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Abstract:

purpose: Epilepsy is a major public health problem worldwide. The aim of this study was to explore the level of awareness, knowledge regarding epilepsy and attitudes prevalent toward epilepsy among king Khalid university students.

Methods: The descriptive and cross-sectional study was conducted with the voluntary participation of 227 participants from students at King Khalid University. The mean age of participating was (20.10 ± 1.3) . Theoretical and practical colleges used questionnaires to assess students' knowledge about epilepsy and their attitudes towards it.

Results: A total of 227 respondents completed the survey; the results showed almost all had heard about epilepsy. Only 83.7% have never had any information on how to treat a patient with epilepsy. 80.6% think non-medical treatment is beneficial for epilepsy %13.2% do not know how to do first aid to deal with epileptic seizures. Almost 32.6% did not know the cause of epilepsy, 59% believed that it was a hereditary disorder 44.1% believed epilepsy is a form of mental illness, 57.3% believed that epilepsy patients die because of epileptic seizures. 59% believed that it was a hereditary disorder 44.1% believed epilepsy is a form of mental illness, 11% of participants thought that epilepsy is caused by evil spirits, 57.3% believed that epilepsy patients die because of epileptic seizures. There were also many students who held negative attitudes towards patients with epilepsy in regard to major life milestones such as marriage and having children. 16.7% indicated that it presents an impediment in participation in sports, approximately 6.2% objected to marrying someone with epilepsy, Moreover 11.5% thought they should not have children and, the study showed 46.3% would not allow their child to play with a child with epilepsy. Moreover 14.5 afraid to live with someone with epilepsy. the study showed 6,6 % objected accept working with a patient with epilepsy.

Conclusions: The level of awareness, knowledge, and attitudes of students at King Khalid toward epilepsy were acceptable regarding this study. However, the negative attitudes and misconceptions still exist. Further studies are needed to determine methods of overcoming these negative attitudes and misconceptions toward epilepsy.

Keywords: Epilepsy awareness; Knowledge; Attitudes; students at king Khalid University.

1. Introduction

Epilepsy affects nearly 50 million people worldwide. It is one of the most common and dangerous neurological diseases (Sander& Josemir, 2003) where 80% of them are in developing regions. People with epilepsy and their families can suffer from stigma and discrimination in many parts of the world. Although this disorder is very common in the Kingdom of Saudi Arabia, with a prevalence rate of 6.54 per 1000. (Alhazzani et al,2016., Alhadyan et al, 2018). A plan should be present to target Saudi Arabian community from different levels of education and different regions for greater education to lower this stigma of epilepsy. (Al-Dossari et al,2018) There are many misconceptions about people's knowledge and their attitudes about epilepsy, which affect people's behavior towards epilepsy patients. Epilepsy affects individuals of all ages and genders and places high physical, mental, financial and social on these individuals. (Hermann, Seidenberg, Bell, Woodard, Rutecki, & Sheth,

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2000., Kanner & Palac,2000., Gilliam, Hecimovic, & Sheline,2003). Prevalence rates vary worldwide from society to another due to the neglect or reluctance of large and varying numbers in these communities for medical consultation. The spread of accidents, poor economic and social conditions, and negative attitudes towards epilepsy patients leads to the concealment of the disease from others (Banerjee, Filippi, & Hauser, 2009). Improvement of the public knowledge and attitudes toward epilepsy may efficiently help the family physicians to convey better health care to the epileptic patients and their families and can effectively improve the primary care services conducted to patients with epilepsy. (Alaqeel & Sabbagh, 2013)

Study of (Kabel, Algethami, Algethami, Alzahrani, Almutairi & Almutairi, 2020) was conducted in three health-related science colleges in Taif University. A questionnaire was distributed to students at these colleges. Results are: more than 80% of the participants have heard or read about epilepsy. About half of them had witnessed a seizure attack. More than three quarters of the participants thought that epilepsy is a neurological disease. In total 97% of the participants stated that convulsions are the main manifestations of epilepsy. In total 77.7% of the participants selected the medical treatment and follow-up as the most effective treatment of epilepsy. More than three quarters of the participants agreed with that epileptic woman can get married and have children. About 90% agreed of working with epileptic persons and become a close friend of them. About half of the participants believed that the equal job opportunity for epileptic and normal persons should be practiced.

A number of studies have reported that the level of knowledge and the trend towards epilepsy vary from society to another and depend on the educational level (El-Tallawy et al 2013., Hills, & MacKenzie,2002., Kobau, &Price,2003., Shehata, & Mahran,2001) Knowledge about epilepsy is not widespread in developed countries (Kobau, &Price,2003) and this knowledge gap in developing countries appears to be worse. Many studies have described lack of awareness and lack of information about epilepsy as a disease, as well as negative attitudes towards epilepsy patients themselves. The lack of knowledge about the causes and occurrence of epilepsy and even its management at the time of the occurrence makes the situation even more serious in those countries. (Shehata, & Mahran,2001). His study (Watten& Watten,1999) indicates that epilepsy patients suffer from social isolation, anxiety, insufficient self-sufficiency, social withdrawal, loss of self-confidence and a weak opportunity to learn social skills. More studies (Morrell,2002., Baker, Jacoby, Buck, Stalgis& Monnet,1997) add to the impact of social stigma on personal relationships, public health, employment opportunities, frustration and overall quality of life. In a study conducted in 15 European countries, about half of patients suffered from epilepsy. The results refer to the quality of life among people with epilepsy which is not ideal. Additionally, people with epilepsy experience many forms of discrimination, which can negatively affect their way of life (Bhalla et al 2012). Misconceptions regarding epilepsy among communities that are less educated, and have inadequate treatment options, might generate false beliefs, which could lead to further difficulties among individuals affected by this disorder [Jacoby & Austin,2007]. In developing countries, where the incidence and prevalence of epilepsy are higher than those in developed countries, the stigma of epilepsy adds more burden to the patients who are already suffering from poor economic situations and inadequate medical services (Baskind & Birbeck.2005., Radhakrishnan,2009., Al-Khateeb & Al-Khateeb,2014).

Prevention is accomplished by raising awareness among communities and healthcare providers [Caveness,1980] As a result, several studies were conducted to measure the knowledge and conceptions of the public about epilepsy.

Despite the progress made in diagnosing, classifying, and treating epilepsy worldwide, little is known about the knowledge and attitudes related to epilepsy. There is a lack of studies conducted on university students in Saudi Arabia especially the Asir region. As a result, several studies were conducted to measure the knowledge and conceptions of the public about epilepsy and their attitudes toward epilepsy patient (Daoud, Al-Safi, Otoom, Wahba & Alkofahi,2007). There are no published studies that were conducted among university students of different faculties in King Khalid University. There is, however, one recent study that was conducted only among people in Asir region to assess awareness, knowledge, and attitudes toward epilepsy. The study was conducted using a validated self-administered questionnaire to assess awareness, knowledge, and attitudes toward epilepsy and the sociodemographic data of the participants. Results showed the level of epilepsy awareness in the Asir region's population is relatively poor and needs improvement (Alhazzani et al, 2016). A recent study reviewed the published research on the psychosocial aspects of epilepsy in Arab countries in the past three decades and concluded that negative attitudes and misconceptions toward people with epilepsy are still widespread in these countries (Al-Khateeb & Al-Khateeb,2014). The purpose of this study (Alomar, Kadi, Alabbas, Aljeddawi, Alsulaiman , Baesa & Sabbaghm2020) was to assess the level of awareness of different aspects of epilepsy, and attitudes toward epilepsy of students at King Abdulaziz University. This cross-sectional study included 255 participants from multiple health specialties. Results showed that the level of awareness among medical students was higher than that among students of other specialties with progressive improvement over the study years.

Another study conducted among university students and schoolteachers in Saudi Arabia showed that the belief in possession by Jinns (demons or devils) was still prevalent in Saudi society; about half of university students believed in it (Obeid, Abulaban, Al-Ghatani, Al-Malki & Al-Ghamdi, 2012). While a study (Muthaffar & Jan,2014) in Qassim indicated that the public's attitudes and awareness of epilepsy are very good, however, knowledge about this medical condition is still insufficient.

In addition to a study conducted among university students in Kuwait which revealed that university students had limited knowledge about epilepsy and its causes. The aim of the study was to assess the level of awareness of various aspects of epilepsy, and attitudes towards epilepsy among K.K. University students in medical and healthcare related to them. It also aimed to assess whether the level of knowledge and attitude improved throughout the school years. By comparing pre-clinical year students to clinical year students, the results showed that the level of awareness among medical students was higher than that of students in other disciplines, with a gradual improvement over the years of study (Altowayan et al,2019). On the other hand, this study aimed to describe the knowledge and perceptions about epilepsy and the attitudes toward people with epilepsy among university students in Yemen. A self-administered questionnaire was completed by 1155 students. About 22% and 10% believed that evil spirits and an evil eye cause epilepsy, respectively. Similarly, 12% believed that children with epilepsy (CWEs) should be isolated from other children, while 12% and 14% thought that PWEs should not get married and should not have children, respectively. Approximately 23% of the students would not allow their child to play with CWEs, and 37% would not employ PWEs in a clerical job. Furthermore, 64% of the students would not agree to marry PWEs. Some misconceptions were strongly linked to attitudes toward PWEs (Al-Eryani, Saied, Alddin, Saber Al-Sobaihi, Wesam Lutf & Al-Taiar, 2015).

And this cross-sectional study aimed to assess the knowledge about epilepsy and the attitudes toward people with epilepsy and their predictors among university students in Jordan. The results showed that male students, students of humanities, and students with a low socioeconomic status tended to have more negative attitudes toward people with epilepsy. (Hijazeen, Abu-Helalah, Alshraideh, Alrawashdeh, Hawa, Dalbah, Abdallah,2014).

Despite advances in the diagnosis, classification, and management of epilepsy worldwide, little is known about the knowledge and attitudes regarding epilepsy. There is a lack of studies among highly educated people. Accordingly, the objective of our study is to assess the level of awareness, knowledge about epilepsy and the attitudes towards patients with epilepsy using a representative sample of King Khalid University.

2. Method

2.1. Study population:

This study had a descriptive and cross-sectional design. The study was conducted The 1st, 2nd, 3rd, and 4th year students who were in the College of Education, Physiotherapy and Home Economics and the College of Health Sciences at King Khalid University in the academic year of 2020–2021. The original study population consisted of (255) female students from King Khalid University. The final sample consisted of 227 samples, age ranged from 18 - 25 years, average age: 20, 10 years, sexually transmitted diseases. Deviation: 1.3 years.

2.2. Data collection tool:

Data collection tool consisted of two parts. In the first part, sociodemographic and epilepsy-related questions the second part comprised the Epilepsy Level of awareness, knowledge, and Attitudes. It was developed by the researcher.

2.3. Epilepsy awareness, knowledge and attitude scales:

The questionnaire, which had been translated into Arabic, consisted of 17 questions [see the Appendix]. [Q1–Q4] evaluate the awareness of the interviewee about the disease. [Q5–Q10] evaluate the knowledge of the interviewee about the disease. [Q11–Q17] are about the attitudes toward patients with epilepsy. The majority of the questions were derived after reviewing various knowledge, attitudes, beliefs and practices

Here are other tools used by other groups studying epilepsy (Muthaffar & Jan,2014., Altowayan et al,2019., Al-Rashed et al,2009). Demographic data including marital status and college type [theory-applied] were also collected (Table 1). Questionnaire designed to survey awareness, knowledge and attitudes about epilepsy". Answers to the questions via *Yes* or *No* choices, and I don't know. "Yes" response coded as 3, "No" coded as 2, and "I don't know" coded as 1. The survey is hosted by Google form and submitted via WhatsApp messenger. Objectives of the study were explained to participant, and informed consent in Arabic language was taken before proceeding to answer the questions. the participants without any personal or family history of diagnosed epilepsy. Awareness regarding epilepsy comprised 4 questions. A total score was calculated by adding the scores on all 4 questions. The minimum score was 4, and the maximum was 12 with a mean score = [1.53], standard deviation [SD = 8.49] in the present sample.

Knowledge regarding epilepsy comprised 6 questions. A total score was calculated by adding the scores on all 6 questions. The minimum score was 6, and the maximum was 18, while the mean score = 13.41 [SD = 2.10]

attitudes toward epilepsy comprised 7 questions a total score was calculated by adding the scores on all 7 questions. The minimum score was 7, and the maximum was 21 while the mean score = 15.02 [SD = 2,10].

2.4. psychometric properties:

The reliability coefficients were calculated by Cronbach's alpha, Spearman, Braun and Guttman methods. The reliability coefficients of the scale were all acceptable and ranged between (0.73-0.77).

Table (1): The reliability coefficients

Item	N of Items	Cronbach's Alpha	Spearman-Brown Coefficient	Guttman Split-Half Coefficient
awareness:	4	.62	.73	.73
Knowledge:	6	.48	.51	.51
Attitude:	7	.63	.52	.50
Total	17	.77	.73	.73

The validity was verified by exploratory factor analysis, and the results of the statistical analysis showed that the scale had acceptable validity coefficients

Table (2): The saturation of the paragraphs on the three dimensions of the scale assessing the level of awareness, knowledge, and attitude towards epilepsy

First factor		Second factor		Third factor	
number	Component	number	Component	number	Component
1	.381	5	.398	11	.338
2	.512	6	.412	12	.507
3	.611	7	.399	13	.436
4	.402	8	.411	14	.724
		9	.347	15	.336
		10	.409	16	.318
				17	.371
total Eigenvalues	4.23		1.99		1.39
% of Variance	24.91		11.72		8.16
Cumulative %			44.80		

2.5. Data analysis:

In the present sample, all questionnaire data were extracted into an excel worksheet for translation and then exported into SPSS [version 20] for further tabulation and subsequent statistical analyses. Both descriptive and inferential statistics were calculated with numbers and percentages. A p-value of 0.05 [95%] confidence interval [CI] was used to determine statistical significance. To evaluate predictors for the outcome variable, all continuous variables deemed as nonparametric, so we used Mann-Whitney U test or the Kruskal-Wallis test to determine their significance.

Table (3): Description of sociodemographic variables

Sociodemographic Variables.	N [%] [n = 227]
Marital status	
Unmarried	203 [89.4%]
Married	24 [10.6%]
College	
Education,	181[79.7%]
Physiotherapy	22[9.7%]
Health Sciences	13[5.7%]
Home Economics	11[4.8%]

3. Results

3.1. Awareness of epilepsy:

Table 2 describes the state of knowledge about epilepsy among the study sample. It was found that the epileptic group knew more about the various methods used for diagnosing epilepsy almost all had heard about epilepsy 44.9%. Only 83.7% have never had any information on how to treat a patient with epilepsy. [5.7%] have already taken care of someone with an epileptic seizure. The percentage of people think non-medical treatment is beneficial for epilepsy 80.6% and %13.2% do not know how to do first aid to deal with epileptic seizures.

3.2. Knowledge about epilepsy:

Almost 32.6% don't know the cause of epilepsy while 4% said it can be contagious. 59% believed that it was a hereditary disorder. 44.1% believed epilepsy is a form of mental illness. 11% of participants thought that epilepsy is caused by evil spirits, 57.3% believed that epilepsy patients die because of epileptic seizures. (Table 4)

3.3. Attituded about epilepsy:

A large percentage [16.7%] believed that a patient with epilepsy should not participate in sports activities, surprisingly; approximately 6.2% objected to marrying someone with epilepsy. Moreover, 11.5% thought they should not have children. Similarly, the study showed 46,3% would not allow their child to play with a child with epilepsy. Almost [5.3] think that a patient with epilepsy cannot drive a car; moreover, [14.5] were afraid to live with someone with epilepsy. The study showed that 6,6 % objected working with a patient with epilepsy. (Table 4)

Table (4): Awareness, knowledge, and attitudes regarding epilepsy [n = 227]

Statement	Yes N [%]	No N [%]	I don't know N [%]	Mean	Std. Deviation
awareness:					
Do you have any information on how to treat a patient with epilepsy?	102 [44.9%]	100 [44.1%]	25[11.0%]	2.34	.668
Have you already taken care of someone with an epileptic seizure?	13 [5.7%]	190[83.7%]	24 [10.6%]	1.95	.402
Do you think non-medical treatment [punching-cautery] is beneficial for epilepsy?	19 [8.4%]	183[80.6%]	25 [11.0%]	1.97	.440
Do you know how to do first aid to deal with epileptic seizures?	82[36.1%]	115 [50.7%]	30[13.2%]	2.23	.665
Knowledge:					
5. Do you know what is the cause of epilepsy?	115[50.7%]	74[32.6%]	38[16.7%]	2.34	.749
6. Do you think epilepsy is contagious?	9[4%]	205[90.3%]	13[5.7%]	1.98	.312
7. Do you think epilepsy is hereditary?	134[59%]	58[25.6%]	35[15.4%]	2.44	.746
8. Do you think epilepsy is a form of mental illness?	100[44.1%]	106[46.7%]	21[9.3%]	2.35	.643
9. Do you think epilepsy is caused by evil spirits?	25[11%]	186[81.9%]	16[7%]	2.04	.424
10. Do you think that epileptic patients die of epileptic seizures?	130[57.3%]	27[11.9%]	70[30.8%]	2.26	.903
Attitude:					
11. Do you think that epilepsy patients do not participate in sports activities?	38[16.7%]	155[68.3%]	34[15.0%]	2.02	.564
12. Do you think a patient with epilepsy should not be married?	14[6.2%]	196[86.3%]	17[7.5%]	1.99	.370
13. Do you think that a patient with epilepsy does not live up to having children?	26[11.5%]	177[78.0%]	24[10.6%]	2.01	.470
14. Do you think that an epilepsy patient should not play with your son or daughter?	105[46.3%]	84[37.0%]	38[16.7%]	2.30	.738
15. Do you think that a patient with epilepsy does not drive a car?	12[5.3%]	198[87.2%]	17[7.5%]	1.98	.358
16. Are you afraid to live with someone who has epilepsy?	33[14.5%]	163[71.8%]	31[13.7%]	2.01	.532
17. Do you accept working with a patient with epilepsy?	188[82.8%]	15[6.6%]	24[10.6%]	2.72	.643

Table (5): Overall results of awareness, knowledge and attitude about epilepsy

	Mean	Std. Deviation	weight mean	percent	Arrangement
awareness:	8.49	1.53	2.12	71%	3
Knowledge:	13.41	2.10	2.23	74%	1
Attitude:	15.02	2.10	2.15	72%	2
Total	36.92	4.60	2.17	72%	

Table 5 presents the distribution. The mean total score of the students obtained awareness was 8.49 ± 1.53 while their total percent 71%, the knowledge was 13.41 ± 2.10 while their total percent 74%, and the attitude was 15.02 ± 2.10 while their total percent 72%.

Table (6): Relationships among awareness, knowledge, and attitudes regarding epilepsy based on participant sociodemographic characteristics [n = 227]

	awareness:		Knowledge:		Attitude	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Marital status						
Unmarried	8.49	1.55	13.32	2.13	14.93	2.16
Married	8.54	1.38	14.21	1.59	15.75	1.39
1 p-value	.81		.02*		.03*	
College (Theoretical - practical)						
Education,	8.45	1.45	13.35	1.98	14.98	1.95
Physiotherapy	8.64	1.84	13.73	2.66	15.45	2.84
Health Sciences	8.69	2.10	13.23	2.95	15.15	3.02
Home Economics	8.73	1.56	14.00	1.67	14.64	1.75
2 p-value	.62		.61		.51	

1p-value has been calculated using manne-whitney u test

2 p-value has been calculated using kruskal-wallis

*Significant at $p \leq 0.05$

Table (7): Difference between awareness, knowledge, and attitudes regarding epilepsy based on participant sociodemographic characteristics [n = 227]

Statement	Marital status	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	Sig.
awareness:	Unmarried	113.65	23071.50	2365.50	-.24	.81 Not sig
	Married	116.94	2806.50			
	Total					
	Theoretical	116.26	21391.50	3540.50	4486.50	.27 Not sig
	practical	104.34	4486.50			
Total						
Knowledge:	Unmarried	110.55	22441.00	1735.00	-2.34	.02 SIG
	Married	143.21	3437.00			
	Total					
	Theoretical	113.57	20896.00	3876.00	20896.00	.83 Not sig
	practical	115.86	4982.00			
Total						
Attitude:	Unmarried	110.82	22496.50	1790.50	-2.17	.03 SIG
	Married	140.90	3381.50			
	Total					
	Theoretical	112.07	20620.00	3600.00	20620.00	.35 Not sig
	practical	122.28	5258.00			
Total						
Total scale	Unmarried	110.59	22449.50	1743.50	-2.29	.02 SIG
	Married	142.85	3428.50			
	Total					
	Theoretical	113.63	20908.50	3888.50	20908.50	.86 Not sig
	practical	115.57	4969.50			
Total						

Table (6) reveals the correlation between sociodemographic variables and participants' knowledge, awareness, and attitudes about epilepsy that were conducted (Table 3). Based on the results, there was a

significant awareness ($p = 0,81$) differed based on marital status for the benefit of married, knowledge ($p = 0.2$) and attitudes ($p = 0.3$). There were no significant differences in awareness ($p = 0.62$), knowledge or ($p = 0.61$) attitudes ($p = 0.51$), as a function of College (Theoretical - practical).

4. Discussion

Epilepsy is a chronic disease, with patients frequently experiencing seizures that affect their social life and interfere with daily activities. Prior notions were that epilepsy is a form of mental illness which is common misconceptions [Hills & MacKenzie, 2002]. Because of lack of knowledge, attitudes, and awareness regarding the etiology of this condition, the public is inclined to disengage from people with epilepsy. The present study provides further understanding regarding public epilepsy knowledge, awareness, and attitudes. In developed countries such as Italy, it was found that 96% of university students had heard about epilepsy compared to 87.6% in our study and 86.5% in a Malaysian study (Ab Rahman, 2005; Mecarelli et al., 2007). However, even in developed countries, knowledge about the etiology of epilepsy is still misunderstood. About 45% of university student participants in Italy (Mecarelli et al., 2007) believed epilepsy was a psychiatric disease, 14% thought it could be contagious, and 25% believed it might result from stress. In Malaysia, the situation is similar, neurological illness. However, only 5.3% believed it was related to evil spirits (Ab Rahman, 2005).

A major problem is that a sizeable ratio of highly educated persons in developing countries think epilepsy is related to evil spirits and the evil eye. In Saudi Arabia, For instance, Muthaffar and Jan reported that 50% had observed a person experiencing an epileptic seizure, and 48% knew someone with the disease. 77.4% of respondents had prior knowledge of epilepsy (Obeid et al, 2012) that reported that 96.1% of Asir residents had heard about the disease. Most knew someone with epilepsy, and 59.1% had witnessed a seizure (Alhazzani et al,2016). The present results are slightly discrepant from one study in Iran, whereby 76.6% of respondents were aware of epilepsy, and a slightly higher proportion knew someone else with epilepsy (58.1%) (Almutairi, Ansari, Sami & Baz,2016). Moreover, in Malaysia, students had different views on the subject, as they exhibited slightly less knowledge about epilepsy, (69%) in comparison with the present study (Hasan &Khan,2011 - Falavigna et al,2007). In Brazil, 88.8% of respondents reported knowledge regarding epilepsy, 67% knew someone with epilepsy, and about 60% had witnessed someone having a seizure [Falavigna,2007]. In terms of attitudes, only 7.9% of respondents in the present study reported they would protest against their children associating or playing with a person who had epilepsy which is much less than other previous studies done in Majmaah showed (49%) and in Riyadh (27%) where they do not allow their children to play with a child with epilepsy (Hijazeen,et al,2014- Almutairi et al,2016). Our respondents (45.1%) reported that they would not protest against their children marrying a person with epilepsy. People are willing to marry a person with epilepsy showing that people in Qassim region are more accepting and with better attitude (Hijazeen, etal,2014). Similar views have been observed in other studies throughout Saudi Arabia (Alhazzani et al,2016., Alzubaidi, Alsudairy & Alzubaidi, 2017). Our findings are also consistent with Iranian study in which 82.5% reported a willingness to allow their child to play with a peer with epilepsy, and 28.0% would allow their children to marry someone with epilepsy (Almutairi et al,2016). Different studies in Arab countries have considered epilepsy as a mental disorder or a neurological disease (Alhazzani et al,2016., Almutairi et al,2016). This suggests that knowledge about epilepsy and the attitudes towards patients with epilepsy are generally deficient and negative.

5. Conclusion

The public's general attitudes and awareness regarding epilepsy in the present study were acceptable; however, knowledge of this medical condition is still inadequate. Most still reported misconceptions, hence, more campaigns are needed in order to increase society's epilepsy awareness, obtaining assistance from governmental agencies, health institutions, mass media, and other health-related organizations. More education on this subject will hopefully strengthen the public's understanding as to how to properly accommodate individuals living with epilepsy.

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Conflict of interest: Authors have no conflicts of interest with regard to the data produced. We confirm that we have read the Journal's position on issues involved in ethical publication and affirm that this report is consistent with those guidelines.

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