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SOCIO-ECONOMIC BACKGROUND AND THE PRACTICE OF CRUDE OIL, ALLIGATOR PEPPER AND SCENT-LEAF IN THE TREATMENT OF CONVULSION AMONG CHILDREN AGED 0-5 YEARS IN MBAITOLI LOCAL GOVERNMENT AREA OF IMO STATE

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ABSTRACT: This study examines the socio-economic background of parents who use crude oil, alligator pepper and scent leaf in the treatment of convulsion among children aged 0-5 years in Mbaitoli Local Government Area of Imo State, Nigeria. The objectives include: to determine the knowledge base of parents concerning the etiology of convulsion; determine the influence of socio-economic factors, in terms of culture of orientation, occupational background, educational background, neighbourhood affiliation, on the parents who are into the practice. Literature was reviewed on the background indictors and treatment remedies. Interactionism was used as the theoretical framework. The descriptive survey design was used. A sample size of 1200 parents was taken. Structured interview protocol and questionnaire were used in the collection of data. Test-retest method was used to ensure reliability. Collected data were analyzed with descriptive statistics and chi-squared test instrument of association. Findings show a high use of local remedies in the treatment of convulsion and that level of education, culture of orientation, low economic status and neighbourhood affiliation greatly influenced the use of these remedies. It is recommended that parents be educated on acceptable etiology and proper treatment of convulsion and that authorities should consider socio-economic and cultural factors in planning health care services utilization.

Keywords: Socio-economic background, culture of orientation, febrile convulsion, practice of crude oil, practice of alligator pepper, practice of scent leaf.

INTRODUCTION

The very young persons of five years and below are often vulnerable to convulsion. The most susceptible ages are the first two years of life (Hause, 1994). The boys are however known to show a slightly higher prevalent rate than their female counterparts (Hirtz, 1989). The scene of convulsion is usually tensed up in terms of fear, panic and desperation (Anigilinje & Anigilinje, 2012). Febrile convulsion is a frightening experience for mothers and at the on-set mothers would seek for information from all sources to reduce stress

(Khosravis, 2017). The most common trigger of convulsion-febrile seizures among children is fever and upper respiratory infection. The above factors, especially fever, are preventable, if identified and managed well. Experience has shown that most parents neglect their children and in most cases leave them to take care of themselves and play with other children as much as they can do, while such parents go about their daily businesses. There is the tendency for rural farm parents and traders to get back to the house weak and can only wash, eat and sleep till the next morning without knowing what happens to their children at night. Most children run fever at night without the knowledge of their parents. Once the fever manifests during the day, the child has already been worn out and might not resist the fever that led to convulsion.

It is difficult to determine what causes convulsion; hence its treatment is prone to errors and illogical suggestions. The situation gets compounded when low socio-economic background and poor orientation of parents in terms of education, income, exposures, occupation, culture of orientation, come into play. According to Nwokocha and Awomiyi (2009) remedies sort against convulsion are usually structured around demographic factors of parents like marriage, religion, level of education, occupation and place of origin. Mbaitoli local government area, made up of thirty four autonomous communities as at 2015, is a place where parents to a large extent make use of scent leaf, crude oil and alligator pepper in the treatment of convulsion. These authors are of the assumption that socio-economic background may have been influencing the poor methodological approach in the treatment of convulsion, hence the need for this examination.

The study is significant to the extent it reveals the improper methodological approach in the treatment of convulsion in children and its public health challenges and implications. The general society would gain from an enlightened understanding in the social and medical management of the episodes of febrile convulsion.

Statement of the Problem

Febrile convulsion is a common pediatric neurological disorder all over the world especially in the tropics (Onyearugha, Okonkwo & Onyewuchi, 2011).Its approach and treatment in Mbaitoli local government area appears predicated upon socio-economic and cultural background, tradition and beliefs. Thus their belief on the concept, etiology and treatment of convulsion is greatly anchored on mysticism, esoteric, superstitious and unfounded scientific assumptions and methods. Hence their general approach could be classed as trado-medical and spiritism. Untreated or wrong approach to convulsion has deleterious effects.

The onset of convulsion generates panic and most time neighbours take over the initiative from parents of the victim. Whenever there is an attack of convulsion, they tend to shout to attract other members of the village who gather, put up a local fire and the child is brought nearer the fire. From the researchers own observation, the crude oil is mixed with the palm carnal oil, alligator pepper and Nchanwu or scent leaf water extract and the child's mouth is forced open and the liquid poured in. They also force some of the liquid through anus. Part of the scent leaf is also put into the local fire for the smell to scare away the evil spirit.

Afterwards they now rub the liquid on the child's body, eyes, nose and ear, most cases they add onions to make it painful for the child to cry. The unconscious child may or may not react or reacts slightly. They tend to ignore the fever which is likely to be the cause of the convulsion. They also ignore the oil on the body or skin which tends to cover the pores preventing the blood and air circulation and make the child convulse more.

At the end, the child will now be rushed to a nearby hospital or clinic, very unconscious, with air ways almost blocked with these substances. Most of these children die before receiving treatment some remain unconscious for days or weeks depending on the condition of the child. Those who recover, come up with abnormalities and complications as a result of mental retardation and pneumonia. The effects of such complicating treatment procedures could be deleterious to the child's health and subsequent physical and mental development. It is also a contradiction to known medical practices and procedures.

The study therefore is designed to investigate the background of parents who are into the practice of use of these substances in Mbaitoli Local Government Area of Imo-State where it is believed that most parents are medically uninformed and where this practice has left most children in this area with some varying abnormalities. The following questions are pertinent to this study. What is the level of knowledge of Mbaitoli parents on the concept and etiology of febrile convulsion? To what extent does cultural orientation and belief system of parents influence their practice? To what extent does occupational background of parents influence their practice? To what extent does neighbourhood affiliation influence the parent's practice of use of scent leaf, crude oil and alligator pepper in the treatment of convulsion? Does the educational background of parents influence their practice of the use of scent leaf, crude oil and alligator pepper in the treatment of convulsion? What are the effects of the practice of use of scent leaf, crude oil and alligator pepper in the treatment of convulsion?

Objectives of the Study

The general objective of the study is to determine the socio-economic background of parents practicing the use of crude oil, alligator pepper and scent leaf in the treatment of febrile convulsion among children aged 0-5 years and the health effect of such practice in Mbaitoli local government area, Imo state. Specifically, the objectives include:

i. To ascertain whether parents who are into the practice of treating convulsion with crude oil, alligator pepper and crude oil have in-depth knowledge of the concept and etiology of convulsion.
ii. To determine the influence of composite of class and rural-urban factors on the management of febrile convulsion.
iii. To determine the occupational background of parents who are into such practice.
iv. To show the influence of neighbourhood affiliation in the practice of crude oil, alligator pepper and scent leaf in the treatment of convulsion.
v. To determine the cultural orientation and belief system of parents who are into the practice.

vi. To determine the influence of educational level on the practice of use of crude oil, alligator pepper and scent leaf in the treatment of convulsion.
vii. To explain the effect of such a practice on children's health during the practice and in later life.

Hypotheses

Out of the above research questions and objectives, two overarching hypotheses that tend to confirm the direction of outcomes of tests were constructed.

H1. The composite of inequality issues of class and rural-urban residence does not significantly influence the management of febrile convulsion in Mbaitoli.

H2. Culture of orientation does not significantly influence the direction of choices in the handling of febrile convulsion among mothers in Mbaitoli.

LITERATURE REVIEW

Meaning and Nature of Convulsion

Febrile seizures popularly called convulsion is defined as temporary nervous disorder occurring in childhood which develops with high fever and prevalent among children aged six months to five years (Sajadi & Khosravi, 2017). During convulsion the person's muscles contract and relax repeatedly (Annegres & Hauser, 1992). Higher fever is associated with children's convulsion. According to Moyer (2001) febrile convulsion can occur in children when they have a fever (a temperature 380c/1010c or above) that occurs as a result of an infection or inflammation. Autret et al (1990) recognize that seizures usually occur with an increase in fever and often so, suddenly that the febrile illness is not recognized by the family before the seizures.

The causes of convulsion in children as identified in Kantala, Uhari and Hietola (1995) include: Infections associated with high fever; metabolic disorders; drugs; poisons; disordered blood vessels; bleeding inside the brain; some unknown. It is of note that women are very visible during episodes of febrile seizures. According to Sajadi and Khosravi (2017) mothers are primary care givers and are more involved in the challenge of febrile convulsion though many lack appropriate knowledge in the control and do run stirred- up emotions, stress and fear at such periods.

Socio-Economic Status and Culture of Orientation Background to Disease Conditions

Socio-economic status (SES) is an important determinant of health, morbidity and mortality. The variables that affect socio-economic status are different in case of urban and rural societies. Separate scales are therefore often employed in the measurement of SES in rural and urban areas. Using Kuppuswamy and Pareekh's 9-pointh scale, the following picture appears: Caste; Occupation of head of family; Education of head of family; Level of social

participation of the head of family; Land holding; Housing; Farm power; Material possessions; Family members (Wani, 2019).

The Federal Office of Statistics (1996) recognizes the following socio-economic indicators for Nigeria: Food and nutrition; Employment/unemployment; Quality of the environment; Health conditions; Education. Shebeeb and Altufaily (2019) opine that parents' knowledge regarding febrile convulsion is significantly associated with higher maternal education, urban residence and mother's age. Ogwurike (2005) emphasizes on occupational status as being proxy variable that indicates the socio-economic status of individuals, their level of enlightenment, awareness and would thus influence ultimate choice of care services. With regards to other socio-cultural indicators, Oladipo (2014) states that "beliefs people hold of doctor's ability, the efficacy of drugs and medical care systems in curing illness and relative effectiveness of alternative sources of care such as traditional healing would determine levels of utilization of health services; sex is a fair predictor of service use and that proximity, availability, age, family size and income are adequate explanatory variables"

Coping Strategy and Treatment of Febrile Convulsion

Among the coping strategies are: the acceptance of the child's condition, trying to be with the child always, seeking for information from many sources as well as maintaining an optimistic attitude (Sajadi & Khosravi, 2017). There is the popular belief that treatment of severe diseases especially convulsion is better with herbal remedies (Okeke & Uzochukwu, 2006). The treatment of different febrile illnesses involve the use of liquid herbs, powdered herbs, medicinal scarification, incantations and sacrifice which suggest the confidence in the efficacy of herbs for treatment of febrile illnesses (Osunwole, 1992). It has been documented that traditional seeking behaviour for febrile illnesses is related to cultural beliefs about the causes and cure of febrile illnesses (Biedsoe & Couband, 1985). A study by Onyearugha, Okonkwo and Onyewuchi (2019) reveals that out of 1360 paediatric cases received in Abia State Teaching Hospital (ABSU) Nigeria, between January 2011 and December 2016, 78 of this were febrile seizures. According to these authors pre-hospital management constituted of application of palm kernel oil, other herbal medications and crude oil, and that these combinations were harmful practices among the care givers. The World Health Organization, cited in Farrsisworth *et al*. (1985) informs that the world populations can use botanical medicines for their primary care needs.

Pharmacological Relevance of Crude Oil, Scent Leaf and Alligator Pepper

Crude Oil:

Crude oil contains high ratios of aromatics and naphthenes and paraffin with high amounts of nitrogen, sulphur, oxygen, heavy metals and resins (Dusseault, 2001). The crude oil is a mixture of volatile liquid hydrocarbons including parafins, mono aromatics, naphthenes, di-aromatics, tri-aromatisc, tetra-aromatics, nitrogen, sulphur and oxygen (Zhang et al., 2013). Crude oil is divided into two, heavy crude oil and light crude oil.

Crude oil poisoning in humans has been discussed in the context of accidental intoxication the toxic effects of petroleum hydrocarbon are exerted on a variety of living systems such as the lungs, liver and kidney. Controlled exposures in man have demonstrated a range of effects. The effects on dermal exposure include a burning sensation, imitation erythema followed by the formation of vesicles, bluster and even extensive epidermolysis. Coughing, choking and gagging have been noted on ingestion and if respiratory signs and symptoms appear early, it indicates that aspiration has taken place. The risk of asphyxiation and thus chemical pneumonitis is high since crude oil is forced down the throat during convulsion episodes. Crude oil is also volatile and therefore easily aspirated into the lungs causing chemical pneumonitis, nausea, vomiting and diarrhoea may occur. (Klein and Sinus, 1986).

Alligator Pepper:

The botanical name is *zingiberaceae aframomum*. The Igbo of South East Nigeria call it *Ose-orji*. It is a perennial herb of about 3 ft, with narrow leaves. When whole pepper grinds are mixed with crude oil and scent leaf, it is used for convulsion treatment. In a study by Inegbenebor *et al.* (2009), concoctions made of alligator pepper are often used by trado-doctors as medication for various ailments, though found to have serious health risks on females in their trimester pregnancy.

Scent Leaf:

The botanical name is *ocimum grasstissimum*. The Igbo of South East Nigeria where Mbaitoli located call it *ncheanwu*. According to Kar, et al (2020), the plant is about 4-5ft tall, a quadrangular stem and ovate leaves that are 5-12cm long. To Gupta (2011) *ocimum gratissimum* possess aromatic odour and bitter taste and that thin layer chromatography (TLC) shows various phytochemical extracts and qualitative analysis reveals the presence of alkaloids, tannins, flavonoids, terpenoids (methanol and ethanol) as well as carbohydrates in alcoholic extract. Concerning the health significance of herbal medicine (WHO, 2019) informs that traditional and complementary medicine are important but underestimated health resource and that traditional and complementary services can potentially meet communities needs and build sustainable and culturally sensitive primary health care. According to Opkala (2015) scent leaf is used for nutritional and medicinal purposes and is assumed to be effective in the treatment of certain ailments and diseases. To Opkala it is diaphoretic and anti-convulsing in nature and contains eugenol known for its antibacterial properties; cures catarrh, cough and fever. Okoro (1988) informs that *ocimum gratissmum* is among plants frequently used in various preparations for the treatment of wide spectrum of diseases. Equally, Iwu, cited by Ibe and Nwufor (2008) states that Ncheawu, alongside other plants, possess antibacterial properties. Equally, Nwaeze and Eze (2009) report that the ethanol extract from *ocimum gratissimum* has been evaluated and has shown some levels of efficacy as antibacterial and is not threatened by the use of some conventional antibiotics that are taken concomitantly.

Interactionist Theory

This study is anchored on interactionist theory. It suggests that in the course of interaction actors take other actors into consideration and try to fit their activities into those of others. To Haralambos and Holburn(2000) humans act on the basis of meanings they give to objects and events during interaction and that these meanings are created, modified, developed and changed within interaction rather than being fixed and pref-formed. In the opinion of Ritzer (2008) the actor comes across physical and social objects. Physical objects are those things out there like trees and chairs while social objects are abstract things like ideas, principles and morals. Continuing, Ritzer reasons that people learn symbols as well as their meaning during social interaction and do respond to these in thoughtful manner and they do engage in naming and categorizing of symbols and images that are in use within the cultural environment.

In view of the above, the use of crude oil, alligator pepper and scent leaf in treating febrile convulsion has remained popular among the Mbaitoli people. Even the gathering and shouting by the local women during attacks of convulsion are expressive of group sentiment and solidarity. In this direction Cord (1992) writes that rural societies run rich associations within which they find bonds of dignity, respect and support in everyday life and in times of crises. These researchers are aware that among the Igbos both life and illness remain communal. The interaction process within the communities sampled sustains these practices even if there are no proven efficacies and verifiable results.

METHODOLOGY

The descriptive survey design was adopted for this work. It was a one-time-only observation. The research was limited to the socio-economic and cultural background indicators of parents in Mbaitoli and their utilization of crude oil, scent leaf, alligator pepper in the treatment of convulsion of their under five children. The research locale is the thirty four (34) autonomous communities as at 2015. Mbaitoli lies within $5^{\cdot 5953}$ latitude and $7^{\cdot 0190}$ longitude (World Postal Code, 2019). It shares boundaries by the North with Isu and Oru local government areas, South with Owerri Local Government area; West and East with Njaba and Ikeduru local government areas respectively.

The population of the local government by 2006 census is 237,474 (FOS, 2009). The target population of this study was however all the parents from the thirty four government autonomous communities whose last child may be five years and below by the time of this research. Given that not all households experience convulsion among the children, a sample estimate of 1200 adults, males and females was made by these researchers. There was no baseline data of persons reporting for convulsion in the local government, hence the estimation.

Cluster sampling technique was adopted for this study. The authors took into consideration the geographical proximity and early cultural contiguities of the groups. The tabular presentation is as follows:

Table1. A Six Area Cluster Table by Autonomous Communities in Mbaitoli

Cluster	Group	Autonomous Communities	No	Sample
A	Mbieri	Amaike, Obi Mbieri, Ihitte, Awo, Umueze, Ezi, Obazu.	7	247.1
B	Orodo	Obi Orodo, Isi Orodo, Ofekata, Amaukwu, Ubahaeze,.	5	176.5
C	Ogwa	Ibeama Isi Ogwa, Alaenyi, Umunneato Ishi Ogwa, Idume, Umueze Abazu, Alaeze Ogwa.	6	211.7
D	Ogbaku and Umunoha	Isi Ogbaku, Ogbaku, Ogbujioma, Okwu Ogbaku, Obinoha, Umunoha.	6	211.7
E	Eziama-Obito and Afara	Eziama-Obiato, Umuagha Eziama, Azara, Afara, Amaocha Afara.	5	176.5
F	Ubomiri and Ifekala	Isi Ubomiri, Egbeada, Amanwuihe, Ifekala, Nkalu.	5	176.5
6	6		34	1,200

The instruments employed for data collection were (i) structured interview protocol. The reason was that most of the expected respondents were not integrated enough to answer unstructured questions (ii) questionnaire schedule. The questionnaire structure was dominated by the likert type scale of **Strongly Accepted, Accepted, Not Accepted, Strongly Not Accepted.**

The validity was achieved by the approval of three public health experts who went through the interview schedules and questionnaires. The content validity was established through available literature on socio-cultural factors in the utilization of herbal medicine.

The test-retest reliability technique was adopted. Twenty parents made up of ten males and ten females were randomly chosen from Umuabali Ubomiri in Mbaitoli local government area and had questionnaire administered to them. A month later, the same but fresh questionnaire were administered with the help of women and men leaders who were before now, trained as research assistants. The results of the first and second tests yielded a high positive spearman rho correlation coefficient of 0.78.

Methods of Data Analysis

The descriptive statistics approach was employed in the analysis of data. The research questions and corresponding specific objectives were tested through frequency distribution tables in the responses to questionnaire items. The descriptive statistics was followed by test of hypotheses using the chi-squared instrument.

Table2. Distribution of Socio-demographic characteristics

Characteristics/Sex	**Size**	**Percentage**
Male	509	42.4
Female	691	57.6
Total	1200	100.0
Age	**Female**	**Percentage**
20 – 24	604	50.3
25 – 29	379	31.6
30 – 34	66	5.5
35 – 39	88	7.3
40 – 44	58	4.8
45 and above	5	0.5
Total	1200	100.0
Education Level	**Female**	**Percentage**
Non-formal	765	63.8
Primary	373	31.0
Secondary	60	5.0
Tertiary	2	0.2
Total	1200	100.0
Occupation	**Female**	**Percentage**
Civil servant	261	21.8
Business / trader	464	38.7
Farmers	453	37.8
Others	22	1.7
Total	1200	100.0
Religious Affiliation	**Female**	**Percentage**
Catholic	577	48.1
Anglican	124	10.3
Pentecostal	353	29.4
Others	146	12.2
Total	1200	100.0

The sex distribution reveals that 509 (42.4%) of the respondents are males while 691 (57.6%) are females. The age distribution reveals that 604 (50.3%) of the respondents are between the ages of 20-24; 379 (31.6%) are between ages 25-29; 66(5.5%) and the ages of 30-35; 88(7.3%) are of the ages of 40-44 while 5(0.5%) are of the ages 45% and above. The level of education reveals that non-formal has 765(63.8%); primary has 373(31%); secondary 60(5.0%) and tertiary has 2 representing 0.2% of the sampled population. The occupation distribution reveals that civil servants have 261(21.8%); business men and traders have 464(38.7%); housewives have 453(37.8%) while others, including students, occupy 22(1.7%). Religious affiliation shows that Catholics occupy 577(48.1%); Anglicans 124(10.3%); Pentecostals 353(29.4%), others 146(12.2%).

Table 3. Knowledge base of etiology of convulsion

S/N	Question	Responses		Total
		Yes	No	
1	Origin is uncertain	840 (70%)	360(30%)	1200
2	Opportunistic spirits	900(75%)	300(25%)	1200
3	Common with the family	860(71.67%)	340(28.33%)	1200
4	Untreated high fever	320(26.67%)	880(73.33%)	1200
5	Due to upper respiratory infection	325(27.1%)	875(72.9%)	1200
6	Due to disordered blood vessel	295(24.58%)	905(75.42%)	1200

The data distribution of etiology shows that 70% of sampled persons were uncertain about the origin of convulsion. Equally 75% ascribed the cause to opportunistic diseases. The percentage that viewed it as a family problem is 71.67%. Only 26.67% are of the knowledge that it could be due to untreated high fever. Only 27.1% knew that it could be due to upper respiratory infection, while 27.58% suggested disordered blood pressure.

Table 4. Distribution of responses on the use Local treatment remedies for convulsion in Mbaitoli L.G.A.

	Responses		
Question	**Yes**	**No**	%
Use of crude oil in the treatment of convulsion	(62.6%)	(37.4%)	100
Use of alligator pepper in the treatment of convulsion	(55.3%)	(44.8%)	100
Use of scent leaf in the treatment of convulsion	62.1%)	(37.9%)	100

The above distribution shows that 62.6%, 55.3% and 62.1% accepted the use of the three remedies respectively while 37.4%, 44.8% and 37.9% in the same order do not use them. Those who still use crude oil and scent leaf are in the majority.

Table 5. Influence of composite class and rural-urban factors in the use of crude oil, alligator pepper and scent leaf

Question Items	Responses			
	SA	A	NA	SNA
Most parents that practice the use of crude oil, alligator pepper and scent leaf belong to lower and peasant classes.	248(20.7%)	305(25.4%)	384(32.0%)	263(21.9%)
The use and practice of crude oil, alligator pepper and scent leaf cuts across social class backgrounds	537(44.8%)	447(37.3%)	67(5.6%)	149(12.4%)
Most parents that practice the use of crude oil, alligator pepper and scent leaf belong more of rural residence than urban.	446(37.2%)	478(39.8%)	66(5.5%)	210(17.5%)

From the distribution above 20.7%, 44.8% and 37.2% indicate strongly acceptance; 25.4%, 37.3% and 39.8% indicate accept, 32.0%, 5.6%, 5.5% do not accept while 21.9% and 17.5% strongly do not accept. There is a mix of acceptance in the social inequality factors.

Table 6. Extent of influence of occupational background of parents in the use of crude oil, alligator pepper and scent leaf

Question Items	Responses			
	SA	A	DA	SDA
Parents with farm background are into the practice than other occupations	200(16.7%)	299(24.9%)	390(32.5%)	311(25.9%)
Parents with business and trading background are into the practice than other occupations	195(16.3%)	294(24.5%)	395(32.9%)	316(26.3%)
Parents from the professions are also into the practice	396(33.0%)	318(26.5%)	196(16.3%)	290(24.2%)

Table 7. Neighbourhood influence in the use of local treatment remedies

Question Items	Responses		
	MT	ST	NA
Parents who use crude oil, scent leaf and alligator pepper are largely influence by neighbours	599(49.9%)	533(44.42%)	68(5.7%)
Neighbours and other reference groups create panic situations during episodes of convulsion	549(45.8%)	589(49.1%)	62(5.2%)
Most neighbours rush to victim families with available convulsion to assist	604(50.3%)	307(25.6%)	289(24.1%)

From the distribution above, 49.9%, 45.8% and 50.5% answered **most of the time (MT)** on the three questions, while 44.42%, 49.1% and 25.6% answered **some of the time (ST)**. The distribution of **Not at all (NA)** is 5.7%, 5.2% and 24.1%. These indicate that neighbours have strong influence in the preference for the use of crude oil, alligator pepper and scent leaf.

Table 8. Influence of culture of orientation on curing approach.

		SA	A	NA	SNA	Total
A	Convulsion to some extent is influenced by unknown forces.	310(25.8%)	384(32%)	248(20.7%)	258(21.5%)	1200
B	Herbal products are needed to complement English medicine.	390(32.5%)	540(45%)	150(12.5%)	124(10.3%)	1200
C	Herbal and crude oil in many instances prove to be superior to hospital approach..	440(36.7%)	550(42.5%)	126(10.5%)	124(10.3%)	1200
D	Presence of family members and kinsmen help the convulsing child to live on.	296(24.7%)	354(29.5%)	300(25%)	250(20.8%)	1200
E	Herbal products and crude oil are even kept to prevent reoccurrence of convulsion.	446(37.2%)	502(41.8%)	124(10.3%)	128(10.7%)	1200
F	Orthodox often encourage practitioners to try alternative medicine.	250(20.8%)	352(29.3%)	380(31.7%)	218(18.2%)	1200

The distribution above reveals: (a) Percentage positive response (SA+A) on the extent to which febrile convulsion is influenced by unknown forces is 57% while negative response(NA+SNA) is 42.2%. (b) Percentage positive response that herbs are needed to complement English medicine is 77.5% while percentage negative response is 22.5%. (c) Percentage positive response that herbs in many instances proved to be superior to hospital to hospital approach is 80.2 while percentage negative response is 20.8. (d)

Table 9. Influence of educational background in the practice of traditional remedies.

Question Items	Responses			
	SA	**A**	**NA**	**SNA**
Parents of high educational levels also use local herbs in the treatment of convulsion.	542(45.17%)	553(46.08%)	55(4.58%)	50(4.17%)
Parents with tertiary education are more knowledgeable in the control of febrile convulsion.	235(19.58%)	152(12.67%)	437(36.41%)	376(31.33%)

The distribution above reveals that 47.17% and 46.08% responded to Stongly Accept and Accept respectively to involvement of persons of high educational level in the use of local herbs in the treatment of convulsion. On the other hand 4.58% and 4.17% responded to Do not Accept and Strongly Do not Accept respectively to parents of high educational level involvement in the use of local herbs. The implication is that high number of parents of high educational level is involved in the practice. From the second question 19.58% and 12.67% responded to Strongly Accept and Accept respectively that parents of tertiary educational background are more knowledgeable in the control of febrile convulsion while 34.41% and 31.38% respectively responded to Do not Accept and Strongly Do not Accept on the same issue. The direction of the response is an indication that parents below tertiary education may be more knowledgeable in the control of convulsion than parents of tertiary education.

Table10. Effect of local treatment remedy: crude oil, alligator pepper and scent leaf on the recovery of children suffering from convulsion.

Question Items	Responses			
	SA	**A**	**NA**	**SNA**
Use of crude oil causes aspiration of oil into the lungs that leads to death.	483(40.25%)	310(25.83%)	133(11.08%)	274(22.83%)
Use of alligator pepper into the eyes and anus help to stimulate the central nervous system	419(34.92%)	377(31.41%)	229(19.08%)	175(14.58%)
Use of scent leaf, alligator pepper and crude oil causes the child sneeze and pass bulky stool	563(46.92%)	354(29.50%)	115(09.58%)	168(14%)
Use of crude oil, scent leaf and alligator pepper helps keep the body worm and stool switching	486(40.50%)	459(38.25%)	165(13.75%)	90(7.5%)
Children treated with crude oil, scent leaf and alligator pepper develops problems like pneumonia after.	431(35.92%)	264(22%)	264(22%)	241(20.08%)

From the above distribution 40.25%; 34.92%; 46.92%, 40.50% and 35.92% strongly agreed to the adverse or side effects of the use of local remedies; while 25.83%, 31.41%, 29.50%, 38.25% and 22% accepted. Altogether the percentages in favour of adverse effects against the five questions are 67.08%, 66.33%, 76.42%, 78.75% and 57.92%. This indicates that most people are aware of the side effects.

Tests of Hypotheses

Two overarching hypotheses, that tend to suggest the outcome of tests of questions, were tested on the influence of (1) composite of inequality issues of class-rural and urban residence and (2) culture of orientation in the understanding and management of febrile convulsion. The chi-square(X^2) test of association was employed. It is given as: $\frac{\Sigma(o-E)^2}{E}$; Where O stands for observed frequencies in responses while E stands for expected response frequencies.

Hypothesis 1 (Generated from table 5)

The composite of inequality issues of class and rural-urban residence does not significantly influence the management of febrile convulsion.

Table 11. Chi-square table of association of inequality issues and management of convulsion

O	248	305	384	263	537	447	67	149	446	478	66	210	
E	300	300	300	300	300	300	300	300	300	300	300	300	
$\frac{(o-E)^2}{E}$	9.01	0.08	23.52	4.56	187.23	72.03	54.28	76.00	71.05	31.68	182.52	27.00	Σ738.91

The above presentation reveals a chi-square calculated value of 738.91. The alpha value is 19.675 derived from df K-1 at 0.05 chi-square table of distribution. The table is categorical table hence K-1. A comparison of calculated and alpha values suggests a rejection of null hypothesis. Therefore the composite of inequality issues of class and rural-urban residence significantly influences the management of febrile convulsion.

Hypothesis 2. (Generated from table 8)

Culture of orientation does not significantly influence the direction of choices in handling febrile convulsion.

Table 12. Chi-square table of association of culture of orientation and the handling of convulsion.

O	310	384	284	258	390	540	150	120	440	510	126	124	296	354	300	250	446	502	124	128	250	352	380	218	
E	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	
$\frac{(o-E)^2}{E}$	0.3	23.5	0.8	5.8	27	192	75	108	65	147	101	103	0.8	9.7	-	8.3	71	136	103	99	8.3	9.0	21	22	Σ1337.74

The above presentation reveals a chi-square calculated value of 1337.74. The alpha value with df from K-1, K=24, at 0.05 chi-square distribution table is 35.17. A comparison of calculated and alpha values suggests a rejection of null hypothesis. Therefore culture of orientation significantly influences the direction of choices in handling febrile convulsion.

Findings and Discussion

1. Socio-demographic indicators reveal that females predominate in the behavior being investigated; persons 20-24 to 35-39 are in the majority; non-formal and primary educational levels dominate; occupation of those involved is predominantly farming and trading and Catholics and Pentecostal Christian groups are in the majority. The female domination is expected going by the fact that mothers are closer to the children. According to Sajadi and Khosravi (2017) mothers are primary care givers and are more involved in the challenge of febrile convulsion.. The ages involved in the investigation correspond to the child rearing ages. Other indicators are in line with NBS (2007) and Federal Office of Statistics (1996) surveys that majority of Nigerian poor are located in rural areas, their greater number are into agriculture, with educational levels mostly non-formal and primary. Above all, they are into a lot of survival strategies. Abanobi (2005) equally informs that socio-economic status, on the strength of one or a combination of income, occupation, education, race and ethnicity does influence health services utilization behavior. To Oladipo (2014) sex is a fair predictor of service use and proximity, availability, age, family size and income are adequate explanatory variables in service utilization.

2. The use of herbal substance from crude oil, alligator pepper and scent leaf is widely distributed in the local government. The reason could be found in the rurality of the local government area. Rural life and rural households go with certain characteristics. According to Cord (1992) rural societies run rich associations where they build bonds of support in everyday life.

3. There is a poor knowledge of the etiology of febrile convulsion. Not many parents recognized the role of untreated high fever and infection of upper respiratory tracts in triggering of febrile convulsion. They also appear not to know the side effects of crude oil and herbs. Klein and Sinus (1986) as well as Inegbeneebor et al (2009) cautioned on the adverse effects of crude oil and local treatment herbs. Kantala, Uhari and Hietola (1995) associated febrile convulsion with high fever, metabolic disorder among other factors. This study authors noted that many parents in the study locale subscribed to opportunistic spirits, family inheritance and shear confusion as they managed febrile convulsion.

4. Poverty is a factor in the choice of the investigated behavior but does not dominate in the behavior, rather all social class levels do participate. The test of hypothesis in this direction confirms that the composite of class, rural-urban issues significantly influence the management of febrile convulsion. This further confirms the role of other intervening variables in the behavior of people during episodes of convulsion, such as group pressure and poor knowledge of convulsion.

5. Culture of orientation and associated beliefs play a dominant role in the choice of crude oil, alligator pepper and scent leaf most parents simply adopt because traditionally their people have been using such. A further test of hypothesis confirms that culture of orientation significantly influences the direction of choices in handling febrile seizure. Bledsoe and Gou (1985) equally confirmed the role of culture in perpetuation of herbal utilization behaviour. Oladipo (2014) did affirm that beliefs held about health personnel and about the efficacy of drugs influenced utilization of health services.

6. Occupation is not necessarily a determining factor in utilization behaviour. The choice of crude oil, alligator pepper and scent leaf is therefore spread among all the rural occupations, farmers, traders, civil servants. Ogwurike (2005), however varies from this going by his reasoning that occupational status is a proxy variable to economic status and enlightenment and do influence utilization and choice of care services.

7. Neighbourhood affiliation contributes greatly in the choice of crude oil, alligator pepper and scent leaf in the treatment of convulsion. At the onset of convulsion, neighbours take over the initiative in the treatment suggestions. This can be explained by Cord's (1992) opinion that rural persons run bonds of dignity, respect and support.

8. Parents with high educational levels use the herbal materials as much as those in the lower educational levels in the treatment of febrile convulsion. The intervening variable is that the research locale is rural, such that even when educated parents would prefer informed treatment they may not act because of neighbourhood pressure, tradition and culture. Never

the less, Shibeeb and Altufaily (2009) associated knowledge of febrile convulsion with parents' education, urban residence and mothers' age.

9. Adverse side effects are with the children who treated with local remedies. This is in line with Klein and Sinus (1986) opinion that the risk of aspiration, pneumonitis, nausea, vomiting and diarrhea are associated with febrile convulsion. In spite of all these, most people however remain in the behaviour.

Recommendations

Health education programmes through public symposia, health talks, seminars, and mass media should be organized by governments, communities and the church to educate parents on the causes of febrile convulsion, chemical composition of crude oil, alligator pepper and scent leaf and the limitations of traditional approaches. Parents who have under five children should be educated on how to manage fever before it reaches convulsive stage. Hospital authorities and voluntary agencies can come in here. Let government step up the founding of children's clinics to help those of low income cope with medical cost. Women's groups should educate their fellows on self control during onsets of convulsion. Socio-economic factors should be considered by relevant government departments and agencies in the planning and provision of health care services utilization

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