



Evaluation of Teachers Knowledge, Attitude and Practice towards Persons with Epilepsy: There is Need for Educational Interventions

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Authors' contributions

This work was carried out in collaboration between both authors. Author EUI designed the study, wrote the protocol, managed the literature searches and wrote the first draft of the manuscript. Author UMI performed the statistical analysis and managed the analyses of the study. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JAMPS/2018/42530

Editor(s):

(1) Hamdy A. Sliem, Professor, Internal Medicine, Suez Canal University, Egypt and College of Dentistry, Qassim University and EL-Jouf University, Saudi Arabia.

Reviewers:

(1) Abhishek Raj, India.

(2) Nasiru Lawal, Usmanu Danfodiyo University Teaching Hospital, Nigeria.

Complete Peer review History: <http://www.sciencedomain.org/review-history/25444>

Original Research Article

Received 14th April 2018
Accepted 25th June 2018
Published 7th July 2018

ABSTRACT

Background: Epilepsy is one of the most common neurological disorders globally. The discrimination and social stigma that surround epilepsy are in many cases a greater burden than the seizures itself. Students with epilepsy often find themselves confronted with social barriers that prevent them from academic achievements. This is in addition to the limitation that the disease itself has already placed on them. School teachers play a central role in determining access to education of the students living with epilepsy and may mediate epilepsy-associated stigma. Teachers' knowledge regarding epilepsy is an essential element of the educational experiences of people with the condition. A proper assessment of the knowledge and attitudes of schoolteachers is therefore pertinent to help identify the need for educational interventions.

Objective: This study was aimed at evaluating the knowledge, attitude and practice of teachers towards persons with epilepsy to determine the need for an educational intervention.

Methods: The study was a descriptive cross-sectional study using validated and pre-tested semi-structured questionnaires to interview teachers working in selected primary and secondary schools in Uyo, Nigeria.

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Results: 66.5% of the teachers had poor knowledge of epilepsy. 34.1% of them had a negative attitude towards people with epilepsy. Only 22.3% of the teachers could provide appropriate first aid management measures for epileptics during seizure episodes. Sociodemographic variables such as gender, years of teaching experience, level of teaching and school category had no significant impact on the teachers' knowledge of epilepsy. However, positive attitude towards persons with epilepsy was significantly associated with the years of teaching experience and the level of teaching.

Conclusion: The knowledge of epilepsy amongst the teachers is poor. The level of negative attitude amongst teachers towards people with epilepsy is worrisome. There is a dire need for educational interventions by healthcare professionals. Pharmacists can and should play a leading role in this regard.

Keywords: Epilepsy; knowledge; attitude; teachers.

1. INTRODUCTION

Epilepsy is a chronic non-communicable disorder of the brain that affects people of all ages [1]. It is characterised by recurrent seizures, which are sometimes accompanied by loss of consciousness and control of bowel or bladder function. Seizure episodes are a result of excessive electrical discharges in a group of brain cells. Seizures can vary from the briefest lapses of attention or muscle jerks to severe and prolonged convulsions. Seizures can also vary in frequency, from less than 1 per year to several per day [2].

Approximately 50 million people worldwide have epilepsy, making it one of the most common neurological diseases globally [2]. The estimated proportion of the general population with active epilepsy at a given time is between 4 and 10 per 1000 people, with some studies in low- and middle-income countries suggesting that the proportion is much higher in these regions, between 7 and 14 per 1000 people. Nearly 80% of people with epilepsy live on low- and middle-income countries, with about three-fourths of such persons not getting the treatment they need [2].

Although the social effects vary from country to country, the discrimination and social stigma that surround epilepsy worldwide are often more difficult to overcome than the seizures themselves. People living with epilepsy can become targets of prejudice. The stigma of the disorder can discourage people from seeking treatment for its symptoms, so as to avoid becoming identified with the disorder. This contributes to the 'treatment gap', whereby a majority of people living with epilepsy do not receive the necessary medical care available for

proper control and management of the condition [3].

In ancient times, persons with epilepsy were perceived as being "possessed", and up till now a large number of people still hold this belief, as well as the belief that epilepsy is contagious. Despite various educational programs implemented in the general public to raise awareness about the condition, the misconceptions of epilepsy continue and have not improved much over time. In many parts of Africa, there is still a lot of superstition about epilepsy [4].

Apart from the disability associated with repeated seizures, psycho-behavioural problems, or side-effects of anti-epileptic medications, the social stigma arising from knowledge about the disease is often a major handicap to people living with this condition. Students with epilepsy still find themselves confronted with social barriers that prevent them from academic achievements, in addition to the limitation that the disease itself has already placed on them [5]. Among these multi-faceted factors, some studies find that stigma and discrimination against epileptic students are probably more devastating than the seizures themselves [6].

Misunderstanding of, negative attitudes towards, and prejudice against people with epilepsy are likely to contribute to perceived feelings of stigma or discrimination among patients with epilepsy. It is believed that misconception and social discrimination may affect the quality of life in epilepsy patients more than the condition itself [7]. Evaluating the knowledge, attitude and understanding of epilepsy is the first step towards alleviating discrimination. Before implementing any public policy targeted at improving the quality of life of epilepsy patients

by promoting their acceptance in society, it is important to know what the target population believes and does with respect to the disease in question. Hence, there is a clear indication to objectively assess the community's level of awareness about this ailment and subsequently work towards improving this level [8]. The social discrimination against epilepsy mainly affect schoolchildren as they are in their growing age with social interactions at multiple levels [9].

Other than the parents, the attitude of teachers with regards to epilepsy is likely to have an important impact on whether children with epilepsy are able to continue schooling or not [10]. A study has shown that a significant percentage of children with epilepsy do not receive adequate levels of formal education [11]. This educational underachievement is likely to be due to many factors, including the stigma and discriminations experienced by students with epilepsy [12]. Reports have also indicated that children with epilepsy are an educationally vulnerable group, and the education staff needs to be mindful of the additional support that they may require, such as proper first aid care in seizure occurrences [1]. School teachers play a central role in determining access to education of the students living with epilepsy and may mediate epilepsy-associated stigma [13]. Teachers' attitude based on their knowledge and beliefs play an immense role in the upbringing of epileptic children. Wrong beliefs cause social discrimination against persons with epilepsy [6]. In addition, teachers' knowledge regarding epilepsy is an important element of the educational experiences of people with the condition, and thus should be properly assessed [1]. In order to ensure a holistic approach to formal education of students living with this condition, a clear understanding of their teachers' knowledge about epilepsy and their attitude towards the disease will be worthwhile. A proper assessment of the knowledge and attitude of school teachers is therefore pertinent so as to help identify the need for educational interventions and also guide policy recommendations that may need to be taken to ensure the proper integration and welfare of students living with epilepsy into the society, thus enhancing their academic performance and general quality of life [1]. This study is therefore aimed at evaluating the knowledge, attitude and practice of teachers towards persons with epilepsy to determine the need for an educational interventions.

2. METHODS

The study was a descriptive cross-sectional study using semi-structured questionnaires to interview teachers working in selected primary and secondary schools in Uyo. The instrument used in the evaluation was adapted from a previous study India with some modifications [6]. The modified questionnaire was then subjected to face and content validation and was also pre-tested in a pilot study. Designed in English language, the study instrument was structured to elicit demographic information and to test the knowledge of the teachers on the cause of epilepsy, the first-aid management of an epileptic attack, and their attitude towards students or pupils with epilepsy. The teachers were not allowed to consult any reference material during the course of the interview.

The study was conducted in 13 primary and 9 secondary schools situated in urban and rural parts of Uyo. Uyo Local Government is a creation of the Federal Government of Nigeria. Initially created as a province in 1959 by the colonial masters, it is now one of the 31 local government areas that make up Akwa Ibom State - Nigeria. It serves as the state capital and is bounded by Abak, Itu, Uruan, Ibesikpo-Asutan, and Etinan local government areas. Uyo is considered to have a high level of educational activities with several government and privately owned and primary and secondary schools.

The primary schools selected for this study were;

1. Kings and Queens Montessori Nursery and Primary School, Plots 11 and 12, Unit G, Ewet Housing Estate, Uyo.
2. Monef Kiddies Nursery and Primary School, Ben Udoh Street, Ewet Housing Estate, Uyo.
3. St. Philips Catholic Primary School, Useh-Offot, Uyo.
4. Qua Iboe Church Nursery and Primary School, Oku, 112 Ikot Ekpene Road, Uyo.
5. Government School, Afaha Ubeh, Itam, Uyo.
6. University Staff School, University of Uyo Annex campus, Ikot Ekpene Road, Uyo.
7. Christ the King International Nursery and Primary School, Dominic Utuk Avenue, Uyo.
8. Bricks Academy Montessori School, H-Line, Ewet Housing Estate, Uyo.
9. Awefort Manor Preparatory School, Plot 78 K-Line Ewet Housing Estate, Uyo.

10. Qua Iboe Church Nursery and Primary School, 112 Nwaniba Road, Ewet Offot, Uyo.
11. Joyful Family Nursery and Primary School, 12 Akpan Eno Street, Uyo.
12. Okonee Nursery and Primary School, 111 Abak Road, Uyo.
13. St Michaels A.C Primary School, Effiat Offot (by State Secretariat), Abak Road, Uyo.

The secondary schools selected for this study were;

1. King Solomon International Schools, No 9 Ben Udoh Street, Ewet Housing Estate, Uyo
2. Uyo High School, Oron Road, Uyo.
3. Government Technical College, Ewet, Nwaniba Road, Uyo.
4. Adiaha Obong Comprehensive Secondary School, Nwaniba Road by Ben Udo Street, Uyo.
5. City Union Academy, 16 Donald Etiebiet Avenue, Ewet Housing Estate, Uyo.
6. St Brian’s Model College, Dominic Utuk Avenue, Uyo.
7. Community Comprehensive Secondary School, Four Towns, Uyo.
8. St Patrick’s School, Iboko Offot, Abak Road, Uyo.

Sample selection was done on set inclusion criteria. The sample size (n) was calculated according to the formula described by Yamane; 1967 [14]. The calculated sample size was 357 teachers. However, a total 450 teachers were interviewed. Measures were taken to ensure that data were not collected from a respondent more than once. The study period was between November 2017 and February 2018. Quantitative data were analysed using Statistical Program for the Social Science (SPSS) version 16.0 computer package with descriptive statistics. A prior level of significance $P < 0.05$ was used for all comparisons. Ethical clearance and formal approval for this research was obtained from the Akwa-Ibom State Ministry of Health.

3. RESULTS

Although questionnaires were issued to 450 teachers, 423 filled questionnaires were retrieved of which only 400 were suitable for analysis. The socio-demographic data of the respondents is as presented in Table 1.

3.1 Teachers’ Knowledge of Epilepsy

Three hundred and eighty-two (95.5%) of the respondents claimed to have heard or read about epilepsy, while 4.5% (18) reported to have not heard or read about epilepsy. One hundred and eighty- four (48.2%) of the respondents that

Table 1. Socio-demographic data of the teachers

Variable	Frequency	Proportion (%)
Gender		
Male	151	37.8
Female	249	62.3
Years of teaching experience		
1-5 years	102	25.5
6-10 years	132	33.0
11-15 years	92	23.0
16-20 years	47	11.8
21 years and above	27	6.8
Level of teaching		
Primary School	236	59
Secondary School	164	41
School category		
Private	269	67.3
Government	131	32.8
Location of school		
Urban	345	86.3
Rural	55	13.8

heard about epilepsy got their knowledge of epilepsy from books, 29.1% (111) from the internet, and 15.7% (60) claimed to have heard about the condition from family/friends, while 7.1% (27) got their knowledge of epilepsy from personal experience/observation. Ten (2.5%) of the respondents had family members that had experienced seizure episodes, while 97.5% (390) did not. Six (1.5%) of the respondents at one time or the other had students with epilepsy in their classrooms, while 98.5% (394) did not.

Three hundred and sixty-one (90.3%) of the respondents correctly asserted that epilepsy was not a contagious disease, while 9.8% (39) claimed that epilepsy was contagious in nature. Thirty percent of the respondents (120) thought that children with epilepsy had a higher rate of insanity, 5.8% (23) were uncertain about it, while 64.3% (257) correctly stated that children with epilepsy did not have a higher rate of insanity. Two hundred and fifty-one (62.8%) believed that epilepsy was a chronic brain condition that could neither be cured nor controlled, 4% (16) were not sure, while 33.3% (133) believed that the condition could be cured or controlled. 41.8% (167) of the respondents believed that persons with epilepsy had normal intelligence with respect to the general population, 31% (124) thought they had below average intelligence, 9.5% (38) thought they had above average intelligence, while 17.8% (71) were uncertain as to the level of intelligence of persons with epilepsy.

One hundred and sixty (40%) of the respondents correctly identified possible causes of epilepsy such as abnormal neural discharges, accidents and head injuries, genetic and congenital abnormalities while 21.8% (87) gave incorrect answers such as low blood sugar, heat, and spiritual attacks as causes of epilepsy. One hundred and fifty-three (38.3%) of the respondents admitted that they had no idea of the causes of epilepsy.

3.2 Respondents' Attitude toward Persons Living with Epilepsy

Two hundred and twenty (55%) of the respondents were afraid of having a student with epilepsy in their classrooms, and/or would rather have such student cured or seizures controlled before entering their classrooms, while 45% (180) did not mind having such students in their classrooms. Seven percent (28) of the respondents preferred to have all students with

epilepsy placed in a special classroom, while 93% (372) thought it was okay for such students to attend classes with the other children. Two hundred and ninety-four (73.5%) of the respondents claimed that they would allow their children to play or sit in the same class with a child with epilepsy, while 26.5% (106) admitted that they would not. Seventeen (4.3%) of the respondents claimed that they would allow their children to marry a person with epilepsy, while 95.8% (383) admitted that they would not.

3.3 Respondents' Knowledge of First Aid Measures to Manage Epileptic Seizures

Three (0.8%) of the respondents claimed to have some experience in performing first aid seizure management, while 99.3% (397) admitted that they had never performed first aid seizure management. When asked about how they would perform first aid seizure management, 22.3% (89) of the respondents gave correct answers involving procedures such as guiding the patient to lie down in a recovery position (sideways), removing obstacles to breathing such as ties and unbuttoning shirt collars, noting the duration of the seizure episode, removing objects in the environment that could cause physical harm or injury to the patient, and staying with the patient to provide comfort until they return to full consciousness etc. Seventy-four (18.5%) gave incorrect answers such as putting spoon between the teeth, tapping the person by the cheek until they regain consciousness, cutting fresh onion and placing it by the nostrils of the patient, mopping the patient's body with water until they regained consciousness etc. Two hundred and thirty-seven (59.3%) of the respondents admitted to not knowing any first aid measure to manage epileptic seizures.

3.4 Relationship between Socio-Demographic Variables and Respondents' Knowledge of Epilepsy

Five items in the instrument assessed respondents' knowledge of the condition. Teachers that provided at least 3 correct answers were considered as having a good knowledge of epilepsy, while those who could not provide at least 3 correct answers were considered as having a poor knowledge of the condition. Analysis showed that of the 151 male respondents that were involved in the study, 97 (64.2%) had poor knowledge of epilepsy while 54 (35.8%) had good knowledge of epilepsy. Of the

249 female respondents that were involved in the study, 169 (67.9%) had poor knowledge of epilepsy while 80 (32.1%) had good knowledge of epilepsy.

Of the 102 respondents with 1-5 years of teaching experience, 67 (65.7%) had poor knowledge of epilepsy while 35 (34.3%) had good knowledge of epilepsy. Eighty-five (64.4%) of the 132 teachers with 6-10 years of teaching experience had poor knowledge of epilepsy, while 47 (35.6%) had good knowledge of the condition. Fifty-six (60.9%) of the 92 teachers with 11-15 years of teaching experience had poor knowledge of epilepsy, while 36 (39.1%) had good knowledge of the condition. Thirty-one (66.0%) of the 47 teachers with 16-20 years teaching experience had poor knowledge of epilepsy, while 16 (34.0%) had good knowledge of the condition. Of the 27 teachers with at least 20 years teaching experience, 19 (70.4%) had poor knowledge of epilepsy, 8 (29.6%) have good knowledge of epilepsy.

Amongst the 236 teachers that taught at the primary school level, 157 (66.5%) had poor knowledge of epilepsy, while 79 (33.5%) had good knowledge of the condition. We interviewed 164 teachers at the secondary school level, 98 (59.8%) of these teachers had poor knowledge of epilepsy, whereas 66 (40.2%) had a good knowledge of this condition.

With regards to the location of the school, 221 (64.1%) teachers out of a total of 345 teachers that taught in schools located in urban areas had poor knowledge of epilepsy, while 124 (35.9%) teachers had good knowledge of epilepsy. 175 (65.1%) of the 269 teachers that taught in privately owned schools had poor knowledge of epilepsy, while 94 (34.9%) had good knowledge of this condition. Amongst the 131 teachers that taught in government owned schools, 94 (71.8%) had poor knowledge of epilepsy, while 37 (28.2%) had good knowledge. Fifty-five of the teachers we interviewed taught in schools located in rural parts of Uyo. Forty-five (81.8%) of these teachers had poor knowledge of epilepsy, while 10 (18.2%) had a good knowledge of this condition.

A Chi square analysis to determine the association between sociodemographic variables of the teachers and their knowledge of epilepsy was carried out. For gender, the values ($X^2 = 0.557$, P-value = 0.262) were obtained, which indicates that there is no significant relationship

between gender on teachers' and their knowledge of epilepsy. Values of ($X^2 = 1.150$, P-value = 0.262) were obtained for years of teaching experience, showing an indication that the years of teaching experience of the teachers had no significant effect on their knowledge. For the level of teaching, the values ($X^2 = 0.596$, P-value = 0.325) indicated that the level of teaching did not influence the teachers' knowledge about epilepsy. Values obtained for the school category section ($X^2 = 1.197$, P-value = 0.120) also suggested that the respondent's knowledge was not determined by the school category, whether privately owned or owned by the government.

3.5 Relationship between Socio-Demographic Variables of Respondents and Their Attitude towards Persons Living with Epilepsy

Four items in the questionnaire assessed the teachers' attitude towards persons living with epilepsy. Respondents that provided at least 2 positive responses were considered as having positive attitudes towards persons living with epilepsy, while respondents with less than 2 positive responses were considered to have negative attitudes towards persons with epilepsy. The relationship between socio-demographic variables and teachers attitude towards people with epilepsy is as shown in Table 2.

4. DISCUSSION

We found that the awareness of epilepsy among teachers is quite high, with most of them claiming to have heard or read about epilepsy. This is comparable to the results of a similar study in India, where a 97% awareness rate was reported amongst school teachers [6]. In another study conducted in Kano, Nigeria, all of the respondents claimed to have read or heard about epilepsy [4].

Majority of the teachers had gained their awareness of the condition through books and the internet. This serves to underscore the importance of the internet as medium for education and sensitization of the general public on health issues such as epilepsy. However, it is important to note that most of the information about disease conditions available in most public media platforms are unregulated and may at times be inappropriate or misguided opinions of unqualified personnel. As such, it is pertinent that healthcare professionals, including pharmacists.

Table 2. Cross Tabulation chi-square test to assess relationship between socio-demographic data and positive attitudes towards persons with epilepsy

Socio-demographic factors	Attitudes		Total	Chi-square test	Significance
	Negative	Positive			
Sex:					
Male	55	96	151	0.772	0.220
Female	80	169	249		
Teaching experience:					
0-5 years	27	75	102		
6-10 years	54	78	132		
11-15 years	31	60	92		
16-20 years	12	35	47	5.963	0.013
21 years and above	8	19	27		
Level of teaching:					
Primary School	92	144	236		
Secondary School	49	115	164	2.805	0.043
School category:					
Private	89	180	269		
Government	49	82	131	0.338	0.332
School location:					
Urban	114	231	345		
Private	21	34	55	0.560	0.273

be encouraged to play a greater role in the dissemination of accurate information aimed at educating the general public concerning chronic conditions like epilepsy

A high proportion of the respondents accurately opined that epilepsy is not a contagious disease. This is commendable and is comparable to similar reports from India, South Korea and Indonesia [6,10,15].

Despite scientific evidence to the contrary, epilepsy has been considered from ancient times to bear a significant relationship with an increased risk of insanity in individuals with the condition [6]. Thirty percent of the teachers interviewed in this study believed that children with epilepsy had a higher rate of insanity. This finding is similar to reports obtained from a study in Thailand, where 29.9% of the teachers had shared the same view [5]. However, in a similar study in India, only 13.7% of the teachers believed that there was a positive relationship between epilepsy and insanity [1]. The belief that epilepsy is associated with a higher risk of insanity may lead to, or further fuel, the stigma surrounding patients with epilepsy. This further underscores the need for interventional programmes aimed at educating the public in order to correct such wrong assumptions and beliefs about this condition.

More than half of the teachers interviewed believe that epilepsy can neither be cured nor controlled. A publication by the National Society for Epilepsy in the Northwest of England posits that while current conventional antiepileptic drugs are not a 'cure' per se for epilepsy as they do not affect the underlying cause of the condition, complete seizure control is possible for the majority of patients with epilepsy by using these drugs [16]. Furthermore, it has been suggested that after 2 to 5 years of successful treatment and being seizure-free, drugs can be withdrawn in about 70% of children and 60% of adults without subsequent relapse [2].

About one-third of the teachers in this study were of the impression that people with the condition have below average intelligence. This finding is comparable a 2008 report by Thacker, et al [6]. It has suggested that people with severe epilepsy who continue to experience seizures were more likely to have difficulties with cognitive ability and brain function than others. In addition, longer periods of remission and effective seizure control were linked with fewer cognitive problems. However, the researchers pointed out that there is little reliable research in this area, and that the effect of the seizures per se is difficult to estimate due to many confounding variables [17]. Therefore, more research is necessary before a definitive conclusion can be reached.

Less than half of the teachers could correctly identify some causes of epilepsy with about forty percent of them asserting that they have no idea of the causes of epilepsy. This suggests a dearth of accurate information available to the general public with regards to the causes of epilepsy. The lack of adequate information and understanding of the condition plays a significant role in the apprehension with which the society tends to view epilepsy as well as the stigma suffered by persons living with this disease. As such, policies and interventional measures aimed at dispelling the aura of superstition and other wrong ideologies pertaining to the causes of epilepsy in the society are necessary in order to increase tolerance and support for persons living with the condition.

More than half of the teachers interviewed were afraid of having students with epilepsy in their classrooms and would rather have such students cured or under control before entering their classrooms. This is higher when compared to results from similar studies conducted in India, where 32.2% of the respondents were afraid of having students with epilepsy in their classrooms and Thailand, where only 9.8% of the respondents were afraid of having students with epilepsy in their classrooms [5,6]. This negative attitude may be attributed to the poor knowledge of the condition among the teachers and the general public. Seizure episodes usually occur unpredictably and may lead to a sense of apprehension and discomfort as the teachers may not know what to do during a seizure occurrence in the classroom. This reiterates the need for greater information dissemination with regards to epilepsy and its management, in a manner that targets teachers and the general public.

A significant proportion (about 7%) of the teachers preferred to have epileptics placed in special classrooms. Although a higher proportion of teachers who the same view has been reported; 20.8% in India and 15.1% in Thailand [5,6]. Our finding is worrisome and calls for action to eliminate the stigmatization of persons with this disease. Moreover, it is appalling to note that about ninety-six percent of the teachers interviewed admitted that they would not allow their children to marry an epileptic patient. In Thailand, 36.3% of the teachers interviewed share the same view, while 86.8% of the teachers interviewed in India were against the marriage of their children with an epileptic patient [5,6]. This clearly indicates the existence of a

social bias against marriage to persons with epilepsy in many societies, which may be due to the perception of epilepsy as being contagious as well as being a mental disorder or the erroneous belief that epilepsy has a spiritual origin.

During a seizure episode, first aid treatment needs to be administered to reduce the risk of further injury to the patient. Less than one percent of the teachers had ever performed first aid seizure management. This, however, may be due to the fact that most of the teachers had not witnessed a seizure episode before. The presentation of seizures, especially generalised tonic-clonic seizures, may generate panic in individuals who are not familiar with epilepsy and seizures.

Only about one-fourth of the teachers could correctly state appropriate first aid measures to be employed during a seizure attack with many of them providing measures that were inappropriate such as putting spoon between the teeth, tapping the person by the cheek until they regain consciousness, placing freshly cut onion into the nostrils of the seizure patient, and mopping the patient's body with water until they regained consciousness. These measures have been identified as being potentially harmful and grossly inadequate and are related to the mythical concepts of epilepsy from ancient times [18,19]. This further highlights the need for interventions that will enhance the knowledge of first aid seizure management measures among teachers as well as the general population to improve the capacity of the population to care for persons living with epilepsy in the society, particularly during seizure episodes.

We found that less than forty per cent of the teachers across both primary and secondary schools had relatively good knowledge of epilepsy. The knowledge of teachers about epilepsy tends to be diffuse but is in good keeping with reality and current social views. Epilepsy, despite being a common neurological disorder since ancient times has eluded the understanding of many people including teachers who should play a pivotal role in disseminating basic knowledge of epilepsy to their students [4].

Our results indicate that sociodemographic factors such as gender, years of teaching experience, level of teaching, a location of the school and category of the school has no significant impact on a teacher's knowledge of epilepsy.

About sixty-six per cent of the teachers had a positive attitude towards students with epilepsy. While this may appear to be encouraging, it is relatively low when compared to results of a study carried out in Kano, north-western Nigeria, where 82% of the teachers had a positive attitude to students with epilepsy [4]. However, this result has shown some improvement on a previous report from southern Nigeria which showed the widespread negative attitude towards epileptic patients in the Nigerian society [20]. A significant proportion of the teachers in our study expressed phobia towards students with epilepsy. This may consequently lead to epileptic students suffering social deprivations and discrimination in the educational system.

We observed that variables such as sex, school category and the location of the school did not have a significant effect on the attitude of the teachers towards people with epilepsy. However, the years of teaching experience and the level of teaching had a significant impact on the teacher's positive attitude towards persons with epilepsy. Teachers with more years of experience tended to have a more positive attitude towards persons with epilepsy. Also, teachers who taught in secondary schools had a better perception and a more positive attitude towards persons with epilepsy. Our observation is in consonance with a report in similar studies where individuals who had received a formal education were more likely to have positive attitudes about epilepsy and higher educational attainment of the teachers was significantly associated with good attitudes towards persons with this disorder [4,8].

5. CONCLUSION

The knowledge of epilepsy amongst the teachers is poor. The level of negative attitude amongst teachers towards people with epilepsy is worrisome. Sociodemographic factors such as gender, years of teaching experience, level of teaching, the location of the school and category of the school have no significant impact on a teacher's knowledge of epilepsy. However, the years of teaching experience and the level of teaching were identified as factors that may affect the attitude of the teachers towards persons with epilepsy.

6. RECOMMENDATION

There is dire need for educational interventions by healthcare professionals to enlighten teachers

as well as the general public on epilepsy with the principal aim of improving knowledge and attitudes towards persons with epilepsy and also dispelling unfounded beliefs, myths and unhealthy perceptions about this disorder. Pharmacists can and should play a leading role in this regard.

CONSENT

As per international standard or university standard written participants consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

ACKNOWLEDGEMENT

The authors acknowledge the contributions of Professor Matthew Okonta and Professor Chinwe Ukwe of the department of clinical pharmacy and pharmacy management, university of Nigeria, Nsukka.

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