



HOME MANAGEMENT OF CHILDHOOD FEBRILE CONVULSIONS AMONG WOMEN IN CHILD-BEARING AGE IN OBIAGU, ENUGU NORTH LOCAL GOVERNMENT AREA OF ENUGU STATE

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ABSTRACT: *Febrile convulsion or seizure is a common emergency in pediatrics which triggers anxiety in parents due to associated morbidities and mortality. This study assessed the home management of childhood febrile convulsion in Obiagu, Enugu North Local Government Area of Enugu State. A cross-sectional descriptive survey was conducted among women of child-bearing age in Obiagu, Enugu North Local Government Area of Enugu State, Nigeria. The population of this study consisted of 1,850 women but 328 is a convenient sample employed in the study. A structured questionnaire with reliability coefficient of 0.83 was used in gathering the necessary data for the study which were analyzed with SPSS version 17.0. It was discovered that all the respondents (320) were aware of febrile convulsion. Two hundred and sixty-five (265) (82.81%) of the women understood febrile convulsion to be high temperature associated with jerking of the child. Also, high temperature was perceived by 269 (84.06%) of the women to be the cause while 140 (43.75%) believe that it was caused by evil forces or demonic. Two hundred and twenty-six (226) (70.63%) of the women applied palm kernel oil on their children's body during convulsion, 124 (38.7%) used herbal concoctions and 105 (32.81%) put substances like palm oil or kerosene in the eyes of their convulsing children. The reason for these actions is mainly because they did not want their children to die. Others include not being aware of better methods and that the materials used were readily available. The women in Obiagu were aware of febrile convulsion and their perception of its cause was fair but they lacked knowledge of appropriate actions to take during febrile convulsion.*

KEYWORDS: Convulsion, Febrile, Home, Women.



INTRODUCTION

Febrile convulsion or febrile seizure is one of the most common emergency neurological conditions in pediatrics practice occurring among children less than five years of age (Daldem et al., 2014).

According to the NHS (2019), febrile convulsions are fits that can occur when a child has fever; this usually lasts for five minutes and it is mainly seen in children between the ages of 6 months and 3 years. It can be simple or complex. However, 9% to 35% of all first febrile convulsions are complex (Wariuru & Appleton in Konlan et al., 2019). Children with simple febrile convulsion encounter low risk of morbidity and mortality and have no link with identifiable brain damage (Shinaar & Glauser in Konlan et al., 2019).

Febrile convulsion is one of the most common presentations in young children, with a 2-5% incidence in Western countries (Sawires, Buttery & Fahey, 2022). Out of the 2,463 children admitted to the Pediatrics Emergency Ward of University of Port Harcourt Teaching Hospital Rivers State, Nigeria, 165 (6.7%) of them had febrile convulsion (Gabriel-Job & Frank Briggs, 2020).

Although febrile convulsions are benign, parents are often shocked to see their children experiencing convulsions mostly as a result of malaria and often consider it life-threatening. Also, the risk of epilepsy after febrile seizure increased from 3% to 7% compared with nearly 0.5% of the general population, making it a significant health problem (Annegers et al. in Atesoglu et al., 2018).

However, the majority of parents have gross misconceptions about febrile convulsions and hence take inappropriate actions in an attempt to control the convulsions. A study revealed that on the management of febrile convulsion, 15% of the women smeared grinded garlic on the body and 7% smeared herbal preparation on the body of their sick children (Wuni et al., 2021). Also, there was a story of a three-year-old boy who was a victim of poor management of seizure disorder. The boy's feet were placed over burning firewood after episodes of seizure. In the process, he sustained a bad wound on the legs, which later became gangrenous. He later developed septicaemia which led to his death (Ojoye, 2019).

These misconceptions and negative actions towards childhood febrile convulsions could lead to increased morbidity and mortality of affected children, hence the need for this study which is aimed at assessing the home management of febrile convulsions among women of child-bearing age in Obiagu, Enugu North Local Government Area.



MATERIALS AND METHODS

Study Design: Cross-sectional descriptive design was adopted as data were collected only once and follow-up of respondents was not done.

Study Setting: This study was conducted in Obiagu.

Population and Sampling Technique: The population of this study is made up of 1,850 women of childbearing age of 15-49 years who are residents of Obiagu from which a convenient sample of 328 was selected.

Inclusion Criteria: The study included women of childbearing age of 15-49 years who are residents of Obiagu.

Research Instrument: A structured questionnaire was used in gathering the necessary data suitable for the study. The questionnaire was validated for face and content validity by an expert in the field of study who ensured that it measured what it was supposed to measure. To determine the reliability of the instrument, a pilot study was carried out in Uwani and a coefficient of 0.83 was obtained indicating that the instrument is reliable for the study.

Data Collection Procedure and Analysis: The questionnaires were distributed in Obiagu, Enugu North to the women of childbearing age, in the markets, shops, streets and houses after their consent were obtained. The literate respondents were given the questionnaire which they returned at their convenience, while the illiterate respondents were helped to complete the questionnaire by interpreting it for them. Data were analyzed with the aid of a statistical software package, SPSS version 17.0 using descriptive statistics of frequency and percentage and they were finally presented in tables.

Ethical Consideration: This was obtained from the Head of Department of Health, Enugu North LGA. Informed consent was obtained from the women before administering the questionnaire to them. Anonymity, confidentiality and privacy of the women's identity were ensured.

RESULTS

Table 1: Socio-demographic Distribution of Participants (n=320)

	<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
1. Age	15-25	16	5
	26-30	68	21.25
	31-40	116	36.25
	41-49	120	37.5
2. Marital status	Single	44	13.75
	Married	248	77.5
	Divorced	4	1.25
	Separated	4	1.25
	Widowed	20	6.25



3. Religion	Christianity	309	96.56
	Muslim	4	1.25
	Traditionalist	7	2.19
4. Educational Qualification	Primary 6 only	104	32.5
	Secondary	128	40
	Tertiary	47	14.69
	Higher degree	41	12.81
5. Occupation	Student	32	10
	Civil servant	80	25
	Self employed	128	40
	Business	34	10.63
	Artisan	33	10.31
	Housewife	13	4.06
	Others	-	-

Findings from Table 1 show that 16 (5%) of the respondents were within the ages of 15-25 while 120 (37.5%) were from 41-49 years of age. For marital status, 248 (77.5%) were married while 4 (1.25%) were divorced and 4 were (1.25%) separated. With respect to religion, 309 (96.56%) were Christians and 4 (1.25%) were Muslims. For educational qualification, 128 (40%) of the women stopped their education at the secondary level while 41 (12.81%) had higher degrees. For occupation, 128 (40%) of the women were self-employed while 13 (4.06%) were housewives.

Level of Awareness Regarding Childhood Febrile Convulsion

Table 2: Awareness About Childhood Febrile Convulsion

		<i>Frequency</i>	<i>Percentage</i>
6. Have you heard of febrile convulsion?	a. Yes	320	100
	b. No	-	-
7. What do you understand by febrile convulsion?	a. High temperature associated with jerking of the baby	265	82.81
	b. Jerking of the baby	121	37.8
	c. Malarial attack	15	4.69
	d. Teething problem	44	13.75
	e. Dying and going back to life	8	2.5
	f. Febrile convulsion is the same as epilepsy	4	1.25



	g. Twitching of the face or extremities	11	3.44
8. Which age group of children is more affected?	a. Children under 5 years	281	87.81
	b. Above 5 years	9	2.81
	c. Children within 10years	30	9.38
9. What are the signs of febrile convulsion?	a. Hotness of the baby's body	95	26.69
	b. Twitching of baby's face and extremities	11	3.4
	c. Jerking of the whole body	121	37.81
	d. Cold hands and feet	40	12.5

Results from Table 4.2 above show that 320 (100%) of the respondents have heard about febrile convulsion. Two hundred and sixty-five (265) (82.81%) understand febrile convulsion as high temperature, 121 (37.81%) understand it as a jerking of the baby, 15 (4.69%) as malarial attack, 44 (13.75%) as teething problem, 8 (2.5%) understand it as when a baby is dying and going back to life, 4 (1.25%) believe it is the same thing as epilepsy while 11 (3.44%) also believe it is twitching of face or extremities. Also, 281 (87.81%) indicated that children under 5 are more affected, 9 (2.81%) indicated children above 5, while children within 10 years had a response of 30 (9.38%). In addition, 95 (29.69%) mothers indicated hotness of the baby's body as one of the signs of febrile convulsion, 11 (3.44%) indicated twitching of baby's face and extremities, 121 (37.81%) indicated jerking of the whole body, while 40 (12.5%) indicated cold hands and feet.

Perceptions about the Causes of Childhood Febrile Convulsion

Table 3: Perception of the Cause of Febrile Convulsion (n=320)

Variables	Frequency	Percentage	
Which of the following do you think cause febrile convulsion?	a. Evil forces and demonic attacks	140	43.75
	b. Any Fever	67	20.94
	c. High temperature	269	84.06
	d. Exposure to cold	40	12.5
	e. Infections	19	5.94
	f. Dirty environment	16	5
	g. Teething	3	0.94
	h. Malarial attack	17	5.34
	i. Drugs	13	4.06
	j. Hereditary	16	5
	k. Constipation	11	3.44



Findings from Table 4.3 show that 140 (43.75%) of the respondents believe that evil forces/demonic attacks are the cause of febrile convulsion, 67 (20.94%) indicated any fever, 269 (84.06%) indicated high temperature, 40 (12.5%) indicated exposure to cold, 19 (5.94%) infections, 3 (0.9%) teething, 16 (5%) dirty environment, 17 (5.31%) malarial attack, 13 (4.06%) drugs, 16 (5%) hereditary factors while 11 (3.4%) indicated constipation as the cause of febrile illness.

Home Management Practices Used by These Women to Care for a Convulsing Child

Table 4: Home Management Practices

	<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
11. Which of the following actions do you take when your child is convulsing at home?	a. I get afraid so I invite neighbours	25	7.81
	b. I give paracetamol	103	32.19
	c. Prayers	56	17.5
	d. I give anti-malarial drugs	11	3.44
	e. Cover my child with blanket	27	8.44
	f. Apply palm-kernel oil (udeaku)	226	70.63
	g. Use olive oil	108	33.75
	h. Herbal concoction	124	38.75
	i. Use baby's urine	83	25.94
	j. Sponge the baby with cool water	71	22.19
	k. Put padded spoon in between the teeth	61	19.06
	l. Put something in the eyes	105	32.81
	m. Incisions on the skin	4	1.25
	n. Put the legs over/beside fire	92	28.75

From Table 4 above, during an episode of convulsion, 103 (32.19%) gave paracetamol, 56 (17.5%) prayed, 11 (3.44%) gave antimalarial drugs, 27 (8.44%) covered the child with a blanket, 226 (70.63%) applied palm kernel oil (udeaku) on the child's body, 108 (33.75%) used olive oil, 124 (38.75%) applied herbal concoctions, 83 (25.94%) used baby's urine, 71 (22.19%) sponged the baby with cool water, 61 (19.06%) put padded spoon in between the



teeth, 105 (32.81%) put substances like kerosene or palm oil in the eyes, 4 (1.25%) made incisions on the skin, while 92 (28.75%) of the respondents put the baby's legs over/beside fire when convulsing.

Factors Influencing Home Management Practices

Table 5: Factors Influencing Home Management Practices

	<i>Frequency</i>	<i>Percentage</i>
What are the reasons for taking such actions?		
1. I don't want my child to die	283	88.4
2. Religious reasons	25	7.81
3. It is cheaper	51	15.9
4. Distance from my house to the hospital	9	2.8
5. Febrile convulsions are not serious	12	3.7
6. Am not aware of any better method	83	25.9
7. That is what my mother taught me	75	23.4
8. That is what is readily available	64	20

From Table 5 above, 283 (88.43%) indicated that the reason for taking the actions was because they did not want their child to die, 17 (5.31%) said it was because of religious reasons, 51 (15.94%) said it was cheaper, 9 (2.81%) indicated distance from their house to the hospital, 12 (3.75%) gave reason that febrile convulsions are not serious, 83 (25.94%) were not aware of better methods, 75 (23.44%) were taught by their mothers, while 64 (20%) said that what they used was what was readily available.

DISCUSSION

Findings of this study showed that all the women had heard about febrile convulsion, and the majority associated febrile convulsion with high temperature and jerking of the body. These findings showed that the majority of the women were aware of febrile convulsion in the population. This agrees with findings from Oforre and Ibadin (2012) who found that rural women were aware of febrile convulsion and that rural women most commonly associated febrile convulsion to high temperature and jerking of the baby's body.

The information obtained from the study suggests that the majority of the women believed that febrile convulsion is caused by high temperature followed by demonic attack and fever. This finding is in agreement with Amadi and Chukwuocha (2009) who found that rural women often perceived febrile convulsion to be caused by high temperature, and also found that demonic attacks were perceived by the women as a cause of febrile convulsion. This is also in line with the findings of Konlan et al. (2019) where 62.8% of the women attributed fever to be the cause



of febrile convulsion. This finding may be due to the nature of our Nigerian society these days where any and every form of illness is related to malaria and high temperature.

Also, it was discovered that the majority of the women in this study apply palm-kernel oil when a child is convulsing, a good number use herbal concoction to manage it while few sponged the baby with cool water and gave paracetamol. Notably, some put substances into the child's eye, put the baby's legs over/beside fire and used the baby's urine to manage febrile convulsions. This shows that some of these harmful home management practices like use of herbal concoctions, instilling substances in the baby's eye, putting legs over/beside fire and using baby's urine may be due to ignorance and superstition, where people take actions based on what has been. This finding is in agreement with Ajayi and Falade (2012) who noted that mothers administered baby's urine, palm kernel oil, local concoctions and put baby's legs over fire when the baby is convulsing. It also agrees with the findings of Nyaledzigbor et al. (2016) which showed that some mothers gave various first aid treatments at home and these actions include tepid sponging, bathing the baby with cold water, putting a spoon in the child's mouth and using traditional herbal preparations. These indigenous practices however differ slightly from a research conducted by Jarret, Fatunde, Osinusi and Lagunju (2012) where cow urine mixtures were used.

The findings also showed that the majority of the women said they take certain actions to manage febrile convulsions because they do not want their children to die. An appreciable number said that they were not aware of any other better method, while others stated that they take certain actions because that is what their mothers taught them and they make use of anything that is readily available. This shows that no parent wants the death of their children and they therefore take any of the best actions known to them, especially the one that is readily available, believing it will work for them since some of the practices were taught and practiced by their mothers.

This finding agrees with Parmar, Sahu and Barvedar (2012) who opined that fear of death is the common reason why mothers use various practices to manage febrile convulsion. Also, Adoburin, Bamidele and Bello (2010) found out that the reason for the practices was that that was what their mothers taught them.

CONCLUSION

All the women in Obiagu were aware of febrile convulsion and their perception about febrile convulsion was fair. The majority of the women adopted unhelpful practices to manage childhood febrile convulsion at home, indicating poor knowledge on the right actions to take during the fits. The most common reason given for this is fear of the child's death.



RECOMMENDATION

Based on the findings of this study,

- The government needs to create more awareness on febrile convulsion and healthier practices to adopt at home.
- Health workers, especially the nurses, need to strengthen their health education for these women.
- Media houses also need to create more awareness on the dangers associated with unhealthy practices.
- Home visits to women in the communities by the community health workers could also prove useful in improving their perception about febrile convulsion, and parents with previous cases of febrile convulsion should ensure that necessary preventive measures are provided in the future to check this condition.

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