

KNOWLEDGE, ATTITUDE AND CULTURAL BELIEFS ABOUT EPILEPSY IN KOLO COMMUNITY, BAYELSA STATE, NIGERIA

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ABSTRACT

Epilepsy is a neurological disorder that is noninfectious and common affecting world's population regardless of race, colour, tribe, religion or nationality. The incidence of epilepsy tends to be higher in developing countries than developed countries with a reported prevalence ranging from 5-10 per 1,000 people in developing countries and 2.8-19.5 per 1,000 of the general population worldwide. There are many cultural and superstitious beliefs associated with the causes of epilepsy. The sample size for the study was 152 respondents using Cochran (1963) sample size formula. A structured closed ended interviewer administered questionnaire (IAQ) was used to obtain information in line with the purpose of the study. The period of data collection took three (3) weeks. 150 questionnaires were retrieved from the four (4) selected wards by multistage sampling after a pilot testing was done. Epilepsy as a brain disorder was agreed by (25.3%) and strongly disagreed by (17.4%). The transmission of epilepsy by lizard was strongly disagreed by (21.1%), disagreed by (27.4%). The finding also showed that (34%) strongly disagreed to neither marrying someone with epilepsy nor allow their children make friends with an epileptic individual (30.5%). The result of the hypothesis using chi-square showed a significant relationship between cultural factors and acceptance of epileptic individuals with $P = 0.001$, $\chi^2=19.803$, $N=150$. The study therefore recommends the need for aggressive health education on epilepsy for literate and non-literate members of the community because this will reduce their cultural misconceptions and influence their attitudes positively towards individuals with epilepsy.

Keywords: Attitude, Cultural belief, Epilepsy, Knowledge

Introduction

Epilepsy is a neurological disorder that is noninfectious and common affecting about 1% of the world's population (Surendran et al. 2015). The incidence of epilepsy tends to be higher in developing countries than developed countries with a reported prevalence ranging

from 5-10 per 1,000 people in developing countries and 2.8-19.5 per 1,000 of the general population worldwide (Sidig et al. 2009). Epilepsy significantly affects economic, mental and social aspect of people suffering from the condition as compared to those

without the condition (Akinsulore and Adewuya, 2010). This is because some people would not accept their sons or daughters to marry an epileptic individual (Myeong-Kyu, 2007) as well as high level of unemployment experienced among people suffering from epilepsy (Bishop and Hermann, 2000). In addition, cognitive impairment associated with epilepsy may have a devastating impact on the education, vocation, social and family life of affected individuals (Akinsulore and Adewuya, 2010). These may consequently lead to stigmatization and a poor quality of life (Ghanean, 2013; Lim, Lim and Tan, 2011).

According to Henry (2002), cultural and superstitious beliefs about disease conditions play a major role in influencing the way in which different disease conditions are perceived and the subsequent actions taken. There are many cultural and superstitious beliefs associated with the causes of epileptic seizures which includes: witchcraft, insanity, possession by demons, feeble mindedness and masturbation (Fisher et al. 2005). These misconceptions will lead to negative attitude towards epileptic individuals. However, the negative impression and attitude is less in an educated community (Mokuolu, 2009; Surendran et al. 2015).

Studies have been conducted assessing knowledge and attitude of medical students towards epilepsy (Sureka, Dhamija, and Saxena, 2016; Surendran et al. 2015) as well as school teachers' knowledge and attitudes in Northwest Nigeria (Owolabi, Shehu, and Owolabi, 2014) and in Southwestern Nigeria (Mustapha, Odu, and Akande, 2013) about epilepsy. This showed a gap of studies of knowledge and attitudes about epilepsy not conducted among members of the community who may not be literate contrary to the previous studies. In addition, there is a dearth of study among members of Kolo community, Bayelsa State about epilepsy which necessitated the need for the study.

Materials and Methods

Study Setting and Sampling

The research was conducted in Kolo Community in Bayelsa State. It is an Ogbia speaking community within the Ogbia Local Government Area of Bayelsa State. It is bounded in the North by Emeyal community, Otuekeme on the South, Odual on the East and Otuoke on the West. There are three (3) compounds in the community. The community has a General Hospital, a government Nursery, Primary and Secondary school as well as private Nursery and Primary schools. The peoples' main occupation are farming, fishing, hunting and trading. Kolo community is about 14 kilometers from Yenagoa, the capital city of Bayelsa state. Kolo community has a central king (The Obena-Ema) of Kolo town.

Population of the study

Kolo community has a total population of 36,883 which comprised of 19,548 males and 17,335 females (Projected 2016 Population size).

Sample and sampling method

The sample size for the study was 152 respondents using Cochran (1963) sample size formula. Multi-stage sampling technique was used to select respondents for the study. At the first stage, simple random sampling technique was used to select 2 districts out of the 4 districts in Kolo community. At the second stage, 2 wards were selected from each district to give a total of 4 wards. At the third stage, simple random sampling technique was used to select 38 respondents in each ward to give a total of 152 respondents for the study while the fifth ward was used for pilot testing of the instrument and no longer used for the study.

Instrument and Data Collection

A structured closed ended interviewer administered questionnaire (IAQ) was used to

obtain information in line with the purpose of the study. The questionnaire is made up of three (3) sections: Section A was to obtain information on socio-demographic variables, section B; elicits information on knowledge of epilepsy while section C; obtained information on cultural beliefs about epilepsy. The items on sections B and C were assessed using a five (5) point Likert scale grading into Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) and Undecided (U). Instrument was adapted from previous studies (Mustapha et al. 2013; Owolabi et al. 2014; Surendran et al. 2015) and validity was ensured by proper scrutiny from four (4) senior academic researchers who assisted in vetting the questionnaire for both face and content validity. Corrections and suggestions were incorporated into the questionnaire. A test-retest reliability was ensured by a pilot testing of the instrument by conveniently selected 10 participants from a compound not selected for study and the result was analysed then corrections made where errors were discovered before final administration to the participants.

The period of data collection took three (3) weeks. Three (3) research assistants were recruited to serve as interpreters for

respondents that did not understand or speak English. Questionnaire was translated by interviewers into pidgin and Ogbia languages during the process of data collection for the study. The research assistants were trained to ensure that they did not change the content of the questionnaire while interviewing some of the respondents that could not speak or understand English. 152 questionnaires were distributed in selected compounds using simple random sampling i.e. 38 participants per ward. Participants were conveniently selected. Members of each selected ward within the age range of 15 years and above were then conveniently selected for the study and questionnaires were then administered to the participants.

Data Analysis

The data collected were organized and statistically analyzed using Statistical Package for Social Science (SPSS) version 17. Frequencies and percentages were calculated for quantitative data while Chi-square was calculated for inferential analysis. A p-value of less than 0.05 was accepted as statistically significant.

Results

Results are presented with the aid of tables in this section and response rate was 98.7%.

Table 1: Frequency Distribution of Socio- demographic data (n=150)

Variable		Frequency (f)	Percentage (%)
Age	less than 18	10	6.7
	18-27	51	34.0
	28-37	31	20.7
	38-47	25	16.7
	48-57	15	10.0
	58 and above	18	12.0
Sex	Male	74	49.3.
	Female	76	50.7

Marital Status	Single	55	36.7
	Married	70	46.7
	Separated	13	8.6
	Divorced	3	2.0
	Widower	9	6.0
Religion	Christianity	130	86.7
	Islam	1	0.7
	African traditional religion	19	12.6
Educational Status	Primary	24	16.0
	Secondary	34	22.7
	Tertiary	58	38.6
	non literate	34	22.7

Source: Authors' field work, 2016

From table 1 above, the finding indicates that majority (34%) were within the age range of 18-27 years and the gender of respondents showed females were 50.7% and males were 49.3%. About half of the respondents were married (46.7%) with (36.7%) single. Tertiary education accounts for (38.6%), secondary education (22.7%) and a significant number (22.7%) had no education.

Table 2: Frequency Distribution of Respondents' Knowledge on Causes of Epilepsy (n=150)

Variables	Response	Frequency (f)	Percentage (%)
1. Is epilepsy a brain disorder	Strongly agree	27	14.2
	Agree	48	25.3
	Strongly disagree	33	17.4
	Disagree	26	13.7
	Undecided	16	8.4
2. Does one get epilepsy by offending the gods	Strongly agree	22	11.6
	Agree	30	15.8
	Strongly disagree	56	29.5
	Disagree	28	14.7
	Undecided	14	7.4
3. Is epilepsy caused by witchcraft	Strongly agree	37	17.4
	Agree	34	17.9
	Strongly disagree	33	19.5
	Disagree	33	17.4
	Undecided	13	6.8

4. Can epilepsy be caused by lack of oxygen at birth	Strongly agree	10	5.3
	Agree	27	14.2
	Strongly disagree	32	16.8
	Disagree	47	24.7
	Undecided	34	17.9
5. Is epilepsy transmitted by lizard	Agree	27	14.2
	Strongly disagree	40	21.1
	Disagree	52	27.4
	Undecided	31	16.3
6. Can epilepsy be developed by head injury	Strongly agree	7	3.7
	Agree	20	10.5
	Strongly disagree	41	21.6
	Disagree	62	32.6
	Undecided	20	10.5

Source: Authors' field work, 2016

Table 2 showed that 25.3% agreed that epilepsy was a brain disorder and was strongly disagreed by (17.4%), 15.8% agreed that people can get epilepsy by offending God or gods while 29.5% strongly disagreed. Less than one-quarter (17.9%) agreed that epilepsy is caused by witchcraft. The transmission of epilepsy by lizard was strongly disagreed by (21.1%), disagreed by (27.4%) and 16.3% were undecided. 32.6% disagree while 21.6% strongly disagreed that epilepsy could develop from head injury.

Table 3: Attitudes towards Epilepsy (n=150)

Variables	Response	Frequency (f)	Percentage (%)
1. Can you marry someone with epilepsy?	Strongly agree	4	2.6
	Agree	21	14
	Strongly disagree	51	34
	Disagree	66	34.7
	Undecided	8	4.2
2. Would you allow your relation to marry someone with epilepsy?	Strongly agree	2	1.1
	Agree	24	12.6
	Strongly disagree	45	23.7
	Disagree	61	32.1
	Undecided	18	9.5
3. If your spouse happen to have epilepsy, would you divorce him or her?	Strongly agree	7	3.7
	Agree	25	13.2

	Strongly disagree	27	14.2
	Disagree	58	30.5
	Undecided	33	17.4
4. Will you allow your child to make friend with an epileptic patient?	Strongly agree	8	4.2
	Agree	38	20.0
	Strongly disagree	19	10.0
	Disagree	58	30.5
	Undecided	27	14.2
5. Can a person with epilepsy have normal children?	Strongly agree	36	18.9
	Agree	51	26.8
	Strongly disagree	17	8.9
	Disagree	29	15.3
	Undecided	17	8.9

Source: Authors' field work, 2016

The finding in table 3 shows that (34%) strongly disagreed to marry someone with epilepsy, (34.7%) disagreed while (14%) agreed. 23.7% strongly disagreed to allow their relation marrying someone with epilepsy, (32.1%) disagreed and (12.6%) agreed. The finding also reveals that (30.5%) disagreed to divorce their spouse with epilepsy while (13.2%) agreed to divorce. 30.5% also disagreed to allow their children make friends with an epileptic individual while (20%) agreed to allow friendship with their children.

Table 4: Cultural Beliefs about Epilepsy (n=150)

Variable	Response	Frequency (f)	Percentage (%)
1. Epilepsy is a mental disorder	Strongly agree	30	15.8
	Agree	42	22.1
	Strongly disagree	20	10.5
	Disagree	51	26.8
	Undecided	7	3.7
2. Epilepsy runs in families	Strongly agree	43	22.6
	Agree	42	22.1
	Strongly disagree	18	9.5
	Disagree	42	22.1
	Undecided	5	2.6
3. Epilepsy is caused by supernatural powers	Strongly agree	41	21.6
	Agree	32	16.8
	Strongly disagree	32	16.8

	Disagree	37	19.5
	Undecided	8	4.2
4. Epilepsy is a punishment from the gods / ancestors	Strongly agree	31	16.3
	Agree	31	16.3
	Strongly disagree	39	20.5
	Disagree	40	21.1
	Undecided	9	4.7
5. Epilepsy is contagious	Strongly agree	21	11.1
	Agree	40	21.1
	Strongly disagree	37	19.5
	Disagree	44	23.2
	Undecided	8	3.7
6. Faith healers are better than modern health interventions when it comes to treatment of epilepsy	Strongly agree	42	22.1
	Agree	44	23.2
	Strongly disagree	23	12.1
	Disagree	31	16.3
	Undecided	10	5.3
8. Epilepsy can never be cured	Strongly agree	27	14.2
	Agree	20	10.5
	Strongly disagree	48	25.3
	Disagree	46	24.2
	Undecided	9	4.7
9. Eating of forbidden food can result in epilepsy	Strongly agree	21	11.1
	Agree	25	13.2
	Strongly disagree	42	22.1
	Disagree	38	20.0
	Undecided	24	12.6

Source: Authors' field work, 2016

The table 4 above shows that belief that epilepsy runs in the family was strongly agreed by (22.6%), agreed (22.1%) and disagreed (22.1%). The cause of epilepsy by supernatural powers was strongly agreed by (21.6%) and disagreed by (19.5%). The study indicates that (20.5%) and (21%) strongly disagreed and disagreed respectively that it was a punishment from gods/ancestors. Less than one-quarter (21.1%) agreed that it is contagious while about one-quarter (23.2%) disagreed. The belief that faith healers are better than modern health treatment was strongly agreed by (22.1%), agreed by (23.2%) and disagreed by (16.3%). About one-quarter strongly disagreed and

disagreed that epilepsy can never be cured while less than one-quarter (10.5%) agreed it can never be cured.

Hypothesis tested for the study: There would be no relationship between cultural factors and acceptance of epileptic individuals.

Table 5: Statistical relationship between cultural factors and acceptance of epileptic individuals (n=150)

Variables	RESPONSES	ACCEPTANCE OF EPILEPTIC INDIVIDUALS		Pearson Chi-square χ^2 (P-value)	DF	REMARK
		high acceptance	low acceptance			
Cultural factors	Strongly agree	14	27	19.803 (0.001)	4	Significant Relationship
	Agree	17	15			
	Strongly disagree	19	13			
	Disagree	15	22			
	Undecided	2	6			
Total		67	83			

Source: Authors' field work, 2016

The result as showed in the table indicates there exists a significant relationship between cultural factors and acceptance of epileptic individuals with $P = 0.001$, $\chi^2=19.803$, $N=150$

Discussion

The findings from the study showed that respondents had a fair knowledge about the causes of epilepsy. This may be attributed to the fact that a significant number of the respondents attained some level of education. Although a reasonable number of the respondents had tertiary and secondary education but lacked knowledge in respect to the causes of epilepsy. This is consistent with the reports by Mustapha et al. (2013) and Owolabi et al. (2014) in Southwestern and Northwestern Nigeria respectively which

showed that school teachers had a deficit knowledge as regards to epilepsy. Despite the fact that they were school teachers, they still needed more knowledge as regards to epilepsy because they may not have enough medical knowledge in respect to certain medical conditions. However, the studies conducted by Sureka et al. (2016) and Surendran et al. (2015) among medical students showed a higher level of knowledge about epilepsy. This therefore, calls for more educational programmes about epilepsy in

community and schools which will improve their level of knowledge about epilepsy. The importance of such educational programme was affirmed by a study conducted on effect of health education programme on knowledge about epilepsy by Mohamed and Elalem (2015) which revealed an improvement of teachers' knowledge about various items of epilepsy.

The study also observed that a significant number of the respondents strongly disagreed to marry someone with epilepsy and will not allow their relations neither marry someone with epilepsy nor allow their children to even make friends with an epileptic individual. This revealed a negative attitude towards epileptic individuals which may be attributed to the low level of education and/or knowledge about epilepsy among respondents. According to Surendran (2015), the negative impression and attitude towards epileptic individuals is less in an educated community. Surendran (2015) was in agreement with the previous studies conducted by Mustapha et al.(2013) and Owolabi et al.(2014) in Nigeria that observed a positive attitude of school teachers towards their students with epilepsy. Thus, there is a strong association between level of education and/or knowledge about epilepsy and attitudes towards epilepsy. The cultural beliefs observed from the study that the condition runs in the family, a

punishment from gods/ancestors, contagious and traditional methods of treatment was better than modern health intervention can be misleading. These misconceptions may lead to negative attitude towards epileptic individuals (Surendran et al., 2015) because cultural beliefs influences the attitude of people towards a disease condition (Henry, 2002). However, these misconceptions can be reduced through educating members of the community which will have a positive influence on their attitudes (Mustapha et al. 2013; Owolabi et al.2014; Sureka et al. 2016; Surendran et al. 2015).

Conclusion and Recommendation

Kolo community members had a fair knowledge about epilepsy with several cultural beliefs that influenced their attitude towards epileptic individuals negatively. The study therefore, recommends the need for aggressive health education about epilepsy for literate and non- literate members of the community because this will reduce their cultural misconceptions and influence their attitudes positively towards individuals with epilepsy. There may be need to review the school curriculum at whatever stage to accommodate the teaching of basic health and cultural issues and first aid management of minor health challenges.

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