Teachers' Awareness about Epilepsy in Children at Al Basra Primary Schools

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ABSTRACT

Background: With a global prevalence of 5-10 per 1000 persons, epilepsy is one of the most prevalent nerve disorders in children. Significantly, roughly 3% of children diagnosed with epilepsy at some point in their lives.

Objectives: Assess awareness of Primary school teachers toward epilepsy in children, and identify the relationship between teacher awareness with specific demographic data.

Methods: The study is descriptive-analytic, study design, a non-probability (purposive) of (159 teachers) who agreed to take part in the research, data were collected from 10 April 2021 to 10 Jun, the questionnaire consists of questions including social and demographic information, and the other parts five domains about the definition of disease.

Results: The results show that the majority of the study sample were female, their age between (20-29) years, married, residence in the periphery, their educational level was university, economic status was enough, and all the study sample have a moderate Knowledge about epilepsy.

Conclusions: Based on the result obtained from the data analysis, the results of the study show different changes in the knowledge of the teachers it was concluded that the major deadlock of teachers. Also, not only first aid, even their lack of information on the signs and symptoms of the disease has an important role, as if the teacher does not know the unique or different from the common symptom, he may be late in assisting the student, and this poses a threat to his health and life.

Recommendations: Give teachers educational courses about first aid for the students saving their life and keeping them away from the source of danger which also includes information about the disease in general and not only about the epileptic seizure. The Ministry of Education's recommendation is to activate the school health system to increase teachers' awareness of chronic diseases and sudden attacks.

Keywords: Teachers' Awareness, Epilepsy, Children, Primary Schools, Seizure, Pediatric

INTRODUCTION

With a worldwide prevalence of 5-10 per 1000 people[1,2], epilepsy is one of the most frequent neurological diseases in children. Surprisingly, approximately 3% of people will be diagnosed with epilepsy at some point during their lives[3]. Epilepsy diagnosis has been shown to have a significant academic and emotional impact on children, particularly school-aged children[4]. Children with epilepsy are sometimes ostracized as a result of their fear of losing control in public. Furthermore, children with epilepsy are more likely to experience a variety of educational issues, including academic underachievement, learning difficulties, mental health issues, and social isolation. When it comes to children with epilepsy, social attitudes and discrimination can be more damaging and harmful than the condition itself[5]. Teachers' attitudes toward children with epilepsy are influenced by their knowledge of the condition. Teachers, on average, do not receive any official epilepsy training during their schooling and training, despite the fact that school accounts for up to 40% of a child's developmental life[3]. Teachers are viewed as social leaders and role models, and thus have an impact on a child's social and psychological development at this vital era. As a result, examining instructors' epilepsy knowledge is important for the advancement of future generations. At any time, and at any school, life-threatening emergencies can occur. The tragic death of a 16-year-old boy following an epileptic seizure due to a lack of first-aid seizure care and qualified experts within the school premises, specifically instructors, was reported in the Kuwaiti news in December 2008. This youngster could have been rescued if those teachers had learned more about epilepsy and had better attitudes toward students with epilepsy. This occurrence prompted us to conduct this research in order to increase schoolteacher awareness about epilepsy and improve their attitudes toward pupils with epilepsy.

MATERIAL AND METHOD

Design: A descriptive analytic study design was carried out to teacher knowledge about epilepsy in children in Basra primary schools. The study had started from10 April 2021 to10 Jun 2021.

Approval Arrangements: After the project of the study is approved by the College of Nursing, set out of official letters have started. Before the data collection, permissions were obtained to conduct the study. Another approval was obtained from the Basra Educational

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Department. Then, permission was obtained from School Itself.

Setting: The study carried out in Al Basra primary schools' teachers about their knowledge about epilepsy in children. The total of teachers in Basra was (60000) the number of teachers who participated in the study was (159) participant by convenient selection sample.

Sample of the Study: Non – probability (purposive) sample of (159) teachers were selected. All the teachers are in primary school only.

Study Instrument: The study's tool is a questionnaire that was created and designed specifically for the purpose of the study after exhaustive examinations of existing literature and comparative studies. There are two pieces to the research instrument. The first section covers the study sample's demographic characteristics, while the second section covers teachers' understanding of epilepsy.

Part I: Demographic Characteristics of the Study Sample

This part related to the socio-demographic characteristics of the teachers consists of (6) items, age, sex, marital status, residence, level of education, economic status.

Part II: Teacher's knowledge about epilepsy

This part includes (23) items, first five points talk about general definition and knowledge about epilepsy, the next four points talk about signs and symptoms, the next five points talk about causes and risk factor. The next three points talk about epilepsy prevention, last five points talk about epilepsy complication and treatment.

Data Collecting: The data is collected through the utilization of a developed questionnaire (Arabic version), the researcher had held the whole responsibility of interviewing the study sample after explanation and clarification the objectives of the study, after taking the initial consent of each teacher to participate in the study. The data collection period lasted from April 10th to June 10th, 2021. Each teacher was given around 10-20 minutes to complete the interview and fill out the questionnaire style.

Statistical Data Analysis: The current study's data were analyzed with the Statistical Package for Social Sciences (SPSS) version 24[6-16].

RESULTS

Table 1: Demographic data of study sample

Demographic Variables	Frequency	Percentage %
Gender		
Male	29	18.4
Female	129	81.6
Age		
20-29	53	33.5
30-39	50	31.6
40-49	32	20.3
50-59	23	14.6
Social status		
Single	41	25.8
Married	110	69.2
Residence		
Center of the city	40	25.3
The country side	118	74.7
Academic level		
Institute	52	32.9
University	106	67.1
Economic status		
Completely enough	17	10.8
Enough	124	78.5
Not enough	17	10.8

Table 1 about social characteristics show that (18.4 %) of participants was males and (81.6%) of participants was females, most of them married (69.2%), regarding residence most of them (74.7%) from country side, (67.1%t) of them their academic level is university level, regarding economic status most of them (78.5%) answer enough.

Table 2: Teacher's knowledge about epilepsy children

No	Questionnaire	True		False		Not sure		MS	ASS
		F	%	F	%	F	%		
1	Epilepsy is a psychological disorder, not a nervous disorder	25	15.7	101	63.5	33	20.8	1.47	M
2	The heat convulsions are the same epilepsy	57	35.8	67	42.1	35	22.0	1.06	M
3	'Have you ever entered health courses about epilepsy	29	18.2	88	55.3	23	14.5	1.62	M
4	The rate of having a disease between both sexes does not differ	106	66.7	30	18.9	23	14.5	1.47	M
5	Does the teacher have basic principles and to deal with a patient with epilepsy	41	25.8	80	50.3	64	40.3	1.01	M
	Total							**1.32**	**M**

Table 2 shows that the study results of the study sample response to epilepsy prevention were medium in all items.

Table 3: Teachers' knowledge about signs and symptoms of Epilepsy

NO	Questionnaire	True		False		Not sure		MS	Ass.
		F	%	F	%	F	%		
1	Frequent and involuntary movement	145	19.2	4	2.5	10	6.3	1.89	M
2	Excessive confusion and starring	112	70.4	14	8.8	33	20.8	1.61	M
3	Hyperactivity is not a symptom of epilepsy	80	50.3	41	25.8	38	23.9	0.75	M
4	Does not suffer from shying or getting away from his friends	85	53.5	48	30.2	26	16.4	0.76	M
Total								**1.25**	**M**

Table 3 shows that the study results of the study sample response to epilepsy prevention were medium in all items.

Table 4 shows that the study results of the study sample response to the causes and risk factors items are medium in (1, 2, 3 and 6) and weak in the other items. The total assessment was medium.

Table 5 shows that the study results of the study sample response to epilepsy prevention were medium in all items.

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Table 4: Teacher's knowledge about causes and risk factors of Epilepsy

N O	Questionnaire	True		False		Not sure		MS	Assessment
		F	%	F	%	F	%		
1	Exposed to severe fever and repeated heat	96	43.4	39	24.5	51	32.1	0.81	M
2	Congenital defect	54	34.0	61	38.4	44	27.7	0.95	M
3	Economic status cannot effect on epilepsy episodes	35	22.0	104	65.4	20	12.6	1.43	M
4	Health, social and environmental condition, noisy and non-stable environment	112	70.4	29	18.2	18	11.3	0.47	W
5	Epilepsy is not genetically diseases	121	76.1	13	8.2	25	15.7	0.31	W
6	Accidents, shocks or direct falling dose does not cause the epilepsy	71	44.7	46	28.9	42	26.4	0.84	M
Total								**0.80**	**M**

Table 5: Teachers' knowledge about Epilepsy prevention

NO	Questionnaire	True		False		Not sure		MS	Ass.
		F	%	F	%	F	%		
1	There is no diet that reduces the repetition of exposure to the seizures	42	26.4	57	35.8	60	37.7	1.09	M
2	Exercise can cause stress for patient	54	34.0	73	45.9	32	20.1	1.11	M
3	Cannot prevent epilepsy	67	42.1	67	42.1	25	15.7	1.0	M
Total								**1.06**	**M**

Table 6: Teachers' knowledge about complication and treatment of Epilepsy

NO	Questionnaire	True		False		Not sure		MS	Ass.
		F	%	F	%	F	%		
1	There is no risk to the patient's life or his mental health	39	24.5	95	59.7	25	15.7	1.35	M
2	The treatment of epilepsy and control depends on the patient only and does not depend on parents and school	18	11.3	126	79.2	15	9.4	1.68	M
3	The teacher information about the disease is enough and is not necessary to know the patient history or discussion with parents	42	26.4	94	59.1	23	14.5	1.32	M
4	The teacher was unable to notice the cognitive effects of epilepsy on the student	67	42.1	67	42.1	25	15.7	0.99	M
5	There is a definitive cure for epilepsy	18	11.3	87	54.7	54	34.0	1.43	M
Total								**1.35**	**M**

Table 7: Relationships between sociodemographic variables and teachers' epilepsy knowledge

Demographic variable	Chi-square	P-Value	SIG
Gender	4.477	0.034	**S**
Age	5.907	0.116	NS
Residence	2.024	0.023	**S**
Academic level	2.051	0.152	NS
Economic status	8.347	0.015	NS

This table demonstrates that there is a strong association between teachers' awareness about epilepsy in children and their gender and residence.

DISCUSSION

Part I: Discussion of the socio-demographic characteristics for the study sample

A total of 159 teachers returned completed surveys ages of teachers was (Range 20-29), While in the study in University of Kentucky ages was (range 30-45)[4].

Gender was constituted (female =81.6%) not accepted with study in Thailand Epilepsies' 1999 While in their study the gender was (male 61%)[16]. social status (married =69.2%) accepted with the study done by Henry, 2000, When fund social status (married =70%)[17] Academic level was (university =67.1%) not accepted with a study done by Hermann and Seidenberg, 1989 who found the majority of them were master level (58%)[18].

Part II

In table 2 at "the heat convulsion is same epilepsy" mean (false = 40.5%), and this an accepted with a study conducted at the University of Catania Via S. Sofia, Italy 2018, who was found that a febrile convulsion is a convulsion caused by a fever. Infants and children who experience a quick rise in body temperature are more likely to experience febrile convulsions. While epilepsy is a chronic neurological disorder, the temperature shift can be so quick that may not even notice the fever until the convulsion[19], table 2 about entered to health courses about epilepsy mean (false =55.3%) not accepted with a study conducted at the University of Amman, Jordan, it concluded their teachers previously entered health courses about epilepsy was (77.3%) to courses and have basic principles to deal with the patient when having a seizure[5].

Table 3 this not accepted with a study conducted in Thailand, among school teachers that found (63.7%) have proven some patients have experience related to low self-esteem in the present circumstances[16]. Table 4 first point mean (65.4% = false) not accepted with a study conducted in Nigeria, that found about (66%) agreed that the low standard of living, poverty and neglect in treating epilepsy in the early stages can increase the disease[20]. Table 4 fifth point mean (76.1% True) not accepted with study Mielke et al (1997), in their study showed (82.1) said that congenital disease[21]. Table 5 mean (67% =true) accepted with a study done by APA (2013), that found (58.1%) said cannot prevent epilepsy[22].

Table 6 mean (42.1% =true), accepted with a study conducted in Sudan, by Abbas and Babikar (2011) that said about (55%) emphasizes that the teacher can note any behavioural changes or difficulty of understanding among the student more than one surroundings after parents and family[4].

Part III

Regarding the association between the age and knowledge of teachers Roddy, and McBride showed a significant relationship these results are supported by the present study[23]. Regarding the association between the economic level and knowledge of teachers showed non-significant relationship the present study, disagree with Mielke et al., that concluded there is a significant relationship between teacher knowledge and economic status[11]. Regarding the association between the Residence and knowledge of teachers showed significant relationship the present study accepted study done at Gezira State, Sudan[4].

CONCLUSIONS

Based on the result obtained from the data analysis, the results of the study show different changes in the knowledge of the teachers it was concluded that the major deadlock of teachers. It is that they did not enter health courses about epilepsy before, as 55.3% had never trained about the disease, and 50.0% said that they could not do first aid when the patient had a seizure in the classroom or schoolyard. Not only does their lack of knowledge of the disease's signs and symptoms play a role, but also does their lack of first aid, as if the teacher does not know the unique or different from the common symptom, they may be late in assisting the student, and this poses a threat to his health and life.

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