

Research Article

Medical doctors do not know it, nor can they treat it: Identifying the common neonatal illnesses and preferred healthcare practices in a Yoruba community, Nigeria

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Abstract - Background: Prompt and effective healthcare practice is essential to reducing neonatal morbidity and mortality which is at a higher rate among low-income nations including Nigeria, especially in rural settings. Studies have identified some structural factors such as poverty and limited healthcare resources as major factors without giving adequate attention to the related intrinsic factors such as peoples' understanding and beliefs among other cultural factors that could encourage or hinder effective healthcare practices for the neonates which is the gap of this study intends to fill. **Methods:** First-hand data were collected during a six-month rapid ethnographic fieldwork at Akinlalu using various qualitative methods of data collection including observations, interviews, and discussion among others. The main focuses were the community's social life and activities and socio-cultural structures such as faith homes and healthcare as well as individuals (grandmothers, grandfathers, birth attendants, medical doctors, and childbearing fathers and mothers) involved in family and children's health in this community. **Results:** Findings reveal an array of neonatal illnesses and interestingly a high level of discordance between the perceived illnesses, causes, and treatment between local people and modern healthcare providers. Widely identified and considered the deadliest neonatal diseases are *senukoto*, *oka*, and *yiyi* (measles). Others mentioned are *giri* (convulsion), *olo-inu*, and *jedi-jedi*. *Senukoto* is believed to be caused by *kokoro* (bacteria/germs) and can kill the infected neonate within the first seven days after birth if not adequately treated. *Oka*, *yiyi*, and *olo-inu* were also considered deadly, usually causing taboos violation while eating sweetening things during pregnancy or breastfeeding is the perceived cause of *jedi-jedi*. **Conclusion:** the study concludes that rural dwellers often cast doubt on orthodox medical practitioners in response to childhood illnesses and treatment which in most cases have implications for prompt healthcare seeking and non-adherence to the medically prescribed regimen.

Keywords: Child morbidity and mortality, folk illness, neonates, ethnography, Yoruba culture.

Background

Health and illness behaviours are subsets of a unified cultural system hence, the reason for variations in the culturally acceptable disease explanations and consequential effects on the health-seeking behaviour across cultures. The culture of a society provides a prism through which behaviours, symbols, and symptoms are viewed and defined, thus forming a cursor for the concepts of ill-health conditions, wellness, and the perceived 'best' or popular healthcare practices in the community including neonatal ill-health conditions (Blumhagen 1980; Lynch & Medin 2006). Recognition of the existence of different cultural explanations for health and illness led to the concept of folk illness. Folk illness is described as those culturally construed conditions, feelings, and situations perceived to cause disease, either to the body or social life; having a contextual interpretative aetiological explanation and healing practice which may or may not be consistent with that of allopathic medicine (Veena Bhasin 2007; Pesquera 1998). Furthermore, ecological, cultural, and medical anthropologists have established that concepts of illness, disease, and health, as well as therapeutic measures including healing practices, are built only on the shared belief, knowledge, and experiences within a given context. This was termed the "meaning-centred approach" (Bhasin 2007).

Further, meaning-centred approach determines where, when, and how to seek and legitimize 'sick-role' by the caregivers and care providers. Discrepancies between caregivers and care providers meaning centred may lead to delay, non-use, and/or non-adherence to the prescription/course of the regimen as demonstrated among the Hispanic American (Bhasin 2007; 2008; Pesquera 1998). Applying this to Nigeria's situation, a meaning-centred approach could help in understanding healthcare practices and health-seeking behaviour vis-à-vis the poor healthcare utilization reported across various Nigerian populations characterized by diverse cultural and socio-economic groups. Despite the fact that western medicine has diffused to, and become the 'ideal healthcare' system virtually in all African nations, including Nigeria; available data on the actual health-seeking behaviour of Africans is medical pluralism among people in the less privileged (poor/rural) settings rely more on the use of home remedy and traditional -medicine than orthodox medicine (Agene *et al.* 2014; Pesquera 1998; Quandt *et al.* 2015; Tafur *et al.* 2009; Taylor *et al.* 1997; WHO 2013; Zyoud *et al.* 2014).

Meanwhile, effective and prompt healthcare seeking from competent personnel has been identified as a single act, but capable of reducing infant mortality by sixty-three percent (Ezeaka *et al.* 2009). However, despite all the efforts and measures from governmental and non-governmental organisations in reducing infant and maternal mortality in Nigeria, the country remains one of the West African nations that did not come near achieving millennium development goals 4-5 even after the expiration of MDGs and remains enlisted among the countries with the highest number of infant mortality rate (IMR (Adedini *et al.* 2015; Adewuyi *et al.* 2017; Ariyo & Jiang 2021; Bruederle & Hodler 2019; Dako-Gyeke *et al.* 2013; Easterly 2009; Lawn *et al.* 2000).

Studies reveal that over 1 million out of about 5 million children born in Nigeria die before the fifth birthday of which more than 280,000 die in their first month (Nigeria 2014). The data further show that social and cultural factors formed the major reasons for the delay or default in accessing effective healthcare facilities, especially in a case where there is no congruence between cultural and orthodox medical aetiological explanations. As an attempt from a qualitative tradition, this study explored people's understanding of neonatal illnesses, symptoms, and causal explanations as a way of knowing understanding when and why some rural dwellers may not or delay seeking help from a biomedical setting. It also explored pervasive treatment options they would opt for and the possible outcome of such a decision.

Methods

Fieldwork Setting

This study was carried out in Akinlalu, one of the rural communities in Ife North Local Government Area of Osun State, southwest, Nigeria. Akinlalu is about fourteen kilometers north of Ife and about seventy-four kilometer south of Ibadan. It is located at the longitude 40.70^o west of the meridian line and 70.50^o south of the equator. Akinlalu is a Yoruba (Oyo) language-speaking community, predominantly agrarian with most women helping their husbands in farming. Some also engaged in buying and selling farm produces like palm oil, vegetable, plantain, and fruits among others.

Social amenities in Akinlalu include a government-owned primary health centre, two privately owned faith homes, many churches, two mosques, six patient medicine stores, one known spiritual healing church/home, and one private clinic (not usually open). Movement is majorly facilitated by *okada* (commercial motorcyclists)

with the presence of a few numbers of five-seats buses and there was neither any bus stop nor motor park thus, restricted movement in and out of the community and in some cases reduces the success rate of medical emergencies.

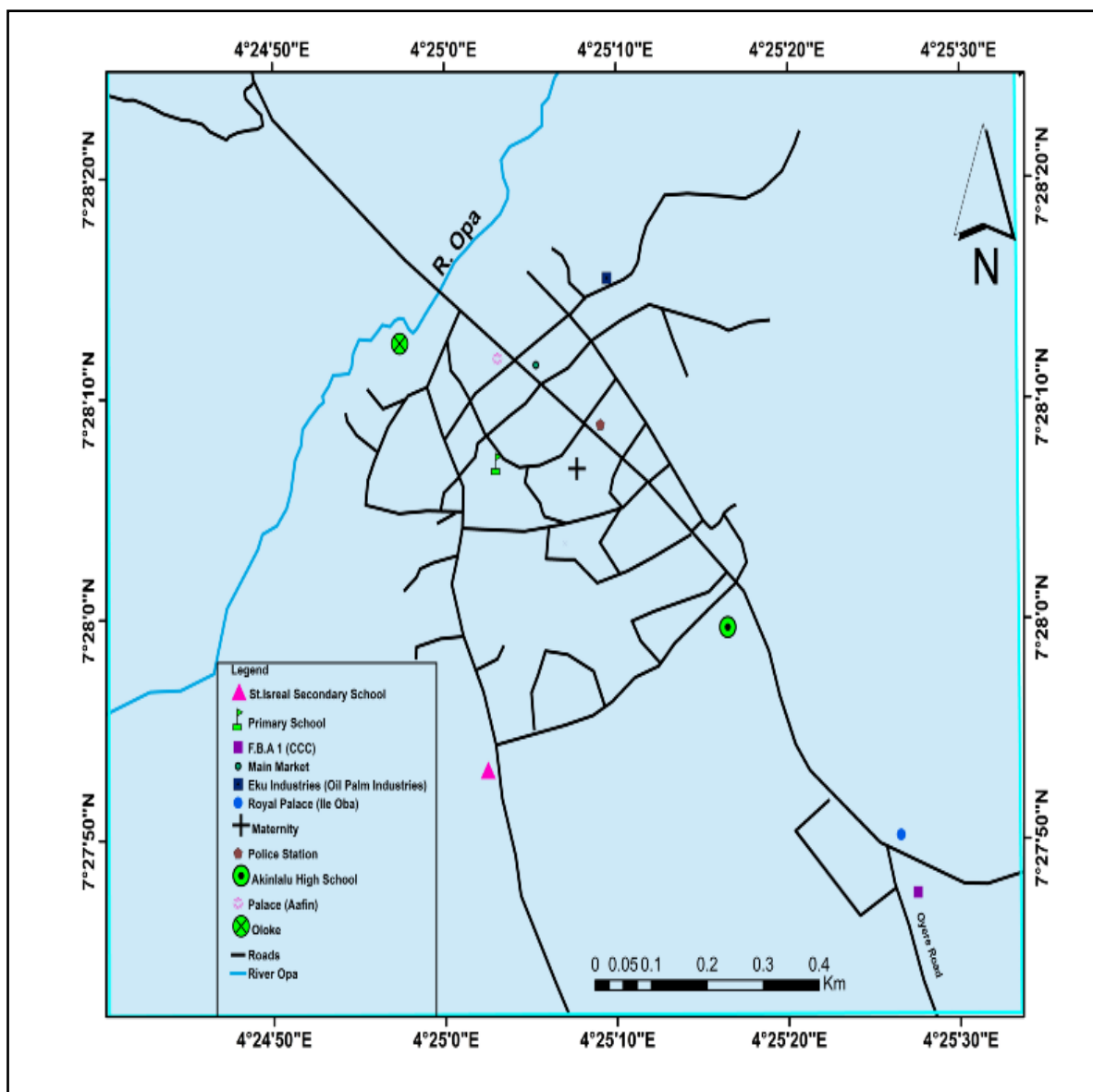


Fig. 1: Map of Akinlalu showing its culturally significant sites

Research Design, Data Collection, and Analysis

Data for this paper were sieved from a larger ethnographic study conducted by TO and with the assistance of TK. The larger study examined ‘cultural beliefs and healthcare practices associated with selected predisposing conditions (preterm delivery, low childbirth weight, and early membrane rupture) to neonatal sepsis in Akinlalu. This study engaged various methods of qualitative data collection such as in-depth interviews

(IDI), focus group discussions (FGDs), and participant and non-participant observation as shown on the [Table 1](#). The fieldwork lasted for a period of six months, but a pre-fieldwork visit was done between January and February before the commencement of fieldwork in March and lasted until August 2014.

Study participants include young and old married natives of Akinlalu (by birth or marriage) who had been residing in Akinlalu for not less than 10 years prior to this study except in the case of the medical doctor. [Table 1](#) shows the distribution of the participants. Further details about community entry, sampling methods, and socio-cultural characteristics of all participants have been published elsewhere ([Alabi 2015](#); [Alabi et al. 2021](#)). Data were collected in Yoruba, the native language of the participants. IDIs and FGDs lasted for about 45 minutes and 80 minutes respectively.

Table 1: Sources of data

Sources	n=
In-depth interview (IDI)	
Pregnant women	3
Faith-based attendants (FBA)	2
Community health worker (CHW)	1
Medical doctor	1
Grandmothers	3
Newly delivered mother 9 primipara	1
Total	11
Focus group discussions (FGDs)	
Young fathers ≤ 35 years	1
Childbearing mothers ≤30 years	1
Grandmothers ≥40 years	1
Total	3

The analysis started from the field by checking filed notes against recorded voice data, after which all the voice data were uploaded into TO personal computer. Data were correctly labelled based on the date and daily activity, transcribed verbatim, translated into English, and typed into Microsoft Word into an electronic copy to enable content analysis. Both authors read the transcripts to plan, sieve relevant data, and generated themes based on the topic. Then codes were separately generated and later harmonised for analysis based on the identified folk illnesses by both authors. Names of the participants were deliberately omitted and unidentified images to guarantee confidentiality and quotes were also used to illustrate the emerging issues.

Ethical Considerations

In the absence of an institutional ethical committee within the Faculty of Social Science at the time of this study, a three-tier Research Committee shoulders this responsibility. Postgraduate Research Committees (Department of Sociology and Anthropology, Faculty of Social Sciences, and Post Graduate College committees) thoroughly examined and approved the research objectives, methodology, and research instruments to ensure this study strictly adheres to all the laid down rules for social research and ‘Protecting Human Research Participant’ Nigeria’s Federal Ministry of Health in National Code of Health Research Ethic ([National Health Research Ethics Committee of Nigeria](#) - NHREC, 2007). Leaders (king and local chiefs) of the community were consulted and intimated of the research objectives and approvals were granted by the council of elders of the Akinlalu community before I commenced data collection. Also, each of the participants was personally contacted, intimated with research objectives including the use of images in academic publications, and voluntarily agreed to participate. Either written or verbal consent was obtained and in some cases both before the interaction. Also, as culturally required in the study area, permission was taken from the husbands to allow their wives to participate in the study except in two cases where those husbands could not be reached and mothers-in-law were consulted instead because all the participants were married. Only the volunteers were included and anonymity and confidentiality were maintained by using figures, age, and gender to identify participants and keeping all hardcopies data safe in my locked bookshelves with electronic copies on a personal pass-worded computer. No substance was administered to any participant and nobody’s human right was violated during and after the study.

Results

Dynamics of Cultural, Religious, and Childbearing Practices in Akinlalu

In an agrarian society, many of the older men were into polygyny and teen spouses, especially the ladies were not uncommon in Akinlalu. Being a patriarchal society, households were male-headed with an average of five members in an extended family living arrangement except in a few cases of monogamous empty-nest or ‘neolocal’ residents. In the extended family living arrangement, the grandfather oversees all ‘political’ affairs in the family and reserves the supreme authority while the

grandmother oversees childbearing and childrearing affairs including the welfare, healthcare seeking, and practices of the members.

More so, every Akinlalu indigene would either claim Christianity or Islam as his/her religion whereas, acceptance of either of the religions does not rescind their traditional religion as their day-to-day activities that involve security, health, and illness, as well as childbearing among others, reflect more of the traditional belief. The belief in *opa* and *oloke* is fundamental in the affairs of personal, family, and community living in Akinlalu. Although *opa* and *oloke* are two different deities, they are closely located at the entrance of this community. People in Akinlalu claimed that the two deities worked together as gatekeepers to protect the community from both physical attacks, such as wars and armed robbery etc and spiritual attacks such as epidemics, misfortune, or poor farming harvest. The implication of this as shown in [Fig. 1](#) is that the community keeps developing along only one side of the river believed to be under the protection of these deities (*Oloke* and *Opa*). In other words, this community remains rural as it kept extending towards the inner part rather than extending towards the other side which is very close to one of the major (Ife/Ibadan) express ways in the southwest Nigeria (despite of its closeness of about two kilometers), and that could have probably made this community more developed. *Opa* is a river as depicted in [Fig. 2](#). It has its source in the eastern part of Ile-Ife (about 24 kilometers away from Akinlalu). *Opa* is believed to be a gatekeeper, protecting the Akinlalu community from external attack and disease prevention as they believed healing occurred after drinking from or swimming in *opa* in the case of infected ones. *Oloke* means ‘owner of the mountain’ and is a form of igneous rock about 5ft long and 4ft tall, see [Fig. 4](#). It is commonly believed that *Oloke* helps their fecundity, harvest, and peaceful coexistence in the community.

Conversely, some religious and healthcare practices other than the general belief in *Opa* and *Oloke* exist in Akinlalu. Following the incursion of the Fulani into the Oyo Empire and civil wars that pervaded the Yoruba nation in the 17th and 18th centuries which dislodged many people and families from their communities, Akinlalu became a home for families from different places like Offa, Modakeke, and Owu among others. This consequently led to various quarters with some distinctive cultural practices which manifest in their occupational, chieftaincies, beliefs, and childrearing practices. A participant recounted:

People started joining them (the founder). Most especially in 1909 when Modakeke was dismembered, so many people came here to start a new life. People came from Yakoyo and Ede before the prevalence of civilization. Some even came from Ifon Osun, and each set of people has their family root (IDI with a 68-year-old man).

Another person said:

People came here from different places and they came with their belief systems.....so each quarter worships her gods like sango, oya and so forth. Also, there is Ile oloya up there as well as Ile Alagbaa. (IDI with a 68-year-old man).



Fig. 2. Opa, a multipurpose river for healing, security, and household usage



Fig. 3. Priest performing rites at Oloke shrine

Each lineage has rituals that members observed especially once the person is married, this includes an initiation into some cultural statuses both at the immediate family level and extended family level. Women's initiation started with marriage, and motherhood and gets to the peak at grandmotherhood. Every stage after marriage is culturally significant, especially for women. In Akinlalu, childrearing starts from pregnancy because, certain rituals are expected to be carried out at certain intervals and ages of pregnancy, among these, are *aseje* (special herbal meal) and *awebe* (ritual bathing for easy delivery). *Aseje* is usually prepared by an elderly in the family or lineage and given to the wife (pregnant woman) to eat in culturally defined periodicals. *Aseje* is prepared so as to ward off potential evil and childhood sickness as well as make the baby strong after birth. Having *awebe* is believed to ease the delivery process and prevent any likely negative outcomes during delivery. It is worthy of note that even though the practice of *aseje* and *awebe* seems widespread in Akinlalu and compulsory when it is prepared, however, the contents and process of preparation seem specific to each lineage.

Two participants shared these:

"... they will prepare ose awebe (the soap that makes one deliver easily) which she will be using to bath with once she enters into the 8th month of the pregnancy, and aseje will be also be prepared alongside (IDI with a 66-year-old grandmother)

No one can reject it. Yes! Because it is an oro idile (compulsory family rituals) for them. Each family has a particular one they must eat at a certain stage of the pregnancy. Although, some women may not want to eat, but if she understands the repercussions of not complying, she would eat" (FGD with young mothers)

A discussant also used her personal experience as an illustration:

"The traditional method that I know is the Aseje. I always eat it whenever I am pregnant and once, I eat it, I will deliver safely and easily. Aseje makes one to give birth easily...once it is prepared, I must eat it" (FGD with young mothers)

It is not only that the belief in cultural ways of preventing and treating childhood illnesses is a common denominator among all the lineages in Akinlalu, also these practices vary among them. They also believed that neither the mother nor a neonate can contract any deadly or infectious disease once the mother took *aseje* and *awebe* as and when due in pregnancy except in a few exceptional cases which were also considered an aberration and a work of metaphysical activities.

Commonly Recognised Childhood Illnesses and Preferred Treatment Options

Childhood illnesses are possible especially when some metaphysical agents are present. Although, many people believed that it will be rare for a pregnant woman or neonate to fall sick if that pregnancy or pregnant woman is well taken care of especially through the cultural preventive and preservative measures of *aseje* and *awebi*. Yet, the data revealed an array of childhood diseases believed to be in existence in Akinlalu which I gave some of them a descriptive name because they lack English etymon. The causal explanations of most of the identified childhood illnesses have preternatural and natural undertone and few were considered hereditary and in many cases contradict biomedical explanations of such symptoms except in the cases of measles, yellow fever, convulsion, and hiccough.

Although, measles, convulsion, and hiccough as mentioned by the participant were consistent with medical terms, however, their native aetiological explanations of these disease conditions were totally different from the orthodox medical explanations. As stated earlier, all other illnesses identified lack English neologism and therefore are given descriptive names based on the given explanations of the major symptoms to enhance readers' understanding. In addition, many of these illnesses were believed lacking western medication and attention was given to these illnesses since that is the focus of this paper. The commonly mentioned illnesses were *yiyi* (measles), *iba apoju* (yellow fever), *Oka* (bugging fontanel), *Senukoto* (roundish mouth) *esuke* (hiccough), *giri* (convulsion), *jedi-jedi* (pile) and *olo-inu* a form of gastrointestinal disorder. Each of these illnesses is discussed separately for the sake of clarity. As an informant said:

“... like that giri (convulsion) baby will be shaking periodically. Senukoto, the baby will be having very high temperature; the higher the temperature, the more the shortage of blood in the baby which may cause the baby to give up the ghost. In the case of oka, there will be spasms on the child's fontanel (IDI with a 46-year-old FBA)

Yiyi Or Measles as a Folk Illness

In Akinlalu, *yiyi* was believed to be the same as measles. *Yiyi* is considered deadly with natural and metaphysical causes and can be treated with either traditional or orthodox medicines. *Yiyi* is mentioned in all the interactions (interviews and FGDs). It is also called *igbona* and *sonpona* (god of chickenpox). However, it was rare to see people, especially young adults calling it *sonpona*. This is because *sonpona* is historically considered one of the Yoruba's powerful deities and because it easily gets angry, it inflicts *igbona* (chickenpox) on its offenders. It was generally believed that *yiyi* can infect anybody but is common among infants and rarely infect neonates except the mother contracted it while in pregnancy and therefore affect the child which could manifest in blindness or any other disability.

Data revealed that, even though people believed in the preternatural causation of *yiyi*, yet, its episodes in an infant were rarely attributed to *sanpona* but commonly mentioned was the climatic condition (hot weather) and vectored by the contact with carriers. *Yiyi* was said to be rampant during the dry season because of the heat and that it could easily spread to another infant in proximity to an infected one. However, it could not be unlikely that what the local people termed measles may not be measles as a biomedical practitioner emphasizes the presence of fever and distinctive rashes which differ from body rashes in the episodes of measles. He recounted:

“Measles is rarely seen in the neonate and that is why we can afford to wait till the ninth month before vaccinating children against measles...as a matter of fact, I have not seen measles in adults. What people call measles often is not measles. When I say measles, I mean the measles based on a clinical diagnosis not because you see rashes on the person. We have noticed that what people call measles is mere rashes on a baby’s body which may be either be localized or all over the baby’s body which is often mistaken for measles....so if we are talking about skin rashes let talk about it and if it of measles, let us talk about measles. Measles usually starts with fever, after that is the rashes of a particular type, however, most of what they call measles is not starting with fever, and if it is not starting with fever, it is not likely it is measles”(IDI with 37 years old paediatrician/public health personnel)

Symptomatically, the measles-inflicted infant may have rashes all over his body, not eating well, dull, and restless. According to them, *Yiyi* if not well managed, can cause permanent disabilities in an infant such as deafness and dumbness, body bombs blindness, mental retardation among other impairments, or even death. However, it was generally believed episodes of *yiyi* were no longer very common in Akinlalu compared to time past. Also, some attributed the reduction in the measles epidemic to urbanism and civilization. Similarly, data revealed the acknowledgment impact of immunization as another factor that tamed the outbreak of *yiyi*. An informant said:

One of them is Yiyii or Yiyi. English man calls it measles...is like smallpox which is killing too... (IDI with a 68-year-old man)

Home remedies remained the most preferred option for the management of measles episodes despite the shift in the perceived causation. Although most people in Akinlalu now believed less in preternatural causal explanation (*sonpona*) and more in natural causal explanation (too much heat), only the ideal healthcare practice changed but the actual healthcare practices were more of home remedies and the use of

traditional medicine. Most of the participants acknowledged the efficacy of antibiotics and hospital-based management as the proper treatment option and even condemned some treatment traditional ways of managing the condition virtually all the participants have either managed or preferred to manage measles with *ero* (local antidote/local herbs). They would also make sure their kids keep a distance away from an infected infant, sprinkling and drinking *emu* (palm wine), keeping *tagiri* (*Adenopus breviflorus*) (Fig. 4) at home, and some local leaves as a way of preventing it. Worthy of note is a particular family culturally known for treating *sopona* (god-inflicted measles) in Akinlalu. Also, apart from the acknowledgment of western medicine, immunization during antenatal care was equally identified as a vital factor in *iyi*'s prevention.



Fig. 4. *Tagiri* (*Adenopus breviflorus*)

An informant shared his belief as follows:

“... each lineage has her own specialization; our own is to treat *sonpona*. *Sonpona* is like smallpox” ... (IDI with a 62-year-old man).

***Oka*- Sunken/Bunging Fontanel**

Oka is a childhood folk illness considered deadly and believed to neither have a western medical explanation nor effective medication and yet, it is believed to be very common among neonates. they claimed that an episode of *oka* may surface in the perinatal period or develop a few days after birth. *Oka* has two types: *oka inu*- the tommy *oka* with a

sign of stripe on the baby's belly and *oka ori* (the one that affects the head) with a mark (swollen vein showing) on the forehead of the baby which may also be called bulging/sunken fontanel of the infant in which a stripe like a line appears on the baby's forehead. Its symptoms include excessive crying especially at night, not suckling well and the baby getting lean. It is believed that a neonate suffering from *oka* may die if a quick response is not given.

Not all people especially young fathers and mothers claim knowledge of the cause of *oka* but they all believed it exists and is curable but only with traditional medicine. Both old and young participants irrespective of gender claimed to have experienced *oka*, either with their own child/ren or through vicarious experiences. Only the older participants claimed to know the causes which were attributed to the diet taken by a pregnant woman. Those foods mentioned were some local vegetables such as *elegede* Field pumpkin (*Curcubita pepo*) and *ebolo* Fireweed (*Crassocephalum crepidoides*) see **Figs 5** and **6** respectively.



Fig. 5: Elegele Field pumpkin (*Curcubita pepo*)

Oka is diagnosed and treated by elders with traditional therapeutic measures. Data revealed that the elderly, especially grandmothers in the family are saddled with the care of neonates because they believed they are experienced. Diagnosing *oka* once the symptoms are noticed involves using a local fruit described to look like a dry okro which will be putting it in the water for some minutes after which if it splits up, they will believe that it is an *oka* and if otherwise it is considered another disease. The perceived effective and preferred management of *oka* is through local herbs for the infected neonate.

“I do not really know the cause.... some would say the cause is the refusal of eating aseje...If it is an oka, there is something like dried okra they use to diagnose it, once they put it inside the water and it scatters, that signifies it in Oka but if not, it will not scatter. And they will prepare a concoction to cure it both for bathing and drinking. (FGD with young mothers)

Another informant said:

A pregnant woman must not eat elegele because it troubles the foetus in the womb (IDI with a 66-year-old grandmother)

“In the olden days, before the advent of the hospital, when a woman is pregnant, we had our traditional medicine that our forefathers and foremothers used to. Aseje (herbal meal) will be prepared for a pregnant woman to eat. There is something called oka (sunken fontanel), once a baby has it from the womb there is no type of modern medicine that can be used to treat it; the baby will still be crying and getting smaller daily until agbo (herbal concoction) is prepared by our fathers”(FGD with young mothers).



Fig. 6. Ebolo- Fire weed (*Crassocephalum crepidoides*)

However, data revealed that *oka* lacked specific medical terminology, and western medicine did not recognize *oka* as a disease condition and had no specific medication for it. Medical personnel explains the symptoms as a mere pulsation in the score as a result of the passage of blood in the vessel in the part of the child’s head that is yet to be covered or fused with the bone.

“It is really nothing to me because every neonate has it. In a neonate, the skull is not yet totally covered with bone. So, it is where infusion is yet to occur that is covered by skin the coverage of the brain. The pulsation of the blood vessel that supplies blood to the brain is seen in that space because the bone is not present which is normal. However, some things may occur that would be an indicator of the child having a health issue. For instance, if that place is depressed that is an indication of dehydration, and if it is tensed, like protruding, that is an indication of infection. It could be a bacterial infection from the accumulation or as a result of another congenital condition that did not allow fusion of the score perhaps.... oka-ori to my understanding is the pulsation of that place and it is normal, not abnormal... Candidly, I am not aware of oka-inu. Except you give me some clues into what they are referring to as oka-inu” (IDI with 37 years old paediatrician/public health personnel).

Senukoto -Roundish Mouth

Senukoto also lacks western medical treatment and used to decimate a large number of neonates within their first seven days of birth in Akinlalu but it is not as frequent as it was in the past. *Senukoto* (roundish mouth) was mentioned by almost all the participants including the young mothers and fathers. During the FGDs, all discussants were very serious about *senukoto* and confirmed its notoriety that it does not allow an infected neonate to live up to the seventh day except if it is discovered and treated early enough. Even though there were no many symptoms given about *senukoto* other than that a neonate suffering from *senukoto* will not be too active and have his mouth folded and will not be able to open his mouth wide even when the baby is crying. The vast majority, especially the younger mothers and fathers claimed ignorance of the cause of *Senukoto* but they believed it exists. A few individuals adduced it to *kokoro* which could mean germs/bacteria/ants but no particular type of organism was mentioned.

Senukoto was believed to be a local neonatal disease that no doctor could treat medically. It can only be treated by a local remedy that only a few elders in the community could prepare, unlike other disease conditions. However, they believed that taking *aseje*, and *awebi* may be prevent *senukoto* and some think immunization may also prevent it.

“I do not know the cause... It is the elders that know its herbs. When the signs and the symptoms are shown, then the baby will be taken to the elderly persons and anyone among them that has treated the baby before will tell the mother to go and buy something like herbs or prescribe herbs that will be used for the baby” (IDI with a 20-year-old primigravida)

There is a sickness called Senukoto the sickness would not allow the baby to live till the day of the christening. The baby would not live to see the 8th day (naming day) before he/she would die. They treat it with the concoction in the

olden days; besides, there were many different sicknesses that our fathers had the competence to manage

...Those whose children are affected by it will look out for anybody that knows its traditional remedial regimen.... There is an aseje for Senukoto and there is also for oka, I always eat them all; none of my children has any of these diseases (FGD with Young mothers)

On the contrary, western medical practitioners were not aware of *senukoto*. A medical practitioner demanded more information on the symptoms so as to understand what such a disease could be perhaps to give the western medical understanding of such a disease condition. In sum, *senukoto* was said to be similar to neonatal tetanus based on the supposed round nature of the victim's mouth.

“Senukoto? I have not heard about that. Maybe you should discuss it further by giving the associated signs and symptoms...That sounded like tetanus now. Or what will Yoruba call tetanus? Ok, it is called arun ipa...And talking about symptoms of tetanus, lacked jaw is one of them, and refusal of food. From the description, I think they are referring to tetanus because the way the name sounded senukoto that is a roundish mouth with the inability to open the mouth wide” (IDI with 37 years old paediatrician/public health personnel)

Jedi-Jedi (Pile)

The people in the study area are *Jedi-jedi* believed to be microorganisms in the body capable of causing damage to the body organs or leading to other illnesses when it is too much in the body system. *Jedi-jedi* is popularly called *jedi* and anybody can have it irrespective of age, status, or gender. When *jedi* is much in adult men, they believed that it can cause excessive farting, dysentery, or irregular defecation, back and waist pains shorten manhood, and/or impotence. In the infant, it was believed that *jedi* can cause dysentery, excessive crying, and/or irregular defecation. Although *jedi* was considered a less serious clinical issue they believed that if it is not well managed can cause other health/medical challenges.

The belief is that *Jedi* is caused by the consumption of too many sweetened foods; thus, believed that only the excessive *jedi* can be prevented or controlled but it is impossible not to have it as long as one is eating any sweetening food. In a neonate, the cause was attributed to the mother as regards what she eats while in and after pregnancy, hence the warning to be avoiding sugary things by the pregnant or lactating women. A participant in the course of the interview said:

“Jedi is a disease that both the old and young can suffer from especially an adult like eating sugary things; only that it is more common in infancy than the

old people... Jedijedi is caused by different sugary things like sweet and other things made of sugar. That of neonates is caused by whatever the mother ate while in pregnancy and even when lactating because it is whatever the mother is eating that the baby is also eating indirectly” (IDI with a 66-year-old grandmother)

“There is a tablet (western drugs) for the cure of jedijedi but there is also an active local concoction for it that will cure it. It is not even something very difficult to prepare, it is a matter of getting onions and kafura soaked in clean water and be given to the child like twice daily. It will cure it. The only thing is that the onion must be a white one and not the common purple colour that we know. It can be given to the baby for a span of like three months. As the one prepared getting a shower, a new one will be prepared” (FGD with Grandmothers)

Orthodox medicine on the other hand does not believe in the *jedi-jedi* saying it is too vague a name for a disease condition. Data from orthodox medical practitioners reveal that there are too many disease conditions with different causes that are regarded as *jedi-jedi*.

“I know of jedidi. Jedijedi is a symptom or word that is used to describe a class of conditions or diseases that have to do with the anal part. From a medical perspective, there are too many things that people call jedi-jedi which make it difficult to say this is jedi-jedi. For instance, if prolapse of the anus, I mean the wall of the anus prolapse outside which is do happen in dehydrated children, some people will call that jedi-jedi. When there is an infection around the anus causing irritation, some will call it jedi-jedi, or when their haemorrhoid which is not prolapse but a tick and big vessel hanging around the anus. It could be internal or external. They also call it jedijedi so there are so many things that they call jedijedi. Also, I do not think it is common in neonates except if the baby has a congenital condition with the anal part. To me, I believe jedijedi is a broad classification that does not point to a particular disease condition. It is too vague a name” (IDI with 37 years old paediatrician/public health personnel)

Other illnesses mentioned include *Esuke*-Hiccough, *Oloinu*-Gastrointestinal disorder, and *Giri*-Convulsion. *Esuke* is a hiccough and it was neither considered a serious childhood health challenge nor deadly. The believed cause is either the mother was eating a particular local vegetable called *ebolo*-Fire weed (*crassocephalum crepidoides*, during pregnancy or it came naturally. The difference between the two is that the infant will be experiencing constant hiccoughs and more often if the mother had eaten *ebolo* while in pregnancy than the natural hiccough which may come but once in a while. They believed that once an infant is experiencing a hiccough, part of the wool/cotton/tread of the shawl or *oja* should be pulled out and put on the baby’s

fontanel. However, if after putting tread, the hiccough persists, the baby should be allowed to suck breast or allow taking water if s/he is a toddler.

Giri is also known as *ile tutu* and was generally believed to be convulsion. *Ile tutu* means ‘cold weather’. *Giri* is mentioned by a few individuals’ especially older people as one of the common diseases threatening infants. *Giri* is considered normal, and everybody is a carrier of some measures of it but could be aggravated if an infant is exposed to too much cold. Occasional muscle seizure and/or muscle palpitation that is commonly experienced by almost everybody was considered to be a sign that everybody has it. *Giri* only becomes a health issue when it is excessive. Similarly, the occurrence of excessive *giri* is believed to be more frequent in infancy than in young people. *Giri* does not have a specific symptom prior to its episode, but it manifests in general body seizures many believed. Once *giri* occurs, the caregiver must first target the victim’s mouth and prevent it from being shut. Thus, a teaspoon or stick is used to prevent the victim’s mouth from closing and if no object is found around two or three fingers could be used to keep the mouth open.

“This is a natural disease that everybody is born with. Everybody has it including you (referring to the author). Yes! It is only its excess that is dangerous. Let me give you examples of its symptoms. Don’t you notice sometimes in your body when a part of your muscle will be palpitating and making some sounds? That is convulsion. It is only its excessiveness that attacks the children” (IDI with a 68-year-old man)

Data revealed that traditional ways of treating *giri* include the use of *agbo* (concoction) of which cattle urine is part of the ingredients. Coupled with *agbo* is the carefulness of the parent or guardian by putting a thick cloth on the child to prevent cold, especially in the cold weather since it is believed that all children have it. However, immunization and western medicine is acknowledged for curbing the prevalence of *giri* among the infant.

Discussion of findings

People in Akinlalu like all other Yorubas are theists. They believe in the existence of one Supreme God called *Olodumare* who is the most powerful, all-knowing, and creator of heaven and earth. It is believed also that *Olodumare* cannot be directly reached except through intermediaries such as deities and forces such as witches and wizards, ancestors, and ghosts. Another important aspect of their belief system is the belief in the ‘dual’ (divine and natural) nature of anything ever existed. They believed that every natural object, such as plant, river, rock, and so forth has both physical and spiritual

components. Both the forces and spiritual components of the natural objects can influence man and his activities either positively or negatively; hence, the need to maintain a harmonic relationship with them to avoid negative effects. As a result, the acceptance of Christianity and Islam in Akinlalu which led to the destruction of most traditional shrines towards the end of the first half of the 20th century notwithstanding, *oloke* and *opa* remained the most prominent traditional deities with existing shrines in the present day Akinlalu. As [Agazue \(2021\)](#) recently reports that socio-cultural belief in spirit affects several not only social life but also child healthcare practices in several cultural settings across Africa, so are daily social life and practices (proverbs, greetings, myths, foods, taboos, etc), childrearing practices, security measures, and health and illness behaviours in Akinlalu, to a large extent reflect their reliance on this cultural belief.

This study explored the understanding of rural dwellers of common childhood illnesses and preferred healthcare practices in the event of these conditions in the Akinlalu community. This was with the view to understanding why caregivers may delay or deny seeking prompt and effective healthcare from competent medical personnel which is a crucial step in reducing neonatal morbidity and mortality rate. The study affirms the importance of cultural beliefs in defining health and ill-health conditions as well as perceived appropriated healthcare practices as argued by earlier studies ([Bhasin 2008](#); [Veena Bhasin 2007](#); [Blumhagen 1980](#); [Pesquera 1998](#)).

The Yoruba's belief in forces such as witchcraft, gods, and ancestors; dual nature (physical and divine) of every existing object, and their interference in human life especially health and illness are also established by this study which is in tandem with Jegede's study ([Jegede 2002](#)). Although, data also confirmed a decline in the occurrence of most of the so-called deadly childhood illnesses in the study area compared with some decades back which they partly attributed to biomedical intervention through immunization and perhaps improved the knowledge level of caregivers especially mothers regarding the causes, symptoms, and treatment of childhood diseases reported by ([Lawn et al. 2010](#); [Odebiyi & Ekong 1982](#)). However, it is evident that to date, actual healthcare practices associated with pregnancy, childbirth, and childhood illness are to a large extent influenced by traditions and cultural beliefs as shown in the status of mothers and grandmothers.

Furthermore, the concept of healthiness or wellness in Akinlalu rests on a 'balanced relationship' between natural and supernatural, as found in general Yoruba

culture. Their definitions and explanations of the causes of diseases' symptoms during pregnancy and childhood reflected Yoruba primordial ways, consequently leading to traditional therapy and medicine as the socially acceptable and preferred curative measures. The belief in the dual nature (spiritual and physical) of man and plants, as well as the symbiotic relationship and harmonic functions between living and non-living things as shared in Akinlalu, explains why a pregnant woman is viewed as a carrier or a custodian of divine 'luggage'. Similarly, the belief in deities and forces could also be held responsible for their dependency on rituals and avoidance of breaking taboos as demonstrated in their epidemiological understanding of neonatal illnesses and pathways for healthcare which has also been documented (Jegede 2002). This, therefore, explains why people generally believed in the protective and curative power of *Opa* (river goddess). Many also believed that rivers *Opa* and *Oloke* can help to increase their harvest, guarantee peaceful coexistence, and give children to barren women. They can prevent infants from contracting some illnesses, especially infectious diseases such as chickenpox and measles among others. Even when a child contracted any of these diseases, bathing with water fetched from river *Opa* could heal the child and probably delay seeking help from the hospital until an advanced stage. Believing in the river goddess for the maternal and infant reproductive healthcare among Yoruba has been documented in the literature in which *Oya*, *Oshun*, and *Yemoja* have been connected with the care and safety of both the pregnant woman and the welfare of a newborn (Awojoodu & Baran 2009). However, all these are potential impediments to effective health-seeking which need to be addressed if childhood healthcare is to be improved.

Cultural belief and internalized health-seeking behaviour remained the primary determinants of healthcare utilization while socio-demographic data seems secondary. The study is consistent with (Feyisetan *et al.* 1997; Taylor *et al.* 1997) on the existence of and preference for the use of trado-medicine among people despite the awareness of/or availability of biomedical facilities even when it is not costly. People in rural settings still romanticize their native epidemiological explanations, especially in the area of childhood diseases. It shows that culture (customs, knowledge, beliefs, and social structure) to a large extent still influences preferred treatment options for the mothers. The findings reveal numerous cultural practices in the care of pregnancy and childhood such as family cultural practices like *aseje*, and *awebi*, which are also based on individual ethno botanical knowledge which are handed over from one generation to another. These internalized healthcare practices are played out from the home front, in

form of home remedy where the elderly treats the sick family member or refer him/her to the perceived most appropriate healthcare which is similar to (Taylor *et al.* 1997) where the home remedy was reported the entry point of healthcare practices among African Americans.

It is clear from this study that discrepancies between native disease causation theories and biomedical aetiological explanation can cause a delay in seeking effective biomedical assistance and/or strains and non-adherence to the prescribed regimen if not a complete denial of hospital presentation. Different epistemology and epidemiological understanding formed the basis for perceiving biomedical personnel as lacking the competence to handle some childhood disease conditions. This cut across virtually all the identified illnesses. For instance, the participants believed that *senukoto* and *oka* lack western medical terms and that doctors do not know the appropriate treatment for these conditions and yet they are considered to exist. Although, measles is considered deadly and contagious which is consistent with biomedical, unlike the position of the western medicine that measles rarely inflicts neonates until around 9 months of age which to local people, *yiyi* can plague anybody. Also, seasonal (too much heat) causation as depicted by the native epidemiological understanding of *yiyi* which to them makes measles episodes more common during a dry season, and the belief in metaphysic (taboo-breaking or offense to god) is not consistent with the medical explanation. However, this notion, therefore, encourages the preference for traditional medicine and renders biomedical facilities under-unitized in the rural community as in the case of measles. This plays out in the choice of the treatment option in the event of a measles episode even though they are aware of effective western medicine for measles, they prefer using *ero* (local antidote), palm wine, and tagiri among others as well as keeping away another infant from the infected one. Using the traditional method to manage measles episodes among Yoruba has long been reported by Odebiyi and colleague (Odebiyi & Ekong 1982) and the traditional way of interpreting and treating childhood disease among Yoruba is reflected in some previous studies (Feyisetan *et al.* 1997; Ogunjuyigbe 2004).

Interestingly, apart from the discrepancy in aetiological explanations, it was observed that some of the symptoms regarded as measles were disproved by the doctors as body rashes. Similarly, causal explanations for *olo-inu* (infant gastrointestinal illness), *esuke* (hiccough), and *jedi-jedi* (pile) are all inconsistent with biomedical positions of similar conditions. By implication, the accuracy of local therapeutic

measures, symptomatic understanding, and correctness of childhood diseases' labelling are not curtailed, however, this local disease causal explanations and labelling are what guide their healthcare practices. It is not far from the truth that wrong diagnosis and administration of wrong drugs are imminent with a home remedy in such a setting which itself could lead to complications or even death of infants. Meanwhile, scholars have also argued that reasons for poor/none utilization of modern healthcare facilities in the events of childbirth and childcare are beyond inequality and uneven distributions of wealth among the population; one of the major factors is the perceived cause and culturally preferred therapeutic measures (Kaphle *et al.* 2013; Ogunjuyigbe 2004).

Even if the eradication of traditional healing and medicines is possible, it is not desirable because it is part of the functional aspect of culture. Although, some challenges are associated with the use of traditional healing system, especially in the area of folk medicine as it may lead to complications, delay in seeking, or non-adherence to the prescription from biomedical facilities which has generated an ongoing debate among scholars. However, traditional healing system and practices including home remedies are cultural imperatives that serve a number of functions such as employment, social identity, and status, including the provision of healthcare services where there is no facility even at a low cost. This formed the basis why some scholars condemn the use of traditional medicine and some recommend integration into biomedicine (Abioye 2011; Oyelakin 2009). There is a need to further study the efficacy of *aseje* and *awebe*, both in context and content since it is widely accepted and their efficacy is acknowledged among the people. Also, as Pesquera, (Pesquera 1998) pointed out, there is a need for further studies to investigate the influence of belief in folk illness and adherence to the prescription and regimen among the mothers.

Conclusion

This paper compiled some perceived childhood illnesses and the preferred treatment options in one of the Yoruba rural communities, in southwest Nigeria with the view of understanding why some people in the rural setting may not or poorly utilize modern healthcare even when available in seeking care for their sick infant. The paper concludes that people in rural settings have their distinctive way of identifying, explaining, and treating childhood illness conditions which may not necessarily be consistent with modern medicine. It is therefore imperative for orthodox medical

personnel and health educators to understand the cultural stance of their clients/patients as a major solution to poor or none utilization of modern healthcare facility in the event of any of such conditions.

There is an urgent need to bridge the gap between native epidemiology and modern medical perspective especially correcting those wrong aetiological assumptions to reduce infant/neonatal morbidity and mortality rate.

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