

Knowledge of Primary School's Teachers about Epilepsy in Al-Basra City Center

Nuha S. Kadhim¹, Doaa M. Bachi², Alaa M. Tuama³ Mohammed Talib Abed⁴

¹Assistant Lecturer in Pediatric Nursing, College of Nursing, University of Basra, - Iraq, ²Assistant Lecturer in Psychiatric Nursing, College of Nursing, University of Basra, - Iraq, ³Instructor Doctor, Community Health Nursing Department, College of Nursing, University of Thi-Qar, Iraq, ⁴Assistant lecturer in pediatric Nursing/ College of Nursing, Babylon University-Iraq

Abstract

Background: Epilepsy is a common disorder that, even for those individuals who frequently work with epileptics, is inefficiently understood. Low comprehension and understanding of the cause for the disorder has been connected with negative attitudes and beliefs, and misconceptions of workplace and school epileptics.

Objective: To evaluate the knowledge of epilepsy among primary school's teachers. And to determine the relationship between primary school teachers' knowledge of epilepsy and their socio-demographic features of age, gender, relative's history, and family history.

Methodology: A cross-sectional descriptive study to evaluate the knowledge of epilepsy among 130 primary school's teachers in the center city of Basra, from February 2020 to July 2020. A probability Simple random sample was done to choice the school's teachers in the schools.

Results: A total of (130) participants gender is approximate; (n=111; 85.4%) for female, and (n=19; 14.6%) for male, their age group less than half of them is within (40-49) years-old (n=42; 32.3%). The results reveals that the majority of participant has a moderate knowledge regarding epilepsy (n=94; 72.3%).

Conclusion: According to results of the current study, the researchers conclude that most participants have a mild understanding of epilepsy.

Key words: Knowledge, Epilepsy, school's teachers.

Introduction

Epilepsy is a chronic brain disease characterized by an abnormal nervous system imbalance caused by the sudden, repeated discharge of the total neuron population from the brain. Excessive discharge can cause sensory disturbances, convulsions or mental dysfunction, with or without loss of consciousness⁽¹⁾. Epilepsy is one of the most common diseases that primary school students encounter; however, the disorder often has a social stigma that may contribute to parental reluctance to share knowledge with teachers. In addition, due to the disease itself, antiepileptic drugs (AED) and psychosocial factors, children with epilepsy have much greater learning and behavior difficulties than the public.⁽²⁾

Epilepsy is a widespread serious neurological disease in the world⁽³⁾, It is often surrounded by prejudice and mythology, but it can overcome huge difficulties⁽⁴⁾. It is characterized by Frequent mental disorders. The nervous system is caused by accidental excessive and disorderly charging of brain neurons, resulting in almost instantaneous sensory disturbances, mental function or loss of consciousness, twitching movements or some combination of these^(5,6).

Teachers are most the top, and the primary parent perform the first line to save primary school students, while the role of the teacher complements the role of the parent. School teachers are the first responder to incidents outside the school hours, injuries arising from

accidents at school. Thus, they must be able to respond correctly to health emergencies affecting school children (7,8,9).

Epilepsy has become a problem for over seventy million population globally (10) and about 80 % of population with epilepsy live in developing country (5,11). Worldwide prevalence rates, however, range from 2.8 to 19.5 per 1000 of the general population (12). The prevalence can be as high as 43 per 1,000 people in developing countries (World Health Organization, 2001), and the incapacity caused by epilepsy accounts for around 0.5 percent of the overall burden of disability over the lifetime of the disease (13).

Similarly, epilepsy is one of the most common disorders in pediatric neurology, often found in the first decade of life. 33 million children worldwide are suffering from epilepsy. The serious consequences of epilepsy in school can cause harm to any child, and the teacher’s Awareness of first aid is needed to deal with the disease. (15,16,17).

All age groups can have affected by epilepsy, but in children it is more common. The prevalence of epilepsy in developing countries is 5 to 10 per 1,000 persons, according to estimates. The prevalence per thousand individuals is 2.8 to 19.5. (19).

Methodology

A cross-sectional descriptive study to evaluate epilepsy knowledge among 130 primary school teachers in central Basra from February 2020 to July 2020.. Approval was received by school administrations, as well as permission from educators to engage in this questionnaire. The time for completing the questionnaire lasted from 10 to 15 minutes. All teachers were instructed to fill out the questionnaire and questions were explained as needed.

The questionnaire consists from two parts, the first part about demographics characteristic of primary school teachers. And the second part about the knowledge about epilepsy and included eight items. The answers to the knowledge question is binary, that is, “yes” or “no”. The correct (positive) reaction score is 1 point, and the wrong (negative) reaction score is 0 points. The questionnaire was modified from a study performed in Central Nepal (1).

A probability (simple random sample) was done to select the teachers in the schools. The researcher obtained permission from the College of Nursing/University of Basra. Additional consent was obtained from directorate of Education in Al-Basra City to the permission for data collection.

All statistical analysis was performed using IBM-SPSS version (20)

Results

Table (1): Distribution by demographic characteristics of Participants

Items	Rating	F.	%
Gender	Male	19	14.6
	Female	111	85.4
	Total	130	100.0
Age	20-29	19	14.6
	30-39	33	25.4
	40-49	42	32.3
	50-59	32	24.6
	60-69	4	3.1
	Total	130	100.0

Cont... Table (1): Distribution by demographic characteristics of Participants

Family history of epilepsy	Yes	106	81.5
	No	24	18.5
	Total	130	100.0
Relatives history of epilepsy	Yes	72	55.4
	No	58	44.6
	Total	130	100.0

F.=Frequency; %= Percentage

A total of (130) participants gender is approximate; (n=111; 85.4%) for female, and (n=19; 14.6%) for male, their age group less than half of them is within (40-49) years-old (n=42; 32.3%), the majority of them have family history of epilepsy (n=72; 55.4%).

Table (2): Distribution of the Level of Teachers' Knowledge about Epilepsy

Items	Rating	F.	%
Overall Knowledge	Low	15	11.5
	Moderate	94	72.3
	High	21	16.2
	Total	130	100.0

F.=Frequency; %= Percentage

The results reveals that the majority of participant has a moderate knowledge (n=94; 72.3%).

Table (3): Association between Participants' Knowledge and their Demographics data

Demographics data		Overall Knowledge			Total	Sig.
		Low	Moderate	High		
Gender	Male	2	11	6	19	$\chi^2 = 3.937a$; df= 2; p-value = .140; P< 0.05 NS
	Female	13	83	15	111	
Total		15	94	21	130	
Age	20-29	0	17	2	19	$\chi^2 = 12.084a$; df= 8 p-value = .148; P< 0.05 NS
	30-39	2	25	6	33	
	40-49	9	28	5	42	
	50-59	4	20	8	32	
	60-69	0	4	0	4	
Total		15	94	21	130	
Family history	Yes	13	84	9	106	$X^2 = 24.957a$; df= 2 p-value = .000; P> 0.05 HS
	No	2	10	12	24	
Total		15	94	21	130	
Relatives history	Yes	11	55	6	72	$X^2 = 8.437a$; df= 2 p-value = .015 ; P> 0.05 HS
	No	4	39	15	58	
Total		15	94	21	130	

“ χ^2 ” = “chi-square”, “df”= “degree of freedom”, “p” = “probability value”, “P< 0.05= significant”, “P >0.05= non-significant”

The table shows that the relationship between teachers’ knowledge and their gender is not significant at less than (0.05), and the results indicate that there is a non-significant association between teachers’ knowledge and their age at less than (0.05) (0.05). Finally, the results show that the significant relation between less than (0.05) of teachers’ knowledge and their family context is strong, whereas the relationship between less than (0.5) of teachers’ knowledge and their families’ history is extremely high.

Discussion

The aim of this study is to think about the information of primary school teachers who form an important part of the community, who have recurrent thinking with children have epilepsy. ⁽²¹⁾.

(Table 1) This table indicates that the gender of a total of (130) participants is approximate; for females (n=111; 85.4%) and (n=19; 14.6%) for males, their age group is less than half of them (40-49) years of age (n=42; 32.3%). This result corresponds to that obtained by Al-Hashemi and others (2016). 36.9 years was the norm. Most teachers (44.7%) were between 30 and 39 years of age, and 22.5 percent of them were between 40 and 49 years of age.

(Table 2) This table indicates that there was almost a moderate degree of cooperation knowledge (n=94; 72.3%). In contrast to those with less education, the current research is confirmed by Abulhamail and others (2014) is more likely to have good knowledge (moderate or very good on the Likert scale) This result is consistent with the study of (Tuama, 2020), the study results suggest that nearly half of the study subjects were moderate knowledge of epilepsy.

The results of the study underhand depict that there is a non-significant statistical association between the knowledge of teachers and their gender. Kumari & Patlia endorse this finding (2016). For male school teachers, the mean knowledge score was 7.82±4.75, while for female teachers, 9.9±6.12. This outcome is consistent with the research of ⁽²³⁾, the results of present study

indicate that there are significant association between age and knowledge were moderate.

The difference (t=1.13, p=.261) was found to be non-significant. Therefore, it can be understood that the standard of knowledge for male and female school teachers was equal. A non-significant relation between the expertise of teachers and their age is shown in this table. Abulhamail and others (2014) found a similar result. The age, gender, years of experience, or form of school of the instructor did not correlate significantly with their epilepsy knowledge.

Conclusions

Based on the findings of the study underhand, the researchers conclude that the majority of participants have a moderate level of knowledge. The findings also indicate that there is a highly important association between the experience of the teachers and their family background and the history of their relatives.

Recommendation

The study recommends that, based on the discussion and the study findings, it is important to design epilepsy health education programs to educate school teachers. Workshops/seminars for school teachers on epilepsy are also recommended to be used.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the College of Nursing and all experiments were carried out in accordance with approved guidelines.

References

1. Thapaet L, Bhandari T R, Shrestha S, Poudel R S. Knowledge, beliefs, and practices on epilepsy among high school students of Central Nepal. *Epilepsy research and treatment*, 2017]
2. Mecarelli O, Capovilla G, Romeo A, Rubboli G, Tinuper P, Beghi E. Knowledge and attitudes toward epilepsy among primary and secondary schoolteachers in Italy. *Epilepsy & Behavior*, 2011;22(2), 285-292]

3. "International league against epilepsy". The history and stigma of epilepsy. *Epilepsia* 2003;44:12-14.
4. Pais-Ribeiro J, da Silva A M, Meneses R F, Falco C. Relationship between optimism, disease variables, and health perception and quality of life in individuals with epilepsy. *Epilepsy & Behavior*, 2007;11(1):33-38
5. Kabir M, Iliyasu Z, Abubakar I S, Kabir Z S, Farinyaro A U. Knowledge, attitude and beliefs about epilepsy among adults in a northern Nigerian urban community. *Annals of african medicine*, 2005;4(3):107-112
6. Yoo J K, Jung K Y, Park K W, Lee D H, Lee S K, Lee I K, Kim M K. Familiarity with, understanding of, and attitudes toward epilepsy among people with epilepsy and healthy controls in South Korea. *Epilepsy & Behavior*, 2009;16(2):260-267
7. Barrett J C. Teaching teachers about school health emergencies. *The Journal of School Nursing*, 2001;17(6):316-322
8. Uskun E, Alptekin F, Oztürk M, Kişioğlu A N. The attitudes and behaviors of housewives in the prevention of domestic accidents and their first aid knowledge levels. *Ulusal travma ve acil cerrahi dergisi= Turkish journal of trauma & emergency surgery: TJTES*, 2008;14(1): 46-52
9. Sönmez Y, Uskun E, Pehlivan A. Knowledge levels of pre-school teachers related with basic first-aid practices, Isparta sample. *Turkish Archives of Pediatrics/Türk Pediatri Arşivi*, 2014;49(3):238
10. Gedefa M, Wolde T, Solomon G. Knowledge, attitudes and practices with respect to epilepsy among preparatory school students in Mekelle city, Ethiopia. *International Journal of Collaborative Research on Internal Medicine & Public Health*, 2012;4(3):202
11. Yemadje L P, Houinato D, Quet F, Druet-Cabanac M, Preux P M. Understanding the differences in prevalence of epilepsy in tropical regions. *Epilepsia*, 2011;52(8):1376-1381
12. Dantas F G, Cariri G A, Cariri G A, Ribeiro Filho A R V. Knowledge and attitudes toward epilepsy among primary, secondary and tertiary level teachers. *Arquivos de neuro-psiquiatria*, 2001;59(3B):712-716
13. Burneo J G, Tellez-Zenteno J, Wiebe S. Understanding the burden of epilepsy in Latin America: a systematic review of its prevalence and incidence. *Epilepsy research*, 2005;66(1-3):63-74
14. Abdul-Karim MA. Graphic online. Retrieved from Graphic Communications Group limited. 2017.
15. Jacoby A. Stigma, epilepsy, and quality of life. *Epilepsy & Behavior*, 2002;3(6):10-20
16. Bishop M, Boag E M. Teachers' knowledge about epilepsy and attitudes toward students with epilepsy: results of a national survey. *Epilepsy & Behavior*, 2006;8(2):397-405
17. Aydemir N. Developing two different measures for assessing knowledge of and attitudes toward epilepsy for the Turkish population. *Epilepsy & Behavior*, 2008;12(1):84-89
18. Karimi N, Heidari M. Knowledge and attitudes toward epilepsy among school teachers in West of Iran. *Iranian journal of neurology*, 2015;14(3):130
19. Kabir M, Iliyasu Z, Abubakar I S, Kabir Z S, Farinyaro A U. Knowledge, attitude and beliefs about epilepsy among adults in a northern Nigerian urban community. *Annals of african medicine*, 2005;4(3):107-112
20. Abulhamail A S, Al-Sulami F E, Alnouri M A, Mahrous N M, Joharji D G, Albogami M M, Jan M M. Primary school teacher's knowledge and attitudes toward children with epilepsy. *Seizure*, 2014;23(4):280-283
21. Kumari V, Patlia M. Assessment of knowledge of school teachers regarding epilepsy. *IJAR*, 2016;2(1):777-780
22. Al-Hashemi E, Ashkanani A, Al-Qattan H, Mahmoud A, Al-Kabbani M, Al-Juhaidli A, Al-Hashemi Z. Knowledge about epilepsy and attitudes toward students with epilepsy among middle and high school teachers in Kuwait. *International journal of pediatrics*, 2016.
23. Tuama A M, Ali M F, Elywy G J. Evaluation of Nurses' Burnout among Nurses at Hospitals in Nasiriyah City Iraq. *Indian Journal of Forensic Medicine & Toxicology*, 2020;14(3):1459-1463
24. Elywy G J, Radhi M M, Tuama A M. Determination the Causes of Neonatal Mortality during the Last 3 Years Ago in Al-Kut City. *Medico Legal Update*, 2020;20(3):1412-1419