

Assessment of Knowledge and Attitude and Practice of Parents towards Epilepsy among Children in Jeddah City

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ABSTRACT

Background: one of the most common neurological disorders among pediatrics is epilepsy. The lack of knowledge about epilepsy would influence the life of affected children.

Objectives: considering the knowledge, attitude and practice (KAP) regarding epilepsy among children in Jeddah City, Kingdom of Saudi Arabia (KSA).

Methods: this was a cross sectional community survey design that was conducted from June to August 2017 on 930 adult Saudi parents. A pre-tested questionnaire was distributed among Saudi parents. The questionnaire included the demographics of included subjects and the source of their information, the knowledge, attitude and practice pattern. **Results:** all of the parents were heard before about epilepsy, but most of them had poor knowledge regarding the cause of the disease, the nature of epilepsy as neurological, but not mental disease and the surgical treatment of epilepsy. The majority of respondents had negative attitudes toward the ability of epileptic children to have normal life. The level of practice was inadequate among most of parents as most of them did not know how to deal with epileptic children with seizures and most of them would avoid dealing with epileptic children. The KAP was inadequate among 78.2% of parents and was good among 21.8% of them.

Conclusion: most of Saudi parents had poor knowledge regarding the epilepsy that resulted in poor attitude and practice misconceptions. The adequate education about epilepsy would increase the incidence of disease management.

Keywords: knowledge, attitude, practice, epilepsy, Saudi parents, Jeddah City, 2017.

BACKGROUND

Epilepsy is a common neurological condition that associated with recurrent seizures and about 4-8 cases from 1000 children suffered from epilepsy in the developing countries ^(1, 2). Also, the results from Arab countries showed high prevalence rates prevalence rates of 230 cases per 10⁵ in Libya, 650/10⁵ in Saudi Arabia ⁽³⁾. The seizures are a temporary distress in the cerebral function and cortical nerve cell activity that results from irregular paroxysms. The paroxysms would suddenly increase the improper discharge from the cerebral neurons causing loss of consciousness, convulsions, sensation disturbance, psychic conditions or many be complex of these symptoms ^(4, 5). The epileptic patients may also suffer from stress, depression and psychosis ^(6, 7). The majority of epilepsy cases are idiopathic, but some other causes may induce epilepsy including stroke, tumor of the brain, alcohol or drug abuse as well as brain injury ⁽⁸⁻¹⁰⁾. Genetic mutations also play a vital role in progression of epilepsy ⁽⁸⁾. There is a lack of knowledge among community population about the epilepsy in KSA which was shown in different studies. The proper awareness about epilepsy

among parents would result in positive attitude and practices toward their children thus lead to

proper management of epilepsy and decreasing the complications among children ⁽¹¹⁻¹³⁾. The present study aimed at assess the knowledge, attitude and practice (KAP) of Saudi parents toward epilepsy.

METHODS

Study design

This was a cross-sectional community survey design that was conducted at Jeddah City, Saudi Arabia, from June to August 2017.

Study population and sample size

This study included 930 subjects who were randomly chosen using multiple stratified random sampling technique. The inclusion criteria were adult male or female parents, they had at least one child. The participants were interviewed in community pharmacies and private clinics distributed in different parts of Jeddah City.

Study tools

The tool used in this study was a pre tested questionnaire that was based on other studies conducted in different parts of KSA among Saudi

parents^(13, 14). The questionnaire included the demographics of included subjects and the source of their information, items regarding the knowledge about epilepsy, questions about the attitude and items about practice pattern. The correct answers takes 1 and incorrect answer takes 0.

Ethical approval

The study was approved by the Ethics Board of Umm Alqura University.

A verbal or written consent were given by the participants enrolled in this study.

Statistical analysis

The processing of the data was done using Statistical Package for Social Sciences (SPSS) version 2.0 IBM Corp.

Table 1: demographic Characteristics of the included subjects(930)

	No.	Percentage (%)
Age		
20-40	582	62.6
41- 60	348	37.4
Gender		
Female	418	45%
Male	512	55%
Educational Level		
Collage	688	74%
Secondary School	180	19.4%
Primary School	62	6.6%
Income		
Low	271	29.1%
Moderate	533	57.3%
High	126	13.6%
Source of knowledge		
From relatives	640	68.8%
Internet	102	10.9%
TV	127	13.7%
Physician	61	6.6%

Assessment of knowledge of included subjects

All the parents heard before about epilepsy, but only 35.5% had adequate knowledge about the idiopathic nature of the disease. Poor level of awareness was found among 69% of subjects regarding the genetic nature of epilepsy. About 81.3% of subjects incorrectly rated epilepsy as a mental disease while more than half of them (58%) knew that epilepsy was not contagious disease. About the treatment of epilepsy 65.8% declared that epilepsy can be treated with medications, but only 19% of parents knew that epilepsy can be treated with surgery(**Table2**).

Table 2: awareness regarding the epilepsy (930)

	Correct	Incorrect
1. Have you ever heard about epilepsy	930 (100%)	0 (0%)
2. Epilepsy is idiopathic disease	330 (35.5%)	600 (64.5%)
3. Genetics could impact the prevalence of epilepsy	288 (31%)	642 (69%)
4. Epilepsy is a mental disease	174 (18.7%)	756 (81.3%)
5. Epilepsy is contagious	540 (58%)	345 (47.9%)

RESULTS

Characteristics of the studied subjects

The demographics of the Saudi parents were presented in **Table 1**. The age of parents was 20-40 years old among 62.6% of parents and 41-60 years old among 37.4% of them. More than half of the respondents (55%) were males and 45% were females. The educational level was bachelor degree among 74% of respondents, 19.4% went to secondary school, while 6.6% of subjects had a primary school degree. The source of knowledge was from relatives among 68.8% of parents, 10.9% from internet, 13.7% from TV and 6.6% had their knowledge from physician (**Table 1**).

6. Epilepsy could be treated with medications	612 (65.8%)	318 (34.2%)
7. Epilepsy could be treated with surgery	177 (19%)	753 (81%)

- Evaluating the subject's attitude

The attitude of parents is shown in **table 3**. The majority of respondents had negative attitudes toward the ability of epileptic children to live equally with others in the society (66.2%).

Also, 61.1% of the subjects thought that epileptic persons can't perform physical daily

activities and 72.8% said that epileptic patients should work in special jobs and with each other. About, 84.4% of parents showed negative attitude as they thought that epilepsy is an obstacle of good life. Over that, most of parents thought that the intelligence of epileptic persons is lower than normal persons.

Table 3: attitude of parents toward epilepsy (n=930)

	No.	Percentage (%)
Epileptic person can live equally with others in the society		
Agree	314	33.8
Disagree	616	66.2
Epileptic person could perform daily physical activities		
Yes	362	38.9
No	568	61.1
Epileptic patients should work in special jobs and with each other		
Yes	677	72.8
No	253	27.2
Epilepsy is an obstacle of the good life		
Agree	785	84.4
Disagree	145	15.6
The intelligence of epileptic persons is lower than normal persons		
Agree	813	87.4
Disagree	117	12.6

Practice pattern of included subjects

The level of practice was inadequate among most of parents. Most of the parents (68.9%) did not know what to do when seeing an epileptic child, 22.8% gave him the first aid and 8.3% would call an ambulance. About 57.1% of parents would not deal with epileptic person. On the other hand, 58.1% of parents would advise to follow up the epilepsy with a doctor, 22.7% would advise other parents to seek herbal medicine and 19.2% thought that there was no need for treatment (**Table 4**).

Table 4: practice of parents toward epilepsy (n=930)

	No.	Percentage (%)
What do you do when seeing a child suffering from convulsions		
I call ambulance	77	8.3
I help him and give him the first aid	212	22.8
I don't know what to do	641	68.9
If a friend or relative had epilepsy how would you advise them		
Use herbal medicine	211	22.7
Tell them to follow up with a doctor	540	58.1
No need for treatment	179	19.2
If you deal with an epileptic patient how will u treat him		
I will leave him	531	57.1
I will act normally with him	399	42.9

The KAP was inadequate among 78.2% of parents and was good among 21.8% of them (Table 5).

Table 5: respondents KAP of epilepsy among the children

Knowledge level	Frequency	Percent (%)
Good	203	21.8
Poor	727	78.2
Total	930	100.0

DISCUSSION

The Saudi parent's knowledge, attitudes and practice (KAP) towards epilepsy are important factors in determining the level of epilepsy and its outcomes in our society. Also, most of beliefs and conceptions about epilepsy in the developing countries are false even among parents of epileptic children⁽¹⁵⁾.

The level of knowledge was inadequate among most of the parents and resulted in poor attitude and practice pattern. The same results were shown in other studies in KSA regarding the awareness about epilepsy^(1, 11-13).

The present study showed that all of the participants heard the word epilepsy before and the majority of them gain their knowledge through relatives and friends. In the same respect, **Alhazzani et al.**⁽¹²⁾ showed that Saudi subjects in Aseer region heard or read before about epilepsy and a high percentage of them knew that friends or relatives with epilepsy. Also, other studies showed comparable results⁽¹⁶⁻¹⁸⁾.

Although, most of subjects knew that epilepsy could be treated with medications, but the majority underestimate the role of surgery in treatment of epilepsy. Consistently, most of Saudi subjects did not appreciate nor had knowledge about the role of surgical treatment in epilepsy^(16, 19).

As for the attitude, it was improper among most of parents regarding effects of epilepsy on normal life. Accordingly, a high percent of population in Italy thought that epileptic children should be separated from normal children and their performance was lower than others⁽²⁰⁾. Also, negative attitude was found in Jeddah city toward treating the epileptic children equally to normal children⁽¹⁹⁾.

On the other hand, there was a positive attitude towards epilepsy among 88% of Saudi families regarding the good academic performance and intelligence of epileptic⁽¹³⁾.

Also, in Riyadh, the same results were shown about the successfulness and achievement of epileptic child⁽¹⁶⁾. In the present study, less than half of the respondent families knew how to perform first aid for a convulsive child and most of these were families of epileptic children. Most families received their information about first aid management from their doctors. This emphasizes the important role of doctors in family and patient education. No previous studies in KSA have evaluated the role of the treating physician in educating families about how to perform first aid management during convulsions.

The practice pattern was also improper as most of the subjects did not know what to do if they saw a child with epilepsy convulsions and some thought that epilepsy could be treated with herbal medicine or without treatment. In accordance, a high percentage of Saudi adults thought that medical treatment is the best choice for epilepsy, but some of them still seek for herbal medicine^(16, 21, 22).

CONCLUSION

Most of Saudi parents had poor knowledge regarding the epilepsy that resulted in poor attitude and practice misconceptions. Also, inadequate knowledge resulted in many complications, negative effects and depression among children. The adequate education about epilepsy would increase the incidence of disease management.

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