

## Perceptions of epilepsy among school teachers in Port Harcourt, Nigeria

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### Abstract

**Background:** Epilepsy is the most common neurological problem of childhood, and its incidence is highest in the first decade of life. Children with epilepsy are burdened by the limitations it imposes on them such as psychological stress (especially when they have seizures in school), loss of school hours and possible effect of the seizure itself on cognitive function. Lack of information and inappropriate beliefs contribute to poor attitude towards epileptics so I sought to determine the perception (attitudes and knowledge) of epilepsy amongst primary school teachers.

**Methods:** This was a questionnaire-based, cross-sectional study of 226 school teachers from five randomly selected primary schools in Port Harcourt, Nigeria.

**Results:** About half of the respondents (118; 52.21%) had post secondary education, while 40% of them are graduates with bachelors' degree in education. The attitude of the teachers was scored as negative or positive depending on the response to an attitude question; knowledge was graded as

poor and good based on the response to a particular knowledge based question. 201(88.94%) were of the opinion that epileptic children pose a danger to the public. 192 (84.96%) felt that epilepsy was more of a spiritual illness than medical. All, 226 (100%) of the participants requested for more information about the disease.

**Conclusions:** Knowledge of epilepsy amongst the primary school teachers was poor. The attitude of these teachers towards epilepsy was not encouraging as many did not have positive attitude toward children with epilepsy. The perception of epilepsy amongst the teachers may improve if correct and up-to-date information about the disease is made available to them.

**Keywords:** Attitude, Children, Epilepsy, Knowledge, Teachers

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### Introduction

Epilepsy is the most common neurological problem of childhood, and its incidence is highest in the first decade of life, <sup>1</sup> a period when children begin and complete a critical part of their social and educational development. School represents a significant component of life for children. It is a place where they spend most of their time in social, psychological, and physical development. Academic achievement, the development of effective work habits as well as social skill acquisition all contribute to the development of behaviors which will play important adult roles. <sup>2</sup> It has frequently been shown that children with epilepsy, for a variety of reasons, have increased risk for a number of education-related problems that negatively impact their quality of life. <sup>3,4</sup> Persons with childhood epilepsy are also at high risk for psychosocial problems later in adolescence and adulthood <sup>1,4,5</sup>. Specifically, affected children are noted to have educational

underachievement, learning disabilities, other mental health problems, social isolation, and poor self-esteem <sup>1,3,5</sup>.

Teachers' knowledge about epilepsy and their attitudes towards epileptics may have a direct impact on the students with epilepsy whom they teach. Poor knowledge of epilepsy among teachers may result in poor school performance, delayed social skill development, and sub-optimal post school success in the areas of employment and social network development among suffers of the disease in their care. <sup>6,7,8</sup> This study was carried out with the aim of evaluating the perception of epilepsy amongst primary school teachers in Port Harcourt, Nigeria.

### Materials and Methods

This study was carried out from June 1<sup>st</sup> to December 31<sup>st</sup> 2012 amongst primary school teachers in Port Harcourt metropolis. Port Harcourt is the capital of Rivers State, one of the Niger Delta states in Nigeria. The city is the nerve center of the famous Nigerian oil industries with a population of 5, 689, 087 and an area of 21 850 km<sup>2</sup>. A two-staged stratified sampling method was used to select the schools in the metropolis. The schools were first stratified based on location. Final selection of ten schools was done by a simple random sampling method, balloting from each

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sub-section of the strata.

The study was carried out by utilizing a structured questionnaire. The questionnaires were administered to the teachers by the researcher and they completed them on the spot. Data obtained included demographic information, questions items on knowledge about epilepsy, attitudinal questions were also itemized. The questions were mainly of the “yes” or “no” variety but also allowed teachers to express their opinions by means of free answers. The attitude itemized questions were assessed as 'positive' or 'negative' based on the correct or incorrect views expressed by the respondents while knowledge items were graded as “poor” or “good” knowledge based on appropriate answers to the questions. Those who answered correctly based on known facts were graded “good”, and incorrect answers were graded as “poor”. The teachers were asked to report (1) their general knowledge of the disorder and life circumstances of persons with epilepsy, (2) the frequency of their contact with a person with epilepsy, (3) whether epilepsy was a medical illness or not, and if they could help or give first aid management to a child having an acute attack in the class. Data was analyzed using SPSS version 17 and results presented in simple descriptive statistics and percentages.

## Results

### *Characteristics of subjects*

The total number of teachers that participated was 226 comprising of 146 females and 80 males with a female: male ratio of 1:0.55. About half of them (118; 52.2%) had the National Teachers College certificate and 40% of with bachelors degree in education. Half reported having taught a student with epilepsy in the past, but only 9.4% reported that they were currently teaching students with epilepsy. Also 221 (97.7%) teachers had no training on emergency treatment of a child having an epileptic fit, while only five (2.2%) admitted to having some form of training on how to handle epileptics with acute epileptic episode while in the classroom.

### *Knowledge*

The knowledge responses are shown on Table 1. All 226 (100%) of the teachers responded that they would like to have more information about epilepsy. 192 (84.9%) opined that epilepsy is more of a spiritual illness than medical.

### *Attitude*

The attitudes expressed by the teachers are shown on Table 2. Two hundred and one respondents (88.9%) were of the opinion that epileptic children pose a danger to the public. Over 200 (89.3%) teachers expressed their view that epileptic children cannot safely play with other children as they may

“contaminate” them.

Table 1. Knowledge of epilepsy among primary school teachers in Port-Harcourt

Knowledge item Responses	Grading	
	Poor (%)	Good (%)
Parents should not expect academic excellence from epileptics.	169 (74.7)	57 (25.2)
Equal opportunities for career choice should be available them	148 (65.4)	78 (34.5)
Epilepsy is a form of mental illness or insanity	191 (84.5)	35 (15.4)
Epileptic children have short life expectancy.	198 (87.6)	28 (12.3)
Children with epilepsy are mentally retarded	178 (78.7)	48 (21.2)
Epilepsy is a contagious disease.	189 (83.6)	37 (16.3)
Offspring of parents with epilepsy will also have it.	186 (82.3)	40 (17.7)
It is a spiritual problem rather than medical	192 (84.9)	34 (15.0)
Epileptics could have good seizure control with medication.	172 (76.1)	54 (23.8)
I am familiar with different types of seizures.	215 (95.1)	11 (4.8)
An epileptic seizure is an emergency	12 (5.3)	214 (94.6)

Table 2. Attitude of primary school teachers in Port-Harcourt towards epilepsy

Attitude items Responses	Grading	
	Negative (%)	Positive (%)
"Normal" children should be protected from classmates with epilepsy.	200 (88.5)	22 (11.5)
I can touch /help a child having an epileptic attack.	189 (83.6)	37 (16.3)
Epileptic children should be in regular school	114 (50.4)	112 (49.5)
Epileptic children should be in same classroom with other children	193(85.4)	33 (14.6)
Families of children with epilepsy should be avoided.	166 (73.4)	60 (26.5)
Epileptic Children should be allowed to play with other classmates.	202 (89.3)	24 (10.6)
Epileptics should be separated from others in the community.	117 (51.7)	109 (48.2)
I can live with an epileptic	174 (76.9)	52 (23.0)

## Discussion

This study highlighted the knowledge and attitude of epilepsy amongst primary school teachers. It evaluated a number of general and specific aspects of teachers' attitudes and knowledge about epilepsy. All of the respondents had basic primary education and 118 (52.2%) of them had post secondary education. This was encouraging because good education contributes to a positive outlook in disease management.

With respect to the knowledge of epilepsy amongst the respondents, 191 (84.5%) of them believed that epilepsy was a form of mental illness or insanity and about the same number of them believed it was a spiritual problem rather than medical. And 172 (76.1%) of the respondents did not know that epileptic seizures could be controlled with medications. The poor knowledge about the disease is unpleasant. This is because teachers are regarded as people with fairly good knowledge in various aspects of life. This poor knowledge was also noted in a study by Kankirawatana<sup>9</sup> who conducted a small pilot study to assess knowledge and attitude toward epilepsy in schoolteachers in Thailand where self-administered questionnaires was used in 360 schools. Other authors had also noted poor knowledge about epilepsy in their studies.<sup>8,10</sup> In these studies, teachers had reported having insufficient knowledge about epilepsy, erroneous and potentially dangerous ideas about first-aid management of seizures.<sup>11,12</sup> This paucity of knowledge was worrisome because they were likely to pass wrong information about epilepsy to the public. However this poor knowledge could be as a result of the fact that majority of them, 221 (97.7%) of them have never received any information about epilepsy while in teacher's training. To this effect it was not surprising when all (100%) of them said they would like to have detailed general information about epilepsy and the appropriate management of an acute episode in the classroom if such is encountered. It was highly good and rewarding to note that about 98% of the teachers knew that individuals with epilepsy were accident-prone; and 222 (98.2%) of them knew that an epileptic seizure was an emergency. They (84.07%) also admitted knowing that epilepsy could affect student's mood, memory, and learning.

The attitude of the study population showed that they were not conversant with epilepsy and its management. This was similar to that reported by other authors in Thailand who reported that up to 38% of the respondents had not heard of or read about epilepsy.<sup>9</sup> Only 33 (14.6%) of them were certain that epileptic children should be in same class with other children. 200 (88.5%) of them had the attitude that other children required to be 'protected' from epileptic children. This was also noted by other studies where epilepsy was taught to be contagious.<sup>11,13,14</sup> This attitude was very disturbing as children with epilepsy

do not 'harm' others when having a seizure, instead they need to be protected against sustaining physical injury from falls during the convulsive episodes. Also, 189 (83.6%) of them admitted that they could not touch or help a child having an epileptic attack. This fear may be because of the belief that epilepsy could be contagious. Similar attitude have been noted by other authors.<sup>11,13,15</sup> Effective counseling will correct some of these unscientific attitudes and wrong beliefs.

The study showed that knowledge about epilepsy among teachers was insufficient. They did not have much information concerning the disorder and immediate management of a student with an epileptic fit in class. Specifically, the teachers identified the need for more information on epilepsy. It will be necessary to enlighten them on classroom management / first-aid treatment of children with an acute attack and the impact of epilepsy and its effect on school performance. It will also be necessary to make them know that it is not a spiritual attack but a medical problem which can be treated.

Talking about epilepsy in the classroom and helping other students understand epilepsy, as well as effective health worker-teacher communication will improve the outlook to epilepsy and improve the care given to affected children.<sup>16</sup> It may be necessary to educate teachers about first aid management of epilepsy within their study curricula.

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