكرمة
- خارج مكة المكرمة

4. المستوى التعليمي

- أبي
- ثانوية علمية كفاءة متوسطة
- درجة البكالوريوس
- درجة الماجستير

5. الحالة الزوجية

- متطلق/متطلقة
- موظف/موظفة
- متقاعد/متقاعدة
- طالبة/طالب

6. دخل الأسرة

- أقل من 5000 ريال
- 5000 – 10000 ريال
- 10000 – 15000 ريال
- أكثر من 15000 ريال

7. الحالة الاجتماعية

- متزوج/متزوجة
- متطلق / متطلقة
- أرمل/أرملة

8. كم عدد الأطفال لديك؟
(إجابة مكتوبة)

9. عمر أصغر طفل
(إجابة مكتوبة)

10. هل كلا الوالدين مشتركين في تربية الطفل؟

- نعم
- لا

11. إذا كنت إجابتك (لا) مع من يعيش الطفل؟

- الأب
- الأم
- الجد/الجدة
- أخرى / من؟

12. هل لديك طفل يعاني من إعاقة عقلية؟

- نعم
- لا

13. هل لديك طفل مصاب باضطراب فرط الحركة ونقص الانتباه؟

- نعم

FIGURE 5: Questionnaire

- العاد القوي
 - إجمال الرتين
 - إجمال التعليم
 - **أسباب وراثية**
 - مجهولة السبب
 - لا أعلم
٦. ما الذي يعجز نوبة الصرع المصحوبة بغيره؟
- قلة النوم
 - زيادة في وتيرة وضعف التنفس
 - الأصوات ، الأضواء الساطعة ، ضوء الشمس الساطع.
 - عدم تناول الأدوية حسب تعليمات مقدم الرعاية الصحية الخاص بك.
 - **جميع ما سبق**
 - لا أعلم
٧. هل يزيد تاريخ تشخيص الحزازي تشخيصات تحدث في الحظيل بسبب ارتفاع درجة الحرارة (من خطر حدوث نوبات الصرع المصحوبة بغيره؟
- **نعم**
 - لا
 - لا أعلم
٨. هل تعتقد أن التاريخ المثلث لنوبات الصرع المصحوبة بغيره تلعب دور في نشأة المرض؟
- **نعم**
 - لا
 - لا أعلم
٩. أكثر مما يلي ما هو براك مثل أو يصف نوبة الصرع المصاحبة بغيره؟ (جمع الإجابات مسجحه وليس مدى الوعى هو نسبي كل ما زانت الحيزات كان مستوى الوعى اكر)
- **نوبات قصيرة من فقدان الوعى (٤-٣٠ ثانية)**
 - **لا يتذكر الطفل وقوع الحادث**
 - **نوبات تكرر وتكون بحسب ١٠-٣٠ نوبة في اليوم**

FIGURE 6: Questionnaire

- أخرى (اكرها)
 - ٣. هذه نوع واحد فقط من اضطراب فرط الحركة ونقص الانتباه.
 - نعم
 - لا
 - لا أعلم
٤. نوبات الصرع المصحوبة بغيره واضطراب فرط الحركة ونقص الانتباه هما
- نفس المرض
 - نوبة صرع مصحوبة بغيره ثم تتحول إلى اضطراب فرط الحركة ونقص الانتباه
 - اضطراب فرط الحركة ونقص الانتباه ثم تتحول إلى نوبات صرع مصحوبة بغيره
 - **مرتبطين بشكلين**
 - لا أعلم
٥. يعد اضطراب فرط الحركة ونقص الانتباه أكثر شيوعا في:
- **ذكور**
 - كلاهما
 - لا أعلم
٦. في أي فئة عمرية ينتشر اضطراب فرط الحركة ونقص الانتباه؟
- **المراهقة**
 - الرشد
 - كبار السن
 - لا أعلم
٧. براك ما هي سميات اضطراب فرط الحركة ونقص الانتباه؟
- **أسباب وراثية**
 - كدمات القوي
 - مشاكل في نشأة الطفل
 - إصابة في الرأس
 - أسباب غير معروفة
 - لا أعلم
٨. هل يجب التراجع المرضي بالإصابة باضطراب فرط الحركة ونقص الانتباه في نشأة المرض لدى الطفل؟
- **نعم**
 - لا
 - لا أعلم

FIGURE 7: Questionnaire

<p>١٠. اختر مما يلي، ما هو برايك متعلق أو يصف اضطراب فرط الحركة ونقص الانتباه؟ [جميع الإجابات مسجومة قياس مدى الوعي هو نسي كل ما رأيت الخيارات كان مستوى الوعي أكبر]</p> <ul style="list-style-type: none"> ● الطفل ذو حركة بطيئة مقارنة بقرانه الذين في نفس العمر ● الطفل يمشي من مسافات في المحافظة على تركيزه ● لا يستطيع الطفل بدء محادثات جديدة أو حتى الحفاظ على محادثته الحالية ● تحصيل الطفل الدراسي نازل ● لا يبدو الطفل مصاباً بحدس خاطئ ● يتخطى الطفل بين مهمة وأخرى دون إكمال المهام بشكلها الصحيح ● فرطوي ● غالباً يفقد الحاجيات الأساسية لإتمام مهمة معينة [اللامبالغة] ● انتفاخي ● غير حنون ● لا أعلم <p>١١. من الأعراض السابقة أي منهم تفقد أكثر؟ (اختر الإجابة واحدة من السابق)</p> <p>١١. من برايك هو الجدل الغبي الأفضل للتعامل مع الأطفال المصابين باضطراب فرط الحركة ونقص الانتباه؟</p> <ul style="list-style-type: none"> ● طلب التمسك ● طلب الأضباب ● طلب الأطلاق ● كل ما سبق ● لا أعلم <p>١٢. ما الذي يعتقد أنه ضروري لعلاج مريض يعاني من اضطراب فرط الحركة ونقص الانتباه؟</p> <ul style="list-style-type: none"> ● التربية النفسية ● التدخل الدوائي ● العلاج السلوكي ● استخدام طرق متنوعة ● لا حاجة للعلاج ● لا أعلم <p>١٣. أكمل الجملة الآتية (التدخل والدواء والعلاج السلوكي يؤثر على تطور اضطراب فرط الحركة ونقص الانتباه لدى الطفل عن طريق.....)</p> <ul style="list-style-type: none"> ● تقليل حدة الأعراض مع نمو الطفل 	<ul style="list-style-type: none"> ● زيادة حدة الأعراض مع نمو الطفل ● ليس فيه أي أثر على الإخلاق ● يشفى الاضطراب تماماً ● لا أعلم <p>١٤. لأي درجة يصعب فرط الحركة نقص التركيز؟</p> <p>ناتلاً</p> <ul style="list-style-type: none"> ● أحياناً ● دائماً ● لا يصعبه أبداً ● لا توجد علاقة ● لا أعلم <p>١٥. هل تعتقد أن فرط الحركة يؤثر على فترة الطفل على التركيز؟</p> <ul style="list-style-type: none"> ● لا يوجد تأثير ● تأثير ضعيف ● تأثير متوسط ● تأثير عظيم ● لا أعلم <p>١٦. برايك ما هو السبب الذي يمنع أرباب الأطفال الذين يعانون من اضطراب فرط الحركة ونقص الانتباه من الذهاب إلى الأطباء؟ [لا توجد إجابة مسجومة]</p> <ul style="list-style-type: none"> ● نظراً لضعف السلبية ● أسباب مادية ● عدم الثقة في الجدل الطبي ● اعتقادهم بشفاعة علاج هذه الاضطرابات ● لا أعلم <p>القسم الرابع - مصدر معلوماتك عن نوبات الصرع المنحوية بغيبوبة و فرط الحركة ونقص الانتباه (لا توجد إجابة مسجومة)</p> <ul style="list-style-type: none"> ● وسائل التواصل الاجتماعي ● المدرسة/الجامعة ● محلات الترفيه والتجارية ● الأقارب والأصدقاء
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FIGURE 8: Questionnaire

- الأطباء
- التلفاز / الصحف
- لا توجد لدي معلومات عن هذين الموضوعين
- أخرى (أذكرها)

FIGURE 9: Questionnaire

Additional Information

Disclosures

Human subjects: Consent was obtained or waived by all participants in this study. Umm Al-Qura University issued approval HAPO-02-K-012-2022-04-1049. The Biomedical Research Ethics Committee has evaluated and examined the research mentioned above proposal and has found it to be per the specifications and conditions of the ethics of scientific research. **Animal subjects:** All authors have confirmed that this study did not involve animal subjects or tissue. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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