

Prevalence and Care Practices of Epileptic Seizure among Children in Orphan and Vulnerable Children Homes in Abeokuta, Nigeria

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Abstract

This study focused on care and prevalence of epileptic seizure among children in orphans and vulnerable children homes in Abeokuta. Specifically, it determined: prevalence of epileptic seizure across gender and age; involvement in the care of victims and ascertain the attitude of uninfected children towards the victim. It was a survey research. Two types of questionnaire were used for data collection. One was completed by caregivers while the other was completed by the Admin officers/managers. A complete enumeration of 105 respondents comprising of personnel's who are directly involved in the care of the children in the selected registered homes was done. Data were analysed using frequencies, percentage, mean and standard deviation. Results show that epileptic seizure in orphan and vulnerable children's home is common among the male in their early adolescence period (10-16 years). Prevalence rate as at 2016 stands at 2.92%; consisting of 4.28% of the total male children population and 0.96% of the total female children population.

Key words: Prevalence, Epileptic, Seizure, Orphans, Vulnerable, Children

Introduction

Prevalence of a disease or condition measures the tendency of having such disease or condition therefore; prevalence number is the total number of cases of a disease or condition existing in a population at a given time (Joint Epilepsy Council, 2011). The brain contains millions of nerve cells called neurons that send electrical charges to each other. A seizure occurs when there is a sudden and brief excess surge of electrical activity in the brain between nerve cells. According to Joint Epilepsy Council (2011) Epilepsy is a tendency to have recurrent seizures. When

there is a sudden and brief excess surge of electrical activity in the brain between nerve cells over prolonged period of time the result is epileptic seizure. Epileptic activity causes a temporary disruption to the way the brain performs its functions. It can affect anyone, at any age, from any walk of life. There are over 40 different types of epilepsy consisting of at least 29 syndromes and a further 12 or so clinically distinct groups defined by the specific cause or underlying cause (Berg, Berkovic, Brodie, Buchhalter, Cross, Van Emde Boas & Scheffer 2010). Seizures may be caused by developmental problems before birth,

structural problems, vascular problems, metabolic conditions, infections and idiopathic causes (CHOC Epilepsy Center, 2004). Epilepsy is the third most common neurological disorder with an estimation of about 50 million people suffering from epilepsy. About four fifth of these are thought to be in developing countries (WHO, 2000; Joint Epilepsy Council, 2011). A large proportion of the 50 million people affected by epilepsy remain untreated (Scott, Lhatto & Sander 2001).

Nigeria defines an orphan as a child (0-17 years) who has lost one or both parents. A child is vulnerable if, because of the circumstances of birth or immediate environment, is prone to abuse or deprivation of basic needs, care and protection and thus disadvantaged relative to his or her peers (FMWA& SD 2008). Based on 2008 Situation Analysis in Nigeria, an extract from Orphans and Vulnerable Children-CARE (OVC-CARE) project, a research carried out between 2004 and 2008 funded by US Agency for International Development (USAID) and implemented by Boston University Centre for Health and Development: there are 17.5 million orphans and vulnerable Children (OVC).

UNICEF and UNAID (2002) mentioned the following effects of sickness and death of parents upon children as economic hardship, lack of love, care and affection, withdrawal from school, psychological distress, loss of inheritance, increased abuse and risk of HIV infection, malnutrition, illness, stigma, discrimination and isolation and agreeing to Folaranmi and Ogunkanmi (2015) modern efforts in resolving the problems of children in conflict of loss of parents have been geared towards

provision of alternative home (orphanage) and adoption of such children and the aim of alternative home (orphanage) is to provide shelter, care, love and protection to orphan and vulnerable children.

From the list of registered orphan and vulnerable children's (OVC) home obtained by the researchers from the Ogun state Ministry of Women affairs and Social Development; as at 2015 there were twenty fully registered orphan and vulnerable children's home in addition to two owned by the government in Ogun state. It could be deduced that the efforts of Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and Faith Based Organizations (FBOs) cannot be overemphasized in the care of orphans and vulnerable Children in our society because in Ogun state the government under the supervision of the Ministry of Women Affairs and Social Development owns two orphan and vulnerable children homes while many of the institutional care are owned by individuals, Non-Governmental Organizations (NGOs), Faith Based Organizations (FBOs) and Community Based Organizations (CBOs) sponsored by philanthropist and charity organizations.

According to Johnson, Awojobi, Osisanwo, Appah, Ezeudu, & Agham (2014) Orphans constitute one of the poorest, most marginalized and socially excluded set in any society; they are subjected to extreme social, political, financial as well as cultural marginalization and they also maintained that orphans are deprived of opportunities in all aspects of life, including access to essential services such as education and health care. More so, provision for the medical needs of the individual child in

the orphan and vulnerable children home is important putting into account the differences in ailment, disability, impairment, treatment plan and also differences in the approach adopted in order to manage them.

Most research work on epilepsy such as a review by Akinsulore & Adewuya (2010) on psychosocial aspects of epilepsy in Nigeria; Janet (2014); Gender issues in Epilepsy; Ogundele & Dawodu (2013); Adherence to Antiepileptic drugs and many other researches on the prevalence, management practices, belief, knowledge and so on focused on countries, states, community or society. Folaranmi & Ogunkanmi (2015) also noted in their research on child detachment as a correlate of social well-being of orphan and vulnerable children in Ibadan and Abeokuta that statistics are scanty and more research needs to be done to understand the problems and roles of orphan and vulnerable Children homes but this research has been able to provide a range of relevant data on care and prevalence of Epileptic Seizure has it pertains to this special group (Orphan and Vulnerable Children) of our community.

Purpose of the Study

This study focused on care and prevalence of epileptic seizure among children in orphans and vulnerable children homes in Abeokuta. Specifically the study determined;

1. prevalence of epileptic seizure disorder across gender and age among children in orphan and vulnerable children homes in Abeokuta
2. special care given to epileptic seizure victims

3. caregiver's perceived attitude of uninfected children towards the victims.

Research Questions

The study provides answers to the following questions:

1. How many male\female displayed seizure and at what age?
2. What are the special cares given to epileptic seizure victims?
3. What are the caregiver's perceptions of the attitude of uninfected children towards epileptic seizure victims?

Methodology

Design of the study: Survey designs was used to study care and prevalence of epileptic seizure among children in Orphans and Vulnerable Children (OVC) homes in Abeokuta, Ogun state, Nigeria

Area of the study: The study was carried out in registered orphan and vulnerable children's homes in Abeokuta area of Ogun state, Nigeria.

Population for the study: The population for this study is 105 comprised of seven groups; Health care officers (Chief health attendants, Health attendants, and Nurses); Admin officers/managers (Admin manager, Head aunty, Assistant head aunty and House manager); Social welfare officers (Social welfare officer, Social welfare assistants, Social workers and Supervising officers); Cooks/ caterers (Cooks and Cook assistants); Teachers; Caregivers and Volunteers which are male and female within the age of 20-50 years, with or without no formal education but must have spent 5 months and above in being involved in the care of children in the selected registered orphan and

vulnerable children (OVC) homes in Abeokuta, Ogun state, Nigeria.

Sample for the study: A complete enumeration of 105 respondents comprising of 24 Health care officers, 4 Admin officers/managers, 8 Teachers, 12 Social welfare officers, 51 Caregivers, 3 Cooks and 3 Volunteers in the selected registered orphan and vulnerable children home was done. Out of the eight registered orphan and vulnerable children home in Abeokuta Ogun state, Nigeria; four which are Stella Obasanjo Children’s Home (SOCH), Juvenile correctional home (JCH), Gideon Orphanage Home and Stephen Centre were selected for this research using their year of establishment (not less than two years old) as a criteria.

Instrument for data collection: Questionnaire was used for the survey research. The questionnaire/interview guide was of two types: Type ‘A’ elicited information from all the personnel’s involved in the care of the children in the orphan and vulnerable Children (OVC) homes. Type B was for the organization to

be completed by one of the Admin officers/ managers; it obtains data on the prevalence of epileptic seizure in the orphan and vulnerable children home across gender and age. Interview schedule was used for the illiterate respondents.

Method of Data Collection: A frequent three week visit was made to all the selected registered homes so as to interview the respondents; meeting respondent during the morning and afternoon duty rotation. Respondent with educational qualification of at least secondary school certificate were allowed to fill the questionnaire themselves. Playing with the children and assisting the caregivers in their caregiving service were used as a motivation for them to fill and allow for the interview section.

Method of Data Analysis: Frequencies, percentage, mean, standard deviation and ranking was used to analyze variables.

Findings of the study

The results are hereby presented in Tables 1- 3 based on the research questions.

Table 1: Percentage Responses on Prevalence of Epileptic Seizure across Gender

Indicators of Prevalence	Male		Female		Total	
	Freq.	%	Freq.	%	Freq	%
Total number of children in the selected Orphan and Vulnerable Children’s home in Abeokuta between 2005-2015	293	58.95	204	41.05	497	100.00
Within ten years (2005-2015) how many children show signs and symptom of epilepsy	24	4.83	6	1.21	30	6.04
Within ten years (2005-2015) how many children were medically diagnosed of epileptic seizure	21	4.23	5	1.01	26	5.23
Number of death of children with epilepsy recorded between 2005-2015	2	0.40	0	0	2	0.40
Total number of children in selected Orphan and Vulnerable Children’s home in Abeokuta as at August 2016.	304	59.26	209	40.74	513	100.00

Number of children showing signs/symptoms of epilepsy as at July 2016.	13	2.53	2	0.39	15	2.92
Number of children medically diagnosed of epileptic seizure as at July 2016.	13	2.53	2	0.39	15	2.92
The number of children on antiepileptic drugs (AEDS) as at July 2016.	13	2.53	2	0.39	15	2.92
The number of children on other form of care/care apart from drugs as at July 2016.	0	0	0	0	0	0

Table 1 shows that a total number of 497 children were present in the selected Orphan and Vulnerable Children's home between 2005 to 2015 (58.95% Male and 41.05% Female) and 6.04% (80% Male and 20% Female) of the children within that ten years (2005-2015) shows signs/symptoms of epilepsy and within that year range only 5.23% (80.77% Male and 19.23% Female) of the children showing the signs/symptoms of epilepsy were medically diagnosed of epileptic seizure and 0.40% (100% Male) death of epileptic seizure victim was recorded during that year.

Table 1 also reveals that as at August 2016 in the surveyed Orphan and

Vulnerable Children's home a total of 513 (59.26% male and 40.74% female) children were present in the home of which 2.92% (86.67% male and 40.74% female) of her population shows signs/symptom of epilepsy and all the victims were medically diagnosed of the disorder and were all placed on antiepileptic drugs.

As at 2016 the age distribution of the children who were with epileptic seizure across the male gender reveals that 23.08% are within the age range of 7 to 9 years, 30.77% are within the age bracket of 10-13 years, 30.77% within the age of 14-16 years and 15.38% are within the age range of 17-19 years while across the female gender 50% were 10 years old and 50% were 15 years old.

Table 2: Percentage Responses on Special Care Given to Epileptic Victims

S/N	Indicators of Care	Yes F (%)	No F (%)	Rank
1	We give drugs (antiepileptic drug) to all children with epileptic seizure	89(84.8)	16(15.2)	1 ST
2	We use the show of signs and symptom only to diagnose epilepsy	87(82.9)	18(17.1)	2 ND
3	There is a regular purchase of appropriate drugs for victims	84(80.0)	21(20.0)	3 RD
4	Medical personnel diagnosed our infected children for epilepsy	80(76.2)	25(23.8)	4 TH
5	We informed the teachers about the child's health condition	79(75.2)	26(24.8)	5 TH
6	Children with seizure are taken to hospital regularly for routine check up	79(75.2)	26(24.8)	5 TH
7	Victims are taken for emergency care after episode in case of first occurrence or change in the mode of seizure occurrence	78(74.3)	27(25.7)	7 TH

8	Training, seminar, talks etc. are provided for caregivers on epilepsy	78(74.3)	27(25.7)	7 TH
9	We allow children with seizure to go to school	81(77.1)	24(22.9)	9 TH
10	Children with epilepsy are sometimes absent from school	81(77.1)	24(22.9)	9 TH
11	Other children in the home are being educated about seizure	73(69.5)	32(30.5)	11 TH
12	Constant complain are being lodged to the medical personnel about the side effect of the drug used by victims	73(69.5)	32(30.5)	11 TH
13	There is a special book where we record episode occurrence e.g. epilepsy log book	68(64.8)	37(35.2)	13 TH
14	There is a special care and monitoring of the food taken by victims by a dietitian and a medical personnel	64(61.0)	41(39.0)	14 TH
15	There are supportive gadgets for the children with epilepsy e.g. helmet, vagus nerve stimulator	59(56.2)	46(43.8)	15 TH
16	There is special diet plan for seizure victims	46(43.8)	59(56.2)	16 TH

Key: F= Frequency; STD=Standard deviation %=Percentage

Table 2 deals with various aspects of care or care given to the victims of epileptic seizure. It shows that among the parameters used to measure the special care given to children with epileptic seizure in the selected orphan and vulnerable children's home, medical assistance majorly prompt drug administration as 84.8% of caregivers affirmed that drugs (antiepileptic drugs) are given to all the children with epileptic seizure and frequent purchase of drugs

ranked high (1ST and 3rd respectively) while provision of special diet plan, provision of supportive gadgets, provision for diet monitoring by a dietitian or medical doctor, recording of episode occurrences, educating other uninfected children, constant lodging of complains on antiepileptic drug side effects, victims school attendance, making provision for episode occurrence in school and provision of training and seminars to caregiver's on epilepsy ranked low.

Table 3: Percentage Responses on Caregivers Perceived Attitude of Uninfected Children towards Victims

S/N	Attitude of Uninfected Children	True F (%)	False F (%)	Mean	STD	Rank
1	Other children helps the victim after gaining consciousness	94(89.5)	11(10.5)	1.895	.308	1 ST
2	Other children identify with children during episode occurrence in school	89(84.8)	16(15.2)	1.848	.361	2 ND
3	Other children calls care of the caregivers by referring to previous episodes occurrence	85(81.0)	20(19.0)	1.810	.395	3 RD
4	Other children eats together with the victim after episode	84(80.0)	21(20.0)	1.80	.402	4 TH
5	Other children during	66(62.9)	39(37.1)	1.629	.486	5 TH

	misunderstanding refers to victims episode occurrence					
6	Other children backbite about the victims health condition	60(57.1)	45(42.9)	1.552	.519	6 TH

Key: F= Frequency; STD=Standard deviation %=Percentage

Table 3 shows the caregivers' perceived attitudes of uninfected children towards victims. Among the parameters used to ascertain the caregiver's perceived attitude of uninfected children; other children helping victims after gaining consciousness (89.5%) ranked 1st, identifying with affected children in school 84.8%. and calling the care of caregiver's by referring to previous episode occurrence 81.0% ranked high ranked 2nd and 3rd respectively while eating together with victims after episode occurrence 80.0% ranked 4th, referring to victim's episode occurrence during misunderstanding and backbiting about victims health condition ranked low.

Discussion of findings

From table 1 it could be seen that 2.92% of the entire population in the home has epileptic seizure of which the male children (4.28%) carries the largest percentage and they are all medically diagnosed. The male that are most infected falls between the ages of 10-16 years. Janet, Mifsud (2014) in a review concluded that differences between men and women in epilepsy may be due to the influence of sex hormones on seizures and epilepsy, as well as due to changes in the endocrine system and levels of sex hormones by epileptiform activity. Also only drug was used to maintain all the children with the disorder, this negates what Danesi and Adetunji (1994) noted in their research that alternative medicine, especially spiritual healing, cannot be

considered irrelevant in the management of epilepsy in Africa.

In like manner Mohammed Asif, (2013) in his review on the role of various vitamins in the patients with epilepsy concluded that a number of different dietary modifications, nutritional supplements, and hormones may help prevent seizures or improve other aspects of health in patients with epilepsy. Though he noted that in most cases, nutritional therapy is not a substitute for anticonvulsant medications. Also from the result of the trial of Neal, Hannah, Ruby, Lawson, Nicole, Geogianna, & Cross (2008) support the use of ketogenic diet in the treatment of children with intractable epilepsy.

From the result in Table 2 most of the organization support mostly in the area of medical (i.e. purchase of drug, regular drug administration etc.) and the show of signs and symptom could also be said to be their major diagnosis at the home level. There are still a good number of ways the organization can support the victim; giving them good first aid, availability of supportive gadgets and more so they can make available means which can enable them imbibe other therapy that can better improve the victims health for example dietary therapy because in a review on the nutritional therapy for epilepsy by Sancheti, Shaikh, Akhade, Shaikh, & Sathaye (2013) they discuss the current status of various dietary supplements (amino acids, minerals, antioxidants, vitamins, ketogenic diet, atkin diet and

herbal therapy) and the probable mechanisms of their efficacies.

They concluded that nutritional treatment comprises a fascinating approach for the treatment of epileptic patients; although their knowledge about the correlation between epilepsy and its treatment with nutrition is in its infancy. Alan & Gaby, 2007 also noted that the ketogenic diet has been successful for many patients, but because of its highly restrictive nature and potential to cause significant adverse effects, its use is restricted to severe cases that fail to respond to other treatments but a less restrictive version of the ketogenic diet, the Atkins diet, has shown promise and deserves further study. Folaranmi & Ogunkanmi (2015) recommended in their research on child detachment as a correlate to social well-being of orphan and vulnerable children in Ibadan and Abeokuta, Nigeria that staff development training for proprietors and workers in orphanages to provide family like environment for orphans in their custody.

Majority of the respondents admitted that there is no notable discrimination against children with epilepsy as can be clearly seen in table 3 that ranging from helping after gaining consciousness to helping victims in school ranks high; although they do refer to previous episodes which often is for caregiver to gain clarity into what the child is reporting during episode occurrence. This is in line with the findings of Frank-Briggs & Alikor (2011) that more than 90% of parents and caregivers know about epileptic seizures and that of Mwini, Peter, Anthony & Dziejorm (2016) when they concluded in their study that majority of mothers have

good knowledge about febrile convulsion and its first aid interventions at home.

Conclusions

The study has investigated the care and prevalence of epileptic seizure among children in orphans and vulnerable children's home in Abeokuta area of Ogun State. The study revealed that the prevalence of epileptic seizure in orphans and vulnerable children homes has been on the reducing scale since the period under consideration in the study (2005-2016). Epileptic seizure is common among the male children in their early adolescence (10-16 years). The organizational support and involvement are mostly based on medical assistance: majorly provision of drugs and frequent purchase of drugs and the attitude of uninfected children can be perceived as not harmful to the victims.

Recommendations

Based on the findings, the following recommendations were made:

1. Research should be made on other forms of management that could be adopted for the management of the disorder.
2. Awareness should be made towards the adoption of other forms of practices that are available for the management of epileptic seizure.
3. Organization should work towards being involved in the provision of supportive gadgets for victims so as for the disorder not to affect the victim's school attendance.

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