Research Article

Approaches to epilepsy treatment among Yoruba traditional healers in southwest Nigeria

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Abstract - Traditional Yoruba medical practitioners are known for taking a holistic and specific approach to treating chronic diseases and illnesses, which may have implications for treatment efficacy and therapeutic outcomes. This study explores the therapeutic measures used by Yoruba traditional healers in managing clients who have epilepsy. Based on a qualitative descriptive case study approach, traditional healers with the requisite experience in treating epilepsy were recruited within two Yoruba communities in southwestern Nigeria. A snowball sampling technique guided the recruitment of 24 traditional healers for face-to-face interviews. All the audio-taped interviews were transcribed and translated into English in a back-to-back approach and analysed thematically with the support of Atlasti 8. It was stated by the traditional healers that divination is the first procedure in the treatment of epilepsy. Divination reveals aetiology, dictates the treatment approach and therapies for each case, and also assists healers in protecting themselves and their significant others from being afflicted with epilepsy. Findings revealed that, as a complex illness, epilepsy could sometimes occur in the life of an individual as an affliction. Thereafter, appeasements, sacrifices, spiritual baths, and concoctions would be introduced on a case-by-case basis. Animals and plant materials also formed parts of the contents used in making potent treatments or therapeutic remedies. Epilepsy is treated among traditional Yoruba healers using different approaches depending on the aetiology of the case and their divination of what works well for an individual. Internal regulations of traditional medicine are required to ensure the legitimacy of treatments and therapies and protect people living with epilepsy from exploitation.

Keywords: Epilepsy, divination, atonement, spiritual baths, concoctions traditional medical practitioners
Introduction

About 10 million people living with epilepsy are in Africa. The figure represents close to 20% of the global population of those who have epilepsy (Mugumbate and Zimba 2018). Among those living with epilepsy, Nigeria has a high proportion of them spread across different communities and age categories. The rate of epilepsy in developing countries is high, with rates ranging from 5.3 to 37 per 1,000 (Okoye et al. 2016). The treatment gap for epilepsy is also higher in developing countries than what exists in developed countries (Mushi et al. 2012). Multiple intersecting factors account for the huge disproportion in treatment gaps. Within the African health care systems, there are grossly inadequate medical experts and limited access to anti-epileptic drugs. Most healthcare facilities are situated in cities far away from the patients’ residents, making it difficult for them to access healthcare (Anard et al. 2019).

The majority of the people living with epilepsy in Africa experienced it in childhood. A recent assessment shows a treatment gap of 75%, as most cases are unreachable despite evidence showing that over 42 percent of funded interventions that are aimed at improving access to anti-epileptic drugs are domiciled in Africa (Jost et al. 2018). Many of the risk factors for epilepsy appear dominant in Africa, where prevalence remains high and the unmet need for treatment is also huge with limited evidence on how to mitigate these gaps (Wilmshurst et al. 2014).

Beyond poor health system performance and other structural forces, the existing treatment gaps for epilepsy are connected to cultural values, beliefs, and practises that shape how lay people conceive, react to, and possibly recover from epilepsy. These factors also account for the disconnection between the dominant biomedical system and lay perspectives on the aetiology of epilepsy, its severity, and its treatability (Mugumbate and Zimba 2018). The religiosities that exist in a number of African communities have contributed to the growing trend of associating epilepsy with supernatural and preternatural forces. Mugumbate et al. (2018) opined that across many African communities, Christians and Muslims believe and attribute epilepsy to spiritual causes, caused by an evil spirit, and which can be cured spiritually by God. This belief influences people's attitudes toward illness, as the majority prefers to patronise traditional healers or faith healers to remove the evil spirit from epileptic victims,
resulting in a delay in seeking medical care and victim stigma. Farrukh et al. (2018) revealed in a systematic review on treatment adherence and choice making that the belief that epilepsy caused by spiritual factors cannot be treated with modern medicine impacts the preferred mode of treatment. The review also shows that patients living with epilepsy still patronise traditional healers despite the available antiepileptic treatment within biomedicine due to the cultural beliefs attributed to the condition. African traditional healers are noted for their diversity in practises and treatment options. Such diversity exists within and across social settings and has implications for the quality of care and treatment outcomes (Van der Watt et al. 2018). The Yoruba traditional healers are not an exception, as such diversity also reflects in their approaches to knowledge generation and validation of treatments and therapies (Agunbiade 2014).

In light of this, more research is needed to understand the approaches to treatments used in existing traditional African medical systems, as well as the potential implications for therapeutic outcomes. Findings from such studies will further illuminate contextual evidence on dissatisfaction with biomedical treatments in some instances where physical access was not stated as a barrier among some patients seeking help for epilepsy (Auditeau et al. 2019). Within the traditional medical system, the possibility of exploitative practises and inexplicable approaches exists. The efficacy or otherwise of what treatment options are being accessed and how abuses can be mitigated will require insights into what approaches exist.

Earlier studies have reiterated the need for studies in this direction, including those that are exploring existing treatment practises and how African traditional healers’ construct and interpretation of epilepsy and neurological conditions shape their service delivery and therapeutic outcomes (Winkler et al. 2010; du Toit and Pretorius 2018). More evidence is required in both directions to understand existing treatment gaps and how to make care more accessible and acceptable (Auditeau et al. 2019). Similarly, and somewhat critically, is the need for evidence on how traditional healers are responding to the widening gaps in epilepsy treatment through the therapies and treatment options they are providing (Kaddumukasa et al. 2018; Anand et al. 2019). Available evidence shows that measures like scarification, prayers, incantations, and herbal concoctions are common among these healers. In some communities in East and South-central Africa, rituals and incantations are used in treating children with epilepsy because of the belief
that an individual can be afflicted with epilepsy through spiritual forces (Boling et al. 2018; Anand et al. 2019; Mushi et al. 2012; Okoye et al. 2016). This view makes divination a core practise among Yoruba traditional healers. In Namibia, traditional healers share the view that epilepsy can be diagnosed by looking at the symptoms and through divination and keen observation. For these healers, observation of symptoms that are backed by divination helps a healer gain an objective diagnosis of whether their patients are afflicted with epilepsy through natural or spiritual forces. In Tanzania, some traditional healers share the view that incisions on the affected body part work based on the belief that the epilepsy will leave the body through bleeding. In Ghana, some Islamic faith healers adopt a mix of Qur’anic and traditional medical remedies in providing cures for their clients living with neurological conditions, including epilepsy (Kpobi and Swartz 2019). The belief that epilepsy is contagious is common in many African communities, and this view reifies epilepsy as spiritual possession (Anand et al. 2019), which requires deliverance, rituals in diverse forms, and the subjection of clients to some unexplainable approaches for relief (Mugumbate et al. 2018).

There is also the challenge of accessing standardised training and multiple explanations of what qualifies an individual healer as authentic and gifted. Among the Yoruba people, where this research was conducted, healers are either born with healing gifts or acquire them through apprenticeship (Agunbiade 2014; Jegede 2005; Adekson 2003). Similar explanations also exist in other African communities across the southern and western parts of Africa (Twumasi and Warren 2018). Among the Yoruba people, healers with inborn healing gifts who are disciplined by following the ethics of such a calling are often considered more powerful. Those with inborn healing gifts are also able to selectively transmit them across generations as deemed fit by the ancestors (Oyebola 1981). With modernization, social change, and economic pressures, more healers have emerged through apprenticeship and claimed to possess some spiritual powers through sacrifices (Agunbiade 2014; Jegede 2005; Adekson 2003). Whether gifted or acquired, there is a common understanding that traditional healers possess the powers to understand and control spiritual forces. Thus, multiple approaches to treating illnesses, including epilepsy, are spread across different African communities (Kaddumukasa et al. 2018; Anand et al. 2019; Kpobi and Swartz 2019). Some of the approaches are sometimes done in secrecy with limited opportunities for standardization, thereby opening opportunities for exploitation. The variations in
treatment options, the acceptance of complex etiological explanations, and the treatment gaps have implications for regulation, standardization, patients’ rights, and the quality of care. Thus, there is also a need for an understanding of what these treatment approaches are, how they can be assessed by those who are professionals within the African traditional medical system to mitigate exploitation, and possible evidence to guide the design and implementation of public health policies in reducing existing treatment gaps. This paper focuses on approaches to epilepsy treatment and the diagnosis procedures among Yoruba traditional healers in south-western Nigeria.

**Methods**

**Research design**

The study employed a case study approach in selecting participants that specialize in the phenomenon of interest in this study, epilepsy treatments. By adopting a case study design, it was possible to identify traditional Yoruba healers for focused face-to-face interviews. The case study approach also helped to gather background information and meaningful insights into the perspectives of traditional healers on the treatment options that are associated with epilepsy within a given social setting (Anand et al. 2019; Kpobi and Swartz 2019).

**Study population and settings**

The target population for this study is traditional healers who are members of the registered professional associations of traditional healers in south-western Nigeria. Traditional healers are known among their circles of professionals and the communities where they are residents, indigenes, or have their places of practise located. Among the Yoruba people, associations with traditional medical practitioners vary by their specialties, orientation, and worldview about health, diseases, and illnesses (Adekson 2003). There are no special names for those who treat epilepsy as a condition, but specialists that treat epilepsy and other common neurological conditions can be found in any of these specialties among the Yoruba people. These healers are known as diviners (Babalawo), herbalists (Onisegun), and herb sellers (Leku Leja). Through professional associations, testimonies of clients with these healers, referrals, and trade fairs, the popularity of traditional healers within Ile-Ife has grown beyond the boundaries to other parts of Nigeria and outside the country (Odebiyi and Togonu-Bickersteth 1987; Rinne 2001; Agunbiade and Ayotunde 2012).
Traditional medical associations have been at the forefront of promoting professionalism and ethical practises among traditional healers in Nigeria (Oyebola 1981). Ile-Ife, being the agreed source of the Yoruba people, plays host to numerous healing homes that provide acceptable and accessible healthcare services to willing clients. Modakeke-Ife, an indigenous Yoruba community that is predominantly occupied by migrants from the old Oyo empire (Adeyeye 2019), also houses a high proportion of traditional healers, and the community has a long history of relations with the people of Ile Ife. Both communities share intersecting boundaries that are difficult to identify for an outsider (Adisa and Agunbiade 2010). Thus, both locations provide unique opportunities for recruiting practitioners who are experienced, respected in their practice, and knowledgeable in the treatment of epilepsy.

**Sampling and recruitment procedure**

Through a "snowball sampling" approach, healers who treat and manage epilepsy were recruited from the various associations of traditional medical practitioners in Ile-Ife and Modakeke-Ife. The recruited participants consisted of diviners, herbalists, spiritualists, and herb sellers.

The four associations of traditional healers that specialise in the treatment of epilepsy in Ile-Ife were selected, and the list includes the Nigeria Association of Medical Herbalists, the Nigeria Union of Medical Herbal Practitioners, the Amalgamation of Nigeria Medical Herbalists, and Elesinje Awo Odua. Akoraye Traditional Medicine Practitioner is selected out of the two associations in Modakeke because it is the only registered association in the town. The interviewers decided to select these associations because they are regarded as specialists in the treatment of epilepsy. These associations hold their meetings separately, and some of the traditional healers belong to two of the associations. For example, the Nigeria Association of Medical Herbalists meets in Fajuyi on Saturdays, Elesinje meets in Okerewe on Saturdays, and the Nigeria Union of Medical Herbal Practitioners meets on Sundays in Okesoda, Ile-Ife. The herb sellers’ association, "Egbe elewoomoatilekuleja," is the only platform for herb sellers in Ile-Ife.
The recruitment procedure started with initial interactions with local registered professional associations of traditional medical practitioners in both communities. Permission was sought from the leaders of these associations, who provided the initial leads on who has expertise in treating and managing epilepsy. Once the names were provided, the physical offices or healing homes of such healers were traced. Residents or those living around these healing homes were also approached to confirm their awareness and knowledge of the expertise of these healers. The community confirmation is a way of corroborating the information that was received at the level of the healer’s association. The process was easy to follow as the lead author is an indigene of Ile-Ife and has good knowledge of both communities. Through these interactions, the first interviews were held, and subsequent interviews came through referrals from the initial interviews. The procedure was followed and guided by the principle of saturation in determining the appropriate sample size. The principle helped in assessing whether additional participants would yield new information. At the 24th interview, it became clear that a deep understanding was emerging as the interviews were conducted among diviners, herbalists, spiritualists, and herb sellers.

A pre-test was conducted before carrying out this study in order to discover the validity of the research instrument. Three traditional healers, consisting of two males and a female, were interviewed for the pre-test. The healers interviewed for the pre-test were not included in the main study.

**Data collection**

A key informant interview guide was used in gathering in-depth information on the treatment approaches of traditional healers in the study settings. The key informant method gave us a chance to talk to the healers in person and learn more about the situations in which they help and support their clients.

When using this method, there is the possibility of researcher bias, and the traditional healers may not be approachable. The researcher overcame this problem by creating a friendly environment and maintaining objectivity.

During the interview, the following questions were asked: Kindly share with me your opinion about epilepsy.
1. What is your opinion on the treatability of epilepsy?
2. What do you think a healer should do to help those receiving treatment for epilepsy recover?
3. Kindly share with me some of the ways in which you treat epilepsy.
4. Could you please tell me why you use these methods and remedies?
5. Could you please share with me some of the positive reports you have received so far since you have been providing care for those living with epilepsy?
6. Could you please share with me some challenging cases of epilepsy you have handled?
7. When there are complex cases to handle, what do you do?

**Probe for reasons, steps taken, and outcomes.**

**Data analysis**

The analysis was guided by the following steps: a translation of all audio recorded interviews from Yoruba to English. A back-to-back translation of the translated transcripts was handled by two experts in both languages. Segments of the transcripts were read several times, with salient portions highlighted and assigned codes. The codes were revised, merged, and categorised for a deeper understanding of the emerging issues. The categories were grouped into themes and sub-themes for effective analysis using Atlas ti.8. A case-narrative strategy was followed in the thematic analysis and presentation of the emerging findings. This approach allowed a logical flow of the thematic issues, while relevant excerpts were extracted to provide additional insights into the themes and subthemes and the contexts in which the healers shared such views or experiences.

**The dilemma of positionality, reflexivity, and ethics**

When researching traditional therapists or healers, especially when assessing epilepsy in terms of aetiological explanations and possible therapeutic outcomes, care should be taken to ensure positionality and reflexivity. Positionality refers to the problem of power relations in the interaction between researchers and research participants. Foucault believes that "power plays a role in the treatment of information," which becomes knowledge or "facts," and therefore treats knowledge as power (Mills 2003).

Therefore, there is a need to recognise that power is an essential component of the knowledge production process. Identifying power relationships embedded in the
research process requires thoughtful analytical reflection. Crossa (2012) stated that "a situation in a web of intensity relations determines how subjects interact with them, providing information on all aspects of field research." Malkki Lissa (2007) contends that, in opposition to the positivist perspective, the "historical and cultural situatedness" of a researcher can impact how she comprehends a wonder and that it is difficult to remove all hints of subjectivity from the information creation process. Zina O'Leary (2013) argues that social scientists must accept that their world view is subjective. If the personality of a researcher has an impact on what he or she sees and what it means, researchers must "listen, see, and evaluate multiple perspectives or realities" to conduct in-depth research (O'Leary 2013). Therefore, it is necessary to reflect the possible influence of a person on the learning process (Hennink et al. 2011). However, it is difficult to find a place to write about stress and anxiety about reflexivity, positionality, and situated knowledge (Rose 1997).

In discussing the positionality and situatedness of knowledge, the researchers recognise that power relations influence the process of knowledge production. The researchers’ beliefs, values, and training in medical sociology influenced how they viewed epilepsy treatment, how the data was collected, and how they presented the results of their research. Dealing with all participants followed the principles of respect for their values and dignity, anonymity (by choice), and confidentiality. The analysis is based on the theories and concepts learned in the master's program. Our position as Yorubas, our knowledge of beliefs, practices, and customs, as well as our ability to speak Yoruba fluently, played a crucial role in this survey. They helped ensure access to traditional healers. Traditional healers welcomed the researchers' unconditional sharing of their experiences because they saw the researcher and the supervisor as Yorubas who understood their own practices. The presentation of identity cards to the healers also helped to ensure that they were expressive enough with their responses.

Incentives were offered to some participants for showing gratitude for the time and audience that followed the interview and observation. The researchers did this because they realised they had dropped their schedule to accommodate the audience. Similarly, some healers requested that they be compensated for their time and open the door to future research.
Due to the sensitivity of the topic of interest, some ethical issues were put into consideration. The study requires a thorough study of people's privacy, especially the personal problems of people living with epilepsy. The issues of confidentiality, anonymity, and the principle of non-violation were examined and confirmed. Investigators ensure anonymity among participants and maintain the confidentiality of information to avoid any harm to participants. However, the participants were asked if their names and pictures could be used for the purpose of the research, and they consented. As a result, designated participants were avoided when the researchers reported. The researchers withdrew questions that were considered too intimate and those that could evoke emotions and unpleasant memories, but with care, the researchers rephrased them to feel comfortable and accepted. When participants became too disavowed with their issues, the researchers postponed the question until another day. For instance, the researcher terminated a question regarding aetiological explanations for and perceived therapeutic outcomes for people living with epilepsy while interacting with one of the healers.

The researchers sought permission from the Nigerian Union of Medical Herbal Practitioners president in Ile-Ife. The leader of the association introduced us to the other healers in Ile-Ife. It was also through him that the researchers got information about some other associations that exist. The healers were accommodating; perhaps because their leader served as our gatekeeper, or because a few of the healers were of the researcher's own ethnic background, some of them engaged us in conversations about their complex medical issues, which are plagued by misinformation and prejudice from modern medical practitioners. The researchers learned to be compassionate listeners.

The researchers assured the traditional healers that the final report will be a true reflection of aetiological explanations for and perceived therapeutic outcomes for people living with epilepsy, standard and marginal therapeutic measures and the rationale for adopting these approaches when treating epilepsy, and the rationale for engaging in or otherwise participating in collaborative care for epilepsy conditions among the traditional healers. The researchers equally sought permission from every person that was interviewed for recordings. In the process of our interviews, participants were free to attend to other things that required their attention and return to continue from where they stopped.
Ethical consideration

Institutional ethical clearance was obtained from the Institute of Public Health, Obafemi Awolowo University, Ile-Ife, Nigeria (IPHOAU/12/1325). The study also followed ethical guidelines during the data collection, analysis, and presentation of findings. Prior to participation in the study, all the participants were briefed on the research aim, their rights to participate without any coercion, and their right to withdraw at any stage from the research without any consequences. The informed consent of the participants was sought, and their approvals were received in verbal form for the majority of the participants and in writing in a few cases for others because some of the participants expressed reticence in sharing information that might expose their treatment regimens and personal identifiers that could reveal the real picture of their patients. Throughout the data collection and presentation of findings, confidentiality and anonymity were maintained.

Socio-demographic characteristics of participants

The socio-demographic characteristics of the interviewees showed that eighteen were males and only six were females. Four out of the twenty-four healers are into selling herbs, while the remainder (20) are diviners or herbalists. The mean age of male interviewees was 55.7 and 54.2 for female interviewees. Four of the traditional healers attended a tertiary institution, some attained secondary education, and a few did not attend school at all. Additional information on the healers' backgrounds and training revealed that most of them were born into families where traditional medicine is the occupation of a family member. Such a family member could be any of the parents, grandparents, or relatives. In this regard, some healers claimed to have begun learning healing arts as an informal apprentice as early as childhood. With accumulated years of experience, such an apprentice graduates and becomes a professional with the blessings of their tutors.

Though few, all the herb sellers involved in this study inherited the profession from their parents. One of the herb sellers opined that herb selling is an inherited occupation, and those who have excelled in it are those who inherited it from a significant other through an informal form of apprenticeship. In all, eleven claimed that they had additional training beyond the tutelage that was received from their parents or
family members. The remainder of the healers did report any form of informal apprenticeship with a relative; however, their training was under a practitioner known to them or suggested to them by a significant other. In this category, a strong appeal was made to destiny and divine calling as precursors to their entrance into the healing occupation. The former group that reported an informal apprenticeship with a relative also laid claim to divine direction as a determinant in their acceptance and entrance into healing. The position of the healers was that anyone could learn and start selling herbs as an occupation. However, success in and through the occupation depends on other factors, including the belief in destiny and choice of occupation among the Yoruba people.

Table 1: Table showing the Socio-demographic characteristics of interviewees

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Highest Educational Attainment</th>
<th>Occupation</th>
<th>Age</th>
<th>Highest Educational Attainment</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
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<td>P1</td>
<td>40</td>
<td>Primary School</td>
<td>Diviner/ Herbalist</td>
<td>P13</td>
<td>52</td>
<td>Second School Diviner/ Herbalist</td>
</tr>
<tr>
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<td>48</td>
<td>Secondary School</td>
<td>Diviner/ Herbalist</td>
<td>P15</td>
<td>70</td>
<td>Primary School Spiritualist/ Herbalist</td>
</tr>
<tr>
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<td>Diviner/ Herbalist</td>
<td>P17</td>
<td>72</td>
<td>Secondary School Diviner/ Herbalist</td>
</tr>
<tr>
<td>P6</td>
<td>50</td>
<td>Secondary School</td>
<td>Syncretic healer/ Diviner</td>
<td>P18</td>
<td>90</td>
<td>No formal Education Diviner/ Herbalist</td>
</tr>
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<td>Diviner/ Herbalist</td>
<td>P19</td>
<td>50</td>
<td>Secondary School Islamic Cleric/ Herbalist</td>
</tr>
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<td>Diviner/ Herbalist</td>
<td>P20</td>
<td>50</td>
<td>Secondary School Spiritualist</td>
</tr>
<tr>
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<td>Diviner/ Herbalist</td>
<td>P21</td>
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<td>Secondary School Herbalist/ Herb Seller</td>
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<td>P23</td>
<td>56</td>
<td>Secondary School Herbalist/ Spiritualist</td>
</tr>
<tr>
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<td>Primary School</td>
<td>Diviner/ Herbalist</td>
<td>P24</td>
<td>60</td>
<td>No formal Education Diviner/ Herbalist</td>
</tr>
</tbody>
</table>

1 Here the letter P stands for participants
Perspectives of the traditional healers on the aetiology of epilepsy

The aetiology of epilepsy is linked to the intersection of natural, preternatural, and supernatural forces. Among these factors, more emphasis was placed on preternatural forces, as many of the participants attributed most of their cases to having managed to access such a source. Their hypothesis emanated from their experiences and deep-rooted worldview, which acknowledges the evil that constantly, runs through the human mind. The social part of humanity often suppresses such evil thoughts and tendencies. However, some social actors are exposed to and encouraged to imitate evil tendencies through interactions and socialisation into evil thoughts and acts. In this way, epilepsy was described as a challenging, complex health condition that sometimes occurs as a form of affliction. The power to cause such afflictions comes from possessing evil powers and the willingness to use them on others. At this point, many of the traditional healers predicted that most of the cases of epilepsy known to them could be attributed to the evil machinations of some humans against their fellow beings. Sometimes, such wickedness emanates from envy or shared wickedness. One of the traditional healers narrated the experience of a woman suffering from epilepsy and revealed that the illness was inflicted on her by the wicked ones:

The only difficulty I have experienced, which was in 2006, is that a woman came to me from her farm and said she has an ailment that did not occur in her childhood. She sold her farm and some of her other belongings because of this ailment. The wicked ones put her in that condition when her husband died because they wanted his property (male traditional healer, age 50, Ogboni Lane, Ile-Ife).

Many of the healers expressed a strong belief in the activities of preternatural forces in the aetiology of complex and complicated epilepsy cases. This belief that epilepsy can affect anyone is consistent with the epistemology of diagnosis and treatment provisions in Yoruba traditional medicine. In diagnosing or treating complex health conditions, a holistic stance is often taken. Such a perspective shields a healer from an underdiagnosis and the provision of a treatment that might not be effective for some of their patients.

The particularity of some epilepsy cases was not doubted by some of the healers. A few of the healers confirmed this possibility once more. From their experiences, some families have a history of epilepsy cases in their families.
It is hereditary when a person has epilepsy, and it begins to increase to two. It is also important to note that staying with an epileptic patient and drinking from the same cup does not transfer epilepsy to him or her. However, a man who is suffering from epilepsy impregnates a woman (male traditional healer, aged 70, Oke Isoda, Ile-Ife).

Such families are sometimes labelled and stigmatised by members of their communities, including those who enter marriage with any of their sons or daughters. While the first causal source cannot be affirmed, epilepsy with such a history could sometimes have roots in preternatural forces and might be very complex to manage or treat, including the risks of reprisals from the afflictors. From their experiences, diagnosis in such cases will require interviews with the patient, their significant others, and divination. Each approach or data source plays different but interconnected roles in securing a more holistic understanding of each case and how to approach the healing process.

**Procedures for the treatment of epilepsy caused by spiritual factors**

**Divination**

Divination as a form of spiritual probing occurs through different mediums, depending on the affiliation of the diviner and the medium's expertise. The diagnosis of epilepsy starts by interacting with the patient to understand the context and history surrounding the condition. Such interaction could be in the form of an interview followed by consultation with a medium for interacting with the spirit world. The initial interaction with the patient gives the healer a sense of what the symptoms are and what it's like to live with the condition. A consultation with the spiritual world is a form of divination, which varies from one healer to another. Through divination, a healer gains a deeper understanding of the condition, how it occurred, the complications that surround a case, and how to resolve the problem. Among the participants, the diviners, who are traditional worshippers, mentioned that before they commenced any treatment, they would first consult an *ifa* oracle or other divination tools to gain a spiritual sense of the aetiology of the condition and the treatment approaches that would be effective for the client. The divination tool, the *ifa* oracle, is used by the healers to unravel the cause of illness in order to know if the illness is caused by natural or spiritual factors, which also influences the mode of treatment rendered to the victims. An excerpt from one of the interviews affirms this practise among the *Ifa* worshippers and their counterparts:
Before we treat epilepsy, I will first make findings in order to know the cause of
the illness. If it is inflicted on the person, I will probe further to know the
remedies that will be effective. If it is inherited from his mother, then I will
adopt a different approach. All these steps are crucial and indispensable when
treating each epilepsy case. (Male traditional healer, aged 50; Ilode, Ile-
Ife)

The process reduces the likelihood of diagnostic error and increases the likelihood of
providing effective therapies and treatments. The procedure also helps to guarantee that
each patient accesses the needed care without expending many resources or the time
required. The perceived cause of the illness influences the methods used by the healers
in the treatment of epilepsy.

Drawing on the experiences of one of the diviners, an individual afflicted with
epilepsy would only recover if there was an in-depth probing and understanding of the
circumstances that supported the affliction. The healer narrated how he once treated an
epilepsy case that was caused by witchcraft. Through divination, the healer gained
insights into how the epilepsy came upon the woman due to the greed of some of her in-
laws who wanted to inherit the properties of her late husband. The healer's narratives
revealed more about her complicated epilepsy condition and how some traditional
healers took advantage of her condition before she arrived at his healing home. With
divination, the healer appeased the gods with a sacrifice that included a goat and other
items before other treatments were administered. An excerpt from the interview can be
seen below:

A certain woman was brought to me in 2006 after repeated failed attempts to
secure healing for her epilepsy. The woman sold all her belongings because of
this ailment. Someone had already collected the sum of one hundred fifty
thousand naira (an equivalence of $1,546)\textsuperscript{2} from her, yet the epilepsy persisted.
My mother brought the woman to me and pleaded for assistance. I consulted
with the medium I have and found that she was afflicted with epilepsy through
witchcraft. I followed the instructions given to me through divination, and it
only cost the woman the sum of three thousand naira (an equivalence of
$30.93), and that's what saved her life (male traditional healer, age 50, Ogboni
Lane, Ile-Ife).

These narratives depict epilepsy as a condition that requires divination for
proper treatment, the avoidance of trauma and disappointment, waste of resources, and
exploitation by greedy healers. In expanding on the centrality of divination, it became

\textsuperscript{2}[1] In 2006, the Naira, Nigeria's currency, was worth 97 to one US dollar.
evident that other critical treatment approaches, such as what form and type of appeasement, atonement, and sacrifice will be acceptable for each epilepsy case, are generated through the process of consultation.

Appeasement
Appeasement entails a philosophical view and practise that are guided by divination before they can occur. The material and non-material components of appeasement differ for each healer and epilepsy case being treated or managed. The healers mentioned that appeasement could only be executed after proper divination and interrogation of complicated cases, especially those connected to preternatural forces. Animals such as local chickens, goats, cats, ducks, guinea fowl, rams, and sheep are the common animals that are slaughtered for appeasements. These animals are common within the locality of these healers, thereby making them accessible and perhaps less expensive for their clients to afford.

The general consensus regarding appeasement was that treatment for epilepsy cases attributed to witches, wizards, and breaking of taboos could not succeed until there was appeasement. The blood of these animals is then used as a medium of spiritual connection based on the divination performed on the victim before the commencement of any treatment.

One of the healers emphasised that on some occasions, the meat from such animals must be given to beggars and neighbours but not their immediate family members or themselves. The decision on what to do with the meat used in appeasement comes through divination, and spiritually sensitive healers must follow the instructions to avoid any repercussions on themselves or family members and to ensure effective recovery for their clients or patients. In the words of one of the healers:

Sometimes I slaughter animals for appeasement, depending on the divination outcome, and we are often not permitted to eat such meat. We can slaughter hens and goats so that we can calm down those that are involved in the illness (male traditional healer, aged 50, Isale Ope, Modakeke).

Appeasement is sometimes conducted using a mix of animal parts and herbs. The choice of animal parts, the proportions to be combined, and the ingredients used differ from one healer to another and case by case. One of the healers described how he sometimes uses a local fowl in the appeasement of a few recent cases. He explained further that sometimes, an afflicted male client would need a cock while a female client
would need a hen. In preparing the appeasement, the feathers of the cockatoo or hen will be specially removed in the preparation of a concoction. The concoction materials also include a lizard and other plants. Once this is prepared, the hen will be preserved in a heated pot and fed with the concoction until the feathers grow back. The belief is that as the feather grows, so too will the epilepsy leave the patient’s body, and the patient will fully recover from the illness. Other healers have mentioned the use of dogs, whose blood may be used to treat epilepsy. Below is an excerpt from the conversation:

There are other ways. I can ask a patient to go and get it. If the patient is a male, he will get a cock, and if it is a female, he will get a hen. Then I will put the hen and a lizard together and cover the lizard inside a clay pot. Then I will use the lizard to treat the patient. They also use the feather of the hen to treat the patient. I will then put the hen into the clay pot and start feeding it. Once the feather starts growing again, the epilepsy will be gone. But there is a way we do it (male traditional healer, aged 70, Oke Isoda, Ile-Ife).

The materials are slightly different for another healer; however, a gender lens was also mentioned in determining what animal parts and materials are relevant. In the words of a female herbalist: Sometimes we burn an agama lizard if the gender of the client is male, while the female lizard is also preferred when the client seeking care is a female. Other animals that can be added include toads and dogs, especially the puppies (female herbalist and herb seller, Ile-Ife).

Appeasement is more of a spiritual exercise than a physical one. The choice of what animal will be acceptable or otherwise comes through divination, revelation, or a deep sense of judgement. When this happens, there is an assurance that the appeasement will strengthen the efficacy of the therapies being provided. The combination of animal parts with herbs and other rituals for appeasement was widely mentioned among the healers. Those that are syncretic in their practises also mentioned sacrifices and atonement as crucial to a quick and effective recovery from epilepsy. Regardless of the differences in combining materials for concoction making, the rationale and essence of embarking on appeasement attracted a high value among healers.

Concoction preparations from animal and plant materials
Lizards are important materials in the treatment and construction of epilepsy in the research setting. The presence of lizards (which some regard as male and female), which are often small and could be a wall gecko or lizard, is thought to cause epilepsy
in victims. According to one healer, the use of toads or lizards in the treatment of epileptic patients sometimes begins after appeasements. Once a patient is offered such treatments, after seven days the patient will vomit the toad or lizard, after which the epilepsy recovery will commence. The vulture was also mentioned as a unique animal that forms part of the treatment materials. When developing some potent epilepsy remedies, some healers explained that the intestine of vultures is a unique animal material. For some healers, the intestine is combined with that of animals like lizards and plant materials and burned into powder for further ingestion either through pap or honey.

Additional insights from one of the healers revealed that the blood of mature dogs and the intestines of puppies also form part of the ingredients in preparing some treatments. In a slight departure, another healer mentioned that sometimes some concoctions are mixed and offered as food for dogs. Once the dog eats the concoction, it will also vomit within a short period of time, and whatever the dog vomits will be given to an epileptic patient to also swallow, and the patient will likewise vomit it, after which there will be relief. In his words:

Another is where we combine various ingredients and place them inside dog food. Immediately the dog vomits it, we will pick it up and give it to the epileptic patient, and he will also vomit it (male traditional healer, age 48, Oke Ayetoro, Ile-Ife).

One of the healers stated that a concoction is not given to every patient because the nature of each person differs. As a result, it is necessary to consult in order to determine which remedies will be effective for each patient in order to cure the illness.

Besides animals, appeasement procedures sometimes require additional materials, like some special herbal plants and different forms of rodents and reptiles. The combination of animals, plants, and other traditional materials like traditional white chalk, Cam wood, and Iyerosun (Ifa consultation powder) is critical in most appeasements. However, the choice of what should be combined and how depends on each case and the instructions from the divination. As a result, the sacrifice offered is a form of atonement for the sins of the person suffering from epilepsy. Whether the affliction is traceable to witches, wizards, or the breaking of taboos, atonement becomes inevitable in the healing and recovery process. Sacrifice then becomes the activity that must take place to generate appeasement and then atonement for the sins and guilt that provided a fertile ground for the affliction to become active and symptomatic. The
belief is that the sacrifice is more important than the medicine given to the patients. If remedies are administered to patients without appeasement, the treatments or therapies will be ineffective, potentially resulting in negative consequences for the healer. The belief in spiritual forces again re-emerged in other treatment approaches and the items that form the core ingredients in the process towards recovery.

**Rationale for using Animal product in the Treatment of Epilepsy**

It was expressed that animal products are used because of their effectiveness in the treatment of epilepsy. One of the healers stated that animal products such as vultures are used because there are chemical formulations present in the body parts of different animals that serve as antidotes for epilepsy. He exclaimed that when these organic formulations are mixed with other remedies, the illness will be cured.

As explained by him:

> The reason is because there are some things that are like chemical formulations, and our forefathers could not explain them then. The parts of these animals have those chemical formulations, and when mixed with other things, they will become an antidote for the ailment disturbing the patient (a male traditional healer, aged 50, from Ogboni Lane in Ile-Ife).

Another healer described epilepsy as a situation in which a lizard is laying eggs inside the body, and the situation will worsen as the egg develops. And if necessary, precautions are not taken, the situation will worsen. It is essential to use the required remedies so that the patient will be cured.

> The epilepsy condition is like a lizard inside the body. It is as if a lizard laid eggs inside the body, and if necessary, measures are not taken to curb it, the eggs will start developing. It escalates beyond measure. It’s like an adaripon; a male lizard is what we call an adaripon. It keeps growing inside the body, but if medications are quickly administered on time, it will flush it out (male traditional healer, aged 50, Ajamopo).

However, some healers are of the stance that animal products such as cockroaches, tortoises, and lizards are used because they have the characteristics of an epileptic patient. One of the healers further explained that the way tortoises walk is just like epilepsy, and if the back of the tortoise is put on the ground, it will be walking somehow. A cockroach is also believed to be acting like an epileptic patient when its back is placed on the ground.
This explains why some animal products are being used. Another healer explained further that some animal products are used because epilepsy walks around in the body of the patient and the animal products also walk somehow, so that is why parts of the animal, such as the bone, are being used. In the words of one of the healers:

We use it because that is what we can use to cure it. Epilepsy usually roams around the body. And you see, all these things that we use to walk somehow So, we use the bone (a male traditional healer, aged 90, named Modakeke).

The motive behind using these things is because some of the healers believe that those animals behave the same way an epileptic patient behaves during the manifestation of the seizure. A healer elucidated that they experiment some of the remedies on the patient, and when they are believed to be effective in treating the illness, they become an antidote and they will start using them. According to him:

Like epilepsy, now we know some things, but we cannot mention them. The way the epileptic patient is behaving, is that how the things behave. When we experiment with some remedies on the patient and see that they work, we will be using them. (Male traditional healer, age 48, Oke Ayetoro)

The choice of remedies and materials that are combined is sometimes based on an area of specialisation or knowledge of what material works well based on experiences with different cases. Some healers have deeper knowledge of herbs than others. Knowledge of animal parts and how to combine such materials with other items varies as well. Some animals are used because it is believed they also display the same characteristics as epileptic patients during seizures. Because of this, they are considered remedies for the illness. Some remedies are tested on the patient, and when they are perceived as effective or workable, they become remedies for this ailment. The implication of this is the effect of some remedies on the patient, as some may not be tested and reliable and may even cause more damage to the patient's health.

**Rationale for using a concoction in the treatment of epilepsy**

Concoctions are given to patients in order to fight the illness from within, and also aid the excretion of epilepsy in their bodies. The belief is that epilepsy may be male or female inside the stomach of a patient, and if a concoction is given to the patient, it will
combat the illness in the stomach. The patient will vomit, and the things inside the person’s stomach will be able to come out. The following excerpt exemplifies this:

The concoction "Aseje" is what we give them to eat so that what is inside them can be purged out. The patient can excrete, vomit, or sweat the illness out of his body. After consuming the concoction, the male and female epilepsies in the patient’s body will collide. The patient will start vomiting, and the vomit must not touch the ground (female traditional healer, age 55, Ile-Ife).

The belief is that the concoction is effective in dealing with the epilepsy in the body once it is ingested by the patient. Such an ingestion could imply that the organism thought to be responsible for epilepsy will be excreted or flushed out of the body, resulting in relief. The time elapsed between ingestion and recovery in an individual's life cannot be predicted. Rather, a gradual recovery period was affirmed for cases that have been treated. From the perspective of the healers, recovery, irrespective of the treatment mode and perceived aetiology requires a gap period between when treatment is initiated and when the symptoms start subsiding.

**Spiritual Bath**

Bathing is regarded as necessary by some traditional healers in order to free patients suffering from epilepsy from spiritual forces. A bath like this could be used for both atonement and treatment. Soaps are prepared for the patients to use in bathing. The goal is to free them from their enslavement, calm their bodies, and prevent further enslavement. Soap is regarded as important by healers in the patient's healing process. It may be in a liquid form, which can be taken with a spoon or burned into medicine. In the words of one of the healers, such soaps are tagged with different names depending on the functions and the components of such soaps.

In his words, "I use special soaps as part of the pathways to effective treatment and deliverance from bondage." I refer to the soap I use for special baths as "osetude" (Deliverance) soap."Once a client successfully bathes with the soap with my guidance and incantations, then whatever treatment I offer such a patient, progress towards recovery is sure. (Male traditional healer, aged 40, Moremi, Ile-Ife).

Another Islamic healer elaborated on the significance of spiritual baths in the treatment of epilepsy:

We will first appease before using the herbal concoction. If the illness is not natural, we do "yasi." "Yasi" is divided into two: bathing in the sea ("iweodo") and agbo (an herbal mixture). The herbal mixture is not for drinking; it is for
bathing. We may ask them to bathe in the bush or anywhere; that is what is called "yasi." The reason for using it is, firstly, to keep the hands of the enemy off the patient's body. Secondly, so that the remedies we are using for the patient will work (male traditional healer, age 51, Itakogun, Ile-Ife).

These excerpts again affirm the systematic procedures and approaches that healers take, with variations in their practises despite similarities in assisting their patients toward recovery. Bathing and the use of different materials, including black soaps, incantations, and Qur'anic verses among some healers, are indispensable parts of the atonement process and the construction of grounds for effective treatment outcomes.

Soap is a critical ingredient in carrying out a spiritual bath for some cases of epilepsy. It is used to wash away the hands of the wicked from the patients’ bodies. Soap is used by the healers in order to liberate their patients from spiritual forces. A healer explained that soap is used in order to set the patients free from the hands of the powerful. Soap is also used in order to soften the flesh of the epileptic patient, which stretches during the manifestation of the illness. In our interview with a traditional healer, he said:

We use soap to set things free because it might be the hand of the elders that is behind it. You know I have said it earlier: if the owner of the world "witches" wants us to succeed in treating patients, there is no work one lays hands on that will not be successful. It will go the way it is supposed to. But we will first use that soap to tackle it when we ask the elders behind it. We will ask them what they want and what they want to collect (male traditional healer, age 40, Ile-Ife).

Soaps are also used by the healers to wash the heads of the epileptic patients in order to remove the impact of the wicked ones on the victims and liberate the patients from the power of the wicked ones. Given the findings, soap is considered important in dealing with problems considered by the healers to be a result of affliction. It is believed to be very effective in washing away the activities of the wicked ones from the patient’s body.

**Incision**

Incision is one of the approaches used by the traditional healers in the treatment of epilepsy. Incisions can be made on the head or on any part of the body of the patient. It was stated by one of the healers that one hundred and one incisions can be made on the patient, and afterwards the area will be rubbed with the use of certain things.

In the words of the healer, "We will first make one hundred and one incisions on the patient." Then rub the processed aladi (traditional ointment) on the patient (a male traditional healer, aged 90, named Modakeke).
Incision is a common practise that supports other forms of therapy that are provided. All of the healers mentioned their reliance on incision at some point, including using it for non-health-related conditions. Incision is used by traditional healers to treat epilepsy because it is thought to protect epileptic patients. Incision is seen as a mark on the patient’s body, to the extent that if the patient is possessed and deliberately wants the illness to persist in order for the parents to continue spending money on the treatment, incision will inhibit the recurrence. An incision is also made to prevent the witches from tampering with the patient. The belief is that once the witches see it on the patient's body, they will know that the patient has become their child because they have been appeased, and the incision serves as a mark on the patient’s body so that he will not be disturbed by the witches or wicked ones again. Incision is also used because some people have been shot with arrows and no treatment will work on their bodies. Even if remedies are used for them, they will not work. Incisions are then made on their bodies, allowing the remedies to work, and killing all the power of the wicked. The following excerpt exemplifies this:

We heat herbs together and make incisions on the head so that the head will calm down because it is something that comes from the brain. It is a brain illness (50-year-old male traditional healer; Isaleope; Modakeke).

However, incisions are made to prevent the ailment from reoccurring after a while. The incision serves as protection for the epileptic victims. Incisions are also made on the forehead for there to be peace with the inner head and the spirit of an individual. Incisions are conceived as a form of vaccination that encompasses the prevention of infection from natural and preternatural occurrences. However, it is a form of practise that is more common due to its perceived efficacy and potential to ward off evil machinations from manifesting in the face of any form of invocation from enemies and evildoers. Thus, the various healers cited the practise of incision as a preventive mechanism as well as an intervention that hastens the patient's recovery.

**Procedures for the treatment of epilepsy caused by natural factors**

**Medicinal leaves**

Medicinal leaves and roots are used by traditional healers in the treatment of epilepsy. The healers make use of a mixture of different leaves and roots that are believed to be effective in the treatment of the illness. It was expressed by the healers that some leaves
are found in the bush or faraway places, and at times they buy the leaves from the herb sellers. The use of medicinal leaves and roots in the treatment of epilepsy is considered by healers to be the primary method of treatment. Some healers claim that certain leaves can only be found at certain times of the year. Some can be found during the rainy season, while others can be found during the dry season. Herbs and other natural products used in treating epilepsy are obtained from medicinal leaves and roots. There are several ways traditional healers make use of medicinal leaves and roots in the treatment of epilepsy. It can be used to prepare remedies in liquid form, which can be put inside traditional gin, and the patient will be using a spoon to take it. It can also be prepared in powdered form. Medicinal leaves and roots can also be burned or pounded, which can be added to hot pap for the client to drink, and the patient can be healed through this process. Traditional healers also prepare the medicinal leaves and root into traditional gin, and the belief is that the patient could vomit or excrete the illness out of their body and recover from the illness.

In our interview with a herb seller, when we inquired about the medicinal leaves used in the treatment of epilepsy, she replied:

Various medicinal leaves, such as ogbo leaves (Parquetinanigrescens) and jenjoko leaves (Cessampelosmucronata), are used in our methods. There are some roots that we also go and look for on the farm. Like pepe leaves (Alchornealaxiflora), we will take it and use it. With the glory of God, we are having good outcomes. When we put it together, it brings a positive outcome, and when we say this illness will cure, it will (female herb seller, Ile-Ife).

There are various explanations for the use of medicinal leaves and roots by herb sellers in the treatment of epilepsy. However, there are gendered disparities in the combination and quantity of medicinal plants that are prescribed for male versus female clients. Some of the healers mentioned that in treating a male patient suffering from epilepsy, nine stones would be used alongside some other things. Also, when treating a female patient living with this ailment, seven stones are used alongside some other materials. The implication of this is that traditional healers have diverse views regarding the treatment of epilepsy, and this can be seen in their treatment approach: If it is herbs that we want to use for them, to mention a few, we will use arojoko leaves ("Eclipta alba L.ex.B.D. Jacks (false diary)"), areyinkosun leaves ("Cyathulaachyranthoides"), and banana "ogedeomini." If the patient is a male, we will use nine stones. If the patient is a female, we will use seven stones. We will put it at the bottom. We will put "eruawonka"
(Guinea pepper) inside it. We will now pick up all the other things mentioned and put them on top of them inside the pot to cook. It is then ready for drinking by the person (a female herb seller, Ile-Ife).

However, one of the healers mentioned another aspect to the treatment of epilepsy. Patients who have difficulties using remedies can take them in their dreams. The healer explained that the patient will be asleep but will see himself taking the medicine in a dream, and there is a way it is done. In his words:

If it is the person who does not want to drink the medicine, we give it to him or her in the dream. There is a way to accomplish this. The patient will be sleeping but will know that he or she took the drugs. He will remember taking the medicine in his dream. The way we do that is a secret (male traditional healer, age 70, Ile-Ife).

The words of the healers portray the versatility they possess and their dexterity in the knowledge and use of herbs for healing purposes. In their use of herbs in managing or treating cases of epilepsy, the preferred mode of preparation differs. Some healers will induce sleep and administer the remedy tailored for a case of epilepsy during this period of being asleep. The procedure and steps involved were not mentioned; however, the accounts revealed some degree of passion that some healers demonstrate in ensuring that cases presented to them are well treated with high chances of recovery. The approach would imply a form of disempowerment by not allowing patients the ability to choose whether to receive a treatment or not.

**Herbal mixture "Agbo"**

Traditional healers make use of herbal mixtures in the treatment of epilepsy. Herbal mixtures are thought to be effective medicines in the treatment of epilepsy. Herbs are prepared by the healers for the consumption of epileptic patients. It can even be produced in tablet form; the patients may be required to use alcohol, traditional gin ("adi"), or lime to take the herbs. It is also possible for epileptic patients to use herbs to bathe.

The reason for our using the concoction "aseje" and herbal mixture "agbo" for the patient is that if we use the remedies for the patient, before we can know that they are effective, the patient must vomit wall gecko "omole," which you will see clearly. (Male traditional healer, aged 50, Ilode)

In advancing a reason for the use of herbal mixtures, the healers predicted that consumption of such concoctions would aid in the removal of the organism that causes
the infection for individuals with natural causation. A similar functionality was also envisioned in cases of evildoer afflictions. Herbal concoction "Agunmu" is also mentioned by some of the traditional healers as one of the ways used in the treatment of epilepsy. It is said that after medicinal leaves and roots have been pounded, they may be transferred into traditional gin. The pounded leaves are usually put in a liquid substance.

The use of herbal mixtures was common among the healers in the treatment of epilepsy. It is used as a cure for the illness. Herbs are used in order to reduce the strength of what is causing an epileptic seizure in the patients. In our conversation with a female herb seller, when we inquired about the rationale for using herbal remedies in the treatment of epilepsy, she said:

Herbs are often provided to avoid repeated episodes of epilepsy. It is when the two elements causing the seizure in their body collide that the afflicted person starts having the symptoms. It will be checked once we begin using the herbs. It will not allow the things causing the seizure to have much power (the female herb seller, Ile-Ife).

This excerpt again reiterates that traditional healers make use of both medicinal leaves and spiritual procedures for the treatment of epilepsy caused by affliction.

**Multiplicity of remedies, contexts, and rationale**

The multiplicity of factors and etiological explanations provided is also reflected in the preference for mixed approaches and treatment options that are available among the healers. The first line of action that was mentioned among all the healers was divination. To all the healers, only divination can reveal the aetiology as well as the treatments or therapies that will be effective. Often, the treatments that are provided by the same healer for epilepsy will vary based on the explanations and suggestions from divination. Spiritually linked epilepsy will necessitate a combination of spiritual and natural treatment.

When the healer divines the cause of a patient’s condition and it is revealed that the illness is caused by the activities of the wicked, the first line of treatment they render is to appease the people behind the illness for them to stop tormenting the patients with epilepsy. Animals can be slaughtered to appease the perpetrators and convince them to forgive the patient for any crime he may have committed. The second line of treatment is to give the patients the remedies that are used to treat it, and one of the remedies is to use medicinal leaves and roots.
Based on the narratives, traditional healers use a combination of medicinal leaves and roots, as well as other procedures that deal with spiritual forces, to treat epilepsy that has been inflicted on the patient. Both natural and spiritual approaches are deployed in treating epilepsy caused by affliction by the wicked. In this way, the beliefs and experiences of a healer affect the treatment options and therapies that are accessible to their clients. One of the interviewees, a 50-year-old female traditional healer, narrated the story of a young man suffering from epilepsy whose parents were about to dump him in a neighbouring town with his clothes; they wanted him far away from them because of the stigma attached to the condition. However, when the patient was brought to the healer and all the necessary procedures were taken and herbs given, the patient recovered. The healer explained further that that patient is now at the university undergoing a Bachelor of Science degree in medicine because the patient also wants to save others by becoming a biomedical practitioner.

Discussion of findings

The African traditional medical system is driven by cultural values, beliefs, and practices, including those that obtain among the healers within this system and their clients or patients. Traditional medicine is also practised differently in different social settings, which raises some concerns about the standardisation of care and its potential consequences for therapeutic outcomes. With the growing gaps in epilepsy treatments, access, and acceptability of modern care in Africa, studies have reported medical pluralism among those living with epilepsy (Kaddumukasa et al. 2018; Anand et al. 2019; Kpobi and Swartz 2019). The practise of seeking healthcare services from multiple medical systems is common with respect to other health conditions. Regardless of whether these treatment approaches are explicable or not, they require contextual evidence on what they are, how they can be assessed by professionals within the African traditional medical system to mitigate exploitation, and possible evidence to guide the design and implementation of public health policies in reducing existing treatment gaps. This study accounts for what exists as culturally inclined forms of
treatment and approaches among traditional healers in two communities in southwestern Nigeria.

The findings revealed the existence of a multiplicity of treatment approaches that exist within a social setting that shares similarities in cultural beliefs, values, and practices. In some ways, these practises appear unique, as evidenced by the use of animal parts and plants, as well as the nature of the incantations recited to increase the efficacy of the treatments. Traditional healers may use novel treatment methods based on the belief that each ailment, disease, and illness have specific compositions and manifestations that necessitate such an approach. Whether animal or plant materials are preferred or deployed in handling a case also depends on many factors.

Among these factors are the preferences, experiences, and inclinations of the healers. The healers also alluded to the critical role incantations play in guaranteeing the potency and efficacy of their treatments. Against this backdrop, such traditional healers in Yorubaland are referred to as "powerful medicine men or women" due to their dexterity in handling life events and versatility in spirituality (Agunbiade 2014; Jegede 2005; Adekson 2003). The constant appeal to and reliance on spiritual forces for suggestions on what treatment or therapy would be effective could also account for the reputations and variations in approaches to treatment and the mixing of concoctions. As established by Agunbiade (2014), the reliance on spiritual forces for knowledge acquisition, diagnosis, and treatment options is a practise that has kept attracting relevance among Yoruba traditional healers. Such practise also exists among African traditional healers and practitioners in the Republic of Guinea (Anand et al. 2019) and among some traditional healers in Namibia (Du Toit and Pretorius 2018).

The findings also shed light on the dynamics of negotiating treatment options as well as the relative powerlessness of those living with epilepsy in determining which treatment is best for them. Despite the possibility of exploitation and errors in judgment, social perceptions of the healer as the good guy reinforce the asymmetrical power dynamic (Mokgobi 2014). In recent times, some of the healers in this study confirmed reports that some traditional healers have deviated into practises such as money rituals that involved human sacrifices and other vices. Malpractices exist, though they are avoidable in most medical systems. The reliance and emphasis on spirituality as a source of knowledge and guidance on treatment approaches strengthens the efficacy of the treatments being offered. Nonetheless, the practise is challenging to standardise and regulate, especially with reports of deviations and malpractices that could compromise
treatment outcomes. This concern was also raised by du Toit and Pretorius (2018) among traditional healers who are treating epilepsy and seizures in Namibia. While such cases were not confirmed among the participants in this study, it is a common development that necessitates increased vigilance on the part of practitioners and the general public. Transparency, truthfulness, and sacrificial living are the hallmarks of the traditional healing occupation among the Yoruba people in Nigeria. Adherence and faithfulness to these traits are changing among traditional healers in Nigeria and elsewhere, where the social ethics and professionalism that ought to prevail in the therapeutic relationship are fast eroding. Such unprofessional practises also exist in some African countries, where some forms of exploitation and defrauding of clients have been reported (Olutope 2020). The healers in this study considered such practises unwholesome and uncommon among their peers within the communities. The existence of professional associations among these healers indicates a willingness to promote standards. However, these associations have to be more vocal and involved in monitoring practises that threaten humanity, such as money rituals that involve human sacrifices.

Notwithstanding the reports of sharp practises and exploitations by some traditional healers, there are some elements of passion and somewhat benevolent dispositions in the narratives of some of the healers. This disposition might be connected to the paternalistic orientation that is common with Yoruba traditional healers (Agunbiade 2014; Jegede 2005; Adekson 2003), whose main concern is providing holistic care in a patient-centered manner. This attachment may be counterproductive, as some healers might become too attached to or biased toward some clients over others. The healer's judgement and capability may be clouded when interacting with clients or patients due to the unlimited boundaries. As such, there are concerns around the possible misalignment of some of these procedures and treatments, especially with the complexities of some cases. There are also chances that such attachment could also create some disappointment on the part of the client when such treatments fail due to misapplication. All these possibilities have implications for patients' adherence to treatments, responsiveness, and recovery expectations. The highlighted consequences are pointers to ways to mitigate exploitation and promote quality of care (Kaddumukasa et al. 2018, Anand et al. 2019). Quality of care has a direct impact on therapeutic outcomes, and the complexities of some of the treatment approaches might be unhealthy.
if thoroughly investigated within the standards of care that are established among the professional associations of these healers.

Investigations done outside the guiding frameworks in practises like divination would yield invalid results. The premium on divination and directions in complex epilepsy cases further reveals the centrality of the practice, and it resonates with the philosophical worldview of the healers and that of the patient or client on the nature and aetiology of epilepsy. This study affirmed that before the healers commence the treatment of patients living with epilepsy, the healers diagnose the cause of the illness through divination using an *ifa* oracle. This affirmed the opinion of Omonzejele (2008) that divination is an important aspect and the first step in traditional medicine. It is a fundamental method used by healers to determine the causes of illness. The healers use sacrifices, a mixture of plant and animal products, spiritual baths, concoctions, incisions, and herbal remedies in the treatment of epilepsy (Kaddumukasa et al. 2018; Anand et al. 2019). This also affirms the report of Borokini and Lawal (2015) that healing is done through sacrifices, incantations, and incisions. The perceived cause of the illness determines the treatment approach. This is like the findings from earlier studies, which reported that herbal mixtures, animal products, and insects are used in the treatment of epilepsy.

Some of the healers in the study revealed that treatment for epilepsy caused by spiritual factors involves the same element that was used to inflict the illness on the patients. The adoption of animal products was hinged on the belief that animals that exhibit signs of epilepsy during seizures possess unique remedies for recovery. In this sense, the healers in this study mentioned animal materials like the intestines of vultures, tortoises, and other animal parts as antidotes when preparing concoctions for their patients. The use of animal parts and plants was also reported among traditional healers in Zambia, where animal and plant materials are combined in preparing antidotes for epilepsy (Baskind and Birbeck 2005).

The findings from this study also show that such combinations are in consonance with the belief in the intersection of physical and spiritual forces in the aetiology of epilepsy. The belief in multicausal factors thus propelled the preference for divination and combinations of treatment options like appeasements, sacrifices, atonements, and the use of herbal and animal materials. In the treatment of natural epilepsy, medicinal leaves such as ogbo "Parquetinanigrescens," jenjoko

The medicinal leaves are prepared in various forms. The medicinal leaves are processed by burning, pounding, or boiling to produce herbs, which can be in tablet, powder, or liquid form. This is corroborated by the findings of Winkler et al. (2010). These medicinal leaves are sometimes mixed with animal products in preparing concoctions for patients living with epilepsy. Certain parts of animals, such as the pangolin ("akika"), a scaly animal, and the vulture ("akala"), are considered antidotes because of their distinguishing features. There is a general belief among the healers that the concoction battles with the lizard that is believed to be the cause of epilepsy, suppresses it, destroys it, and purges it out of the patient’s body system.

The cultural belief that epilepsy is a supernaturally caused illness influences the high patronage of traditional healers within society and has an impact on the treatment approach used by healers in the treatment of the condition (Omonzejele 2008). The combination of spiritual therapies and mixtures of plant or animal products are considered therapeutic measures for epilepsy. Traditional healers emphasise giving their patients possible explanations for the occurrence of illness, and the perceived cause of epilepsy influences the remedies used by them in treating the illness. Therefore, divination is the basis of treatment among traditional healers treating epilepsy. According to the literature, healers place a high value on divination because it allows them to consult the spiritual realm to uncover the cause of the illness and be guided on the procedures for treating their clients (Aina and Famuyiwa 2007; Omonzejele 2008). For epilepsy caused by supernatural forces, sacrifice and appeasement, along with a combination of plant and animal constituents, are critical. The cultural worldviews about epilepsy are evident in the multiplicities of the approaches used by the healers in the treatment of their clients.

Despite the richness of the evidence from this study, more depth and insights could have been possible if there were traditional healers from the various ethnic groups in Nigeria. Nonetheless, the adoption of a face-to-face interview helped a great deal to explore the views and experiences of the healers in the treatment of epilepsy. The approach also helped in building a good rapport with the healers, as some mentioned some of the remedies and the essential ingredients of some of their treatment measures or approaches.
Conclusion

Traditional healers play significant roles in the treatment of patients living with epilepsy. The findings from this study capture the multiplicity of treatment approaches and materials used in the making of concoctions and therapies that are offered to clients with epilepsy. The therapeutic interactions start with interviews with the patient or significant others and then divination. For effective outcomes, the method was deemed indispensable in holistic diagnosis and treatments tailored to each epilepsy case. Through divination, healers also avert themselves and their significant others from possible reprisals or contractions of epilepsy in cases traceable to preternatural forces. With variations in etiological explanations, the treatments and therapeutic measures that emerged after divination revolved around appeasements, atonement or sacrifice, spiritual baths, and concoctions. Animal and plant materials are indispensable ingredients in making potent treatments or therapeutic remedies. Traditional healers share varied etiological explanations around epilepsy, and such variations also exist in the treatments being offered to their clients. Internal regulations of traditional medicine are required to ensure the legitimacy of treatments and therapies and protect people living with epilepsy from exploitation.

Conflicts of Interest. The authors declare no conflict of interest.

References


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