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*"The traditional healer said, 'I had a genie that scared me in my eyes, and that is why I fall':*  
**an Ethnographic study in Mahenge, Tanzania**

Pendo F. Magili<sup>1</sup>, Isolide S. Massawe<sup>1</sup>, Vivian P. Mushi<sup>2,3</sup>, Dan K. Bhwana<sup>1</sup>, William Matuja<sup>2,4</sup>,  
Robert Colebunders<sup>5</sup>, Helen Cross<sup>6</sup>, Josemir W. Sander<sup>8,9,10</sup>, Arjune Sen<sup>10</sup>, Charles R. Newton<sup>11,12</sup>,  
Sloan Mahone<sup>10</sup> and Bruno P. Mmbando<sup>1</sup>

**Institutions:**

- <sup>1</sup>National Institute for Medical Research, Tanga Research Centre, Tanga, Tanzania
- <sup>2</sup>Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania
- <sup>3</sup>University of Dar es Salaam, Dar es Salaam, Tanzania
- <sup>4</sup>Muhimbili National Hospital, Dar es Salaam, Tanzania
- <sup>5</sup>Global Health Institute, University of Antwerp, Antwerp, Belgium
- <sup>6</sup>Developmental Neurosciences Research and Teaching Department, UCL Great Ormond Street Institute of Child Health, London, UK
- <sup>7</sup>Department of Tropical Disease Biology, Liverpool School of Tropical Medicine, Liverpool, UK
- <sup>8</sup>Neurology Department, West China Hospital, Sichuan University, Chengdu 610041, China
- <sup>9</sup>Stichting Epilepsie Instellingen Nederland (SEIN), 2103 SW Heemstede, The Netherlands
- <sup>10</sup>Oxford Epilepsy Research Group, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, UK
- <sup>11</sup>Neuroscience Unit, KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya
- <sup>12</sup>Department of Psychiatry, University of Oxford, Oxford, UK

\*Correspondence author: Dr Bruno P. Mmbando, Email: b.mmbando@yahoo.com

**Highlights:**

- 26 • Traditional healers are often the first contact for epilepsy treatment.
- 27 • Misconceptions regarding the causes of epilepsy lead to traditional treatment-seeking.
- 28 • People with epilepsy often visit several traditional healers.
- 29 • Traditional healing is associated with a high cost for families.

30

31

## 32 **Abstract**

33 **Background:** In many low-income countries, individuals with epilepsy often seek traditional  
34 healers as their initial source of treatment following seizure onset. However, their experiences with  
35 traditional healing remain insufficiently explored. This study examines the perceptions and  
36 experiences of people with epilepsy regarding traditional healing practices in Mahenge, Tanzania.

37 **Methods:** A culturally specific ethnographic approach, focusing on oral history to capture rich  
38 contextual narratives, was employed. A total of 45 oral history interviews were conducted with  
39 persons with epilepsy from 21 villages in Mahenge. Participants were selected based on the criteria  
40 of being at least 18 years old, having epilepsy, and being able to recount their experiences in  
41 Swahili, the primary language spoken in the region. Data were manually analyzed using thematic  
42 analysis.

43 **Results:** Traditional healers frequently attribute epilepsy to supernatural causes such as curses and  
44 witchcraft, drawing connections between patients' seizure onset and past events believed to have  
45 triggered the condition. Alongside their treatments, healers impose restrictions on persons with  
46 epilepsy, which can be difficult to adhere to and may serve as a justification for treatment failure.  
47 Additionally, some individuals reported experiencing physical, emotional, and even sexual  
48 harassment during their interactions with traditional healers

49 **Conclusion:** There is a firm reliance on traditional healing practices for epilepsy, where cultural  
50 beliefs and ritual practices jeopardise diagnosis and care for people with epilepsy. Raising  
51 awareness about epilepsy and its management, as well as the rights for people with epilepsy among  
52 traditional healers and the community in general, is important to improve care and safeguard  
53 interests for patients.

54 **Keywords:** Epilepsy, Experiences, Traditional healing, Traditional healers.

55

## 56 **1. Introduction**

57 Epilepsy is a neurological disorder characterised by two or more unprovoked seizures occurring  
58 greater than 24 hours apart [1–2]. It is estimated to affect about 50 million people worldwide, of  
59 which about 80% live in low- and middle-income countries (LMIC), where the treatment gaps

60 exceed 50% [3–4]. In this context, traditional medicine, being easily accessible, plays an important  
61 role. The number of people with epilepsy is expected to increase further due to rising life  
62 expectancy worldwide, with the leading risk factors of epilepsy being birth trauma, traumatic brain  
63 injury (TBI), and brain infections [6]. Despite this, epilepsy continues to be associated with  
64 witchcraft, family curses, and evil spirits in many parts of the world [7], especially in sub-Saharan  
65 Africa (SSA) [8]

66 Most of the people living with epilepsy in rural communities, especially in SSA, consult traditional  
67 healers as their first line of treatment despite increased awareness of epilepsy [9–10]. A traditional  
68 healer (traditional medical practitioner) is a person who is recognised by the community as  
69 competent in providing health care by using traditional remedies from plants and animals based  
70 on social and cultural backgrounds [12]. Traditional healers are referred to by different local names  
71 depending on one's ethnic origins and how the healing power was acquired. In the Mahenge area,  
72 there are two types of traditional healers: the "Mbui" and the "Mganga" (meaning healer). The  
73 "Mbui" is a traditional healer whose powers are claimed to be acquired from ancestors. In contrast,  
74 Mganga acquire traditional skills from their fellow healers or witches. The Mbui is claimed to be  
75 able to predict future events and communicate the causes of individual or social problems through  
76 consulting ancestors/spirits. While Mganga knows about various herbs and roots, their treatments  
77 are based more on physical and observable symptoms than spiritual diagnoses [13]. Healers (Mbui  
78 and Mganga) may use rituals, sacrifices, and physical observation to identify and treat diseases.  
79 Also, healers used plants like *Abrus precatorius* L. (Leguminosae), *Clausena anisata* (Willd.)  
80 Oliv. (Rutaceae), *Hoslundia opposita* Vahl (Lamiaceae) in treating epilepsy [14]. In a study  
81 conducted in Guinea, 79% of participants reported seeing a traditional healer for their epilepsy  
82 management, while 71% of the participants reported visiting a traditional healer before visiting a  
83 healthcare worker in the health facility [15]. In a study involving 167 participants from Tanzania,  
84 44% believed that epilepsy could be treated successfully with traditional healers [16]. Similarly, a  
85 recent study in the Mahenge area found that 69% of respondents thought that the appropriate  
86 treatment of epilepsy is traditional medicine since epilepsy is caused by witchcraft, in comparison  
87 with 39% who stated that epilepsy can be treated by allopathic medicine [17]. In this study, the  
88 aim was to explore the experiences of people with epilepsy in using traditional healers in the  
89 management of epilepsy.

90 **2. Methods**

91 **2.1 Study design and sampling**

92 An ethnographic design and a face-to-face interview were used to gain an in-depth understanding  
93 cultural perceptions of illness and treatment of people with epilepsy. The study involved (45)  
94 people with epilepsy enrolled from 21 villages in Mahenge area, which are Vigoi (6), Isongo (6),  
95 Makanga (5), Uponera (4), Ebuyu (3), Makanga juu (2), Togo (2), Mbagula (2), Isyaga (2),  
96 Msogezi (2), Mdindo (2), Chamangi (2), Madibila (2), Mawasiliano (1), Kisewe (1), Safari road  
97 (1), Soko mpya (1), Mgolo (1). The participants were selected using a purposive sampling .  
98 Inclusion criteria were people with epilepsy who were at least 18 years old and who could express  
99 themselves. Excluded from participation in the study were people with epilepsy who declined to  
100 provide informed consent.

101

102 **2.2 Study setting**

103 Mahenge area in Morogoro-Tanzania is an area with a high incidence of epilepsy associated with  
104 onchocerciasis [18,19]. In this area, over 50 per cent of individuals suspected to have epilepsy  
105 tested positive for onchocerciasis using OV16 antibodies [20]. This area is characterised by a  
106 terrain with fast-flowing rivers and streams, which provides optimal breeding sites for the vectors  
107 transmitting onchocerciasis [21]. The main economic activity of the population is subsistence  
108 farming and livestock keeping (mainly pigs, chickens, goats and cows) on a small scale. Few  
109 people are engaged in gemstone mining.

110 **2.3 Data collection**

111 The study employed oral history method, which records and explores individual's live experiences,  
112 uncovering insights into past time and places [22]. The data was collected between May 2021 and  
113 January 2023. The research team developed and reviewed unstructured interview guide to ensure  
114 important history was not missed during the oral history interview. The interview guide was used  
115 to probe the participants by allowing flexibility in storytelling. The guide included, , questions  
116 about their belief in the cause of epilepsy, the first contact for their treatment, where they normally  
117 receive the advice for traditional healing (healing influence), their experience in traditional healing

118 (diagnosis, management, and associated costs) and how do they benefit from the traditional  
119 healing.

120 The interviews were conducted by an experienced researcher trained in oral history taking as a  
121 data collection method. The interviewer was also fluent in Kiswahili language, and aware about  
122 the culture of the study area. The interviews were recorded using audio recorder and lasted for 45  
123 to 60 minutes.

#### 124 **2.4 Data analysis**

125 The audio recordings were transcribed by four experienced researchers who were conversant with  
126 both English and Kiswahili before being translated from Kiswahili to English. The verbatim  
127 transcribed notes taken during interviews were used during the analysis using the thematic analysis  
128 [23]. To become familiar with the data and ensure that the transcribed data accurately represented  
129 the verbatim responses stated by all participants, the audio-recorded were listened to, and the  
130 transcripts were read multiple times. The relevant data segments were labeled based on emerging  
131 concepts and then grouped into similar codes, forming broader categories. Lastly, selective coding  
132 refined and integrated these categories into cohesive themes aligned with the study's objectives.  
133 To enhance transparency, the researchers documented their coding decisions, interpretations, and  
134 modifications throughout the analysis. Intercoder reliability, where multiple researchers  
135 independently code the same data, was used to minimize bias. Additionally, participant validation  
136 (member checking) was incorporated to allow respondents to review and ensure their perspectives  
137 were accurately represented.

#### 138 **2.5 Ethical consideration**

139 Ethical approval was obtained from the National Medical Research Coordinating Committee  
140 hosted at the National Institute for Medical Research (NIMR/HQ//R.8b/Vol.I/1079). Before  
141 registration, information about the project was provided to all participants. Then, their written  
142 consent to participate was obtained by signing for those who could read and write. Participants  
143 who could not write were requested to provide their thumbprints and have their consent form  
144 signed and dated by an unbiased witness during the consenting process. Each participant was given  
145 a number as an identifying marker to maintain anonymity by keeping their real names hidden. Data  
146 and completed forms were kept in a secure location.

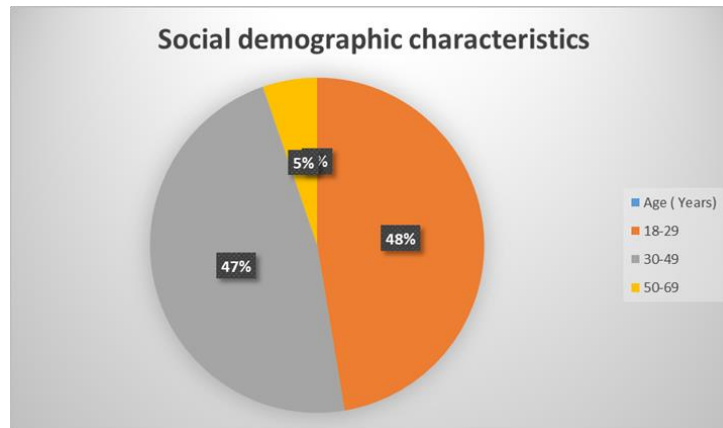
## 147 **2.6 The trustworthiness of the data**

148 The study was implemented to meet Lincoln and Guba's framework criteria to guarantee reliability  
149 [24]. Four criteria had to be met, which are credibility, dependability, confirmability and  
150 transferability. To increase data credibility, the researcher in this study engaged with data for more  
151 than two years while constantly compiling field notes but also allowed participants to validate their  
152 perspectives (member-checking). The dependability of data was assessed several times by the  
153 research team, who ensured they had enough discussion about the emerging data. Transparent  
154 contextual descriptions and sampling procedures were used to assess data's transferability (the  
155 findings can be applied to other settings). participants' oral histories about their experiences in  
156 traditional healing were used to assess the data's conformability. Confirmability was assessed  
157 through the interpretation of the data and conclusions about the greater awareness of epilepsy and  
158 its management. The research team and other professional colleagues in the field of qualitative  
159 research reviewed the transcriptions, codes, and emerging themes.

## 160 **3. Results**

### 161 **Social demographic characteristics**

162 The sociodemographic characteristics of the study participants, as presented in a pie chart (Figure  
163 1), reflect a diverse age and gender distribution. A total of 45 participants were included, consisting  
164 of both men and women across three age groups. The majority of participants were in the 30–49  
165 age group, comprising 23 individuals (9 men and 14 women). This suggests that middle-aged  
166 individuals were the most represented group in the study. The 18–29 age group included 20  
167 participants (9 men and 11 women), indicating a relatively high level of participation among  
168 younger adults. The 50–69 age group had the fewest participants, with only 2 individuals (1 man  
169 and 1 woman), showing limited representation of older adults.



170  
171 **Figure 1:Socio-demographic characteristics of the study participants**

172 **Themes generated from oral interviews**

173 **3.1 Diagnosis of epilepsy**

174 Findings from this study show that, in Mahenge, traditional healers often attribute epilepsy to  
175 spiritual or supernatural causes. Some of the common methods used by traditional healers to  
176 diagnose epilepsy include:

177 **3.1.1 Spiritual Diagnosis:**

178 Traditional healers (diviners), also called the ancestors (act as mediators between them) once the  
179 patient arrives to identify the spiritual cause of epilepsy. Diviners may use mirrors, bones, or stones  
180 to communicate with the spiritual world and determine the cause of seizures. They also asked them  
181 about the disease and its cause.

182 *The traditional healer called the ancestors and started talking to them before saying,*  
183 *"Someone witched me since when I was young before even teething" (Participant, 08)*

184 *If you go to a traditional healer, you should give two thousand shillings so that he can tell*  
185 *you your problems. So he called his demons, and then they started to say I was thrown 'a*  
186 *love monster' (Participant, 13)*

187 **3.1.2 Observation of Symptoms:**

188 Traditional healers pay attention to the physical signs of epilepsy, like the occurrence of seizures  
189 and loss of consciousness. These symptoms are often linked to cultural beliefs about sickness, such

190 as the impact of witchcraft or evil spirits. The actions during or after a seizure can offer insights to  
191 the healer about the type of illness.

192 *I stayed with the healer so that she could observe how the problem began before helping*  
193 *me with the medicine she knows... I was not alone, there were many. We created a*  
194 *temporary room for living, and each of us used traditional medicines for epilepsy treatment*  
195 *(Participant, 02)*

196 Many participants acknowledged starting their treatment with traditional healers before seeking  
197 care at the hospital. Some also mentioned that, in addition to taking hospital-prescribed  
198 medications, they continued using traditional medicine.

199 I was using both traditional and hospital medicine... I went to the hospital to collect the medicine  
200 and went back to the traditional healer's house (Participant, 02). Moreover, most of the interviewed  
201 participants who visited traditional healers mentioned that witchcraft was responsible for their  
202 seizures

203 *I didn't believe the disease was from God., ..., I truly felt it is my fellow human beings who*  
204 *had caused me the problems of falling (Participant, 36)*

205 *The healer said, "I had a genie that scared me in the eyes, and that is why I fall"*  
206 *(Participant, 03)*

207 *The healer found that people were the source of my disease (bewitched) due to my best*  
208 *performance at school. (Participant, 02)*

209

## 210 **3.2 Management of Epilepsy**

211 The treatment modalities used in traditional healing are divided into two sections: ritual practices  
212 (incantation and sacrifice) and plant remedies, which include herbs for drinking, bathing, and  
213 applying to the body.

214

### 215 **3.2.1 Ritual practices**

216 Participants revealed that the management of epilepsy is done through performing ritual practices  
217 by traditional healers through the slaughtering of animals and worshipping their ancestors (the

218 'living-dead', compassionate spirits of ancestors who are blood-related to the people who believe  
219 in them) by calling and asking them about the kind of the treatment to be provided to the patient,  
220 showing some gesture and actions by following their norms in a specific order during the treatment.

221  
222 *The chicken was slaughtered, and the internal organs, legs and head were removed, then*  
223 *the remaining carcass was whole-cooked with medicine inside the cooked chicken. The*  
224 *healer started eating the food before giving us. You don't have to eat without his*  
225 *permission...; the chicken should be black or white (Participant, 22)*

226  
227 *He went to the forest, slaughtered a chicken and mixed its blood with traditional medicines,*  
228 *and then applied it to my head to restore my memories. (Participant, 30)*

229  
230 *I was told when the chicken is slaughtered, I am not supposed to eat chicken wings and*  
231 *neck; I should eat the other parts of the chicken (Participant, 14)*

232

### 233 **3.2.2 Plant remedies**

234 Management of epilepsy is done through the provision of traditional medicine/herbals, which are  
235 described as a mixture of different herbs that are burned for the person to inhale. This is meant to  
236 help reduce the strength of what is causing seizures. Some other remedies given to people with  
237 epilepsy were also supposed to be used through a mixture of porridge or water, as mentioned by  
238 participants below:

239 *At midnight, everyone must wake up. He places medicine in the fire, and you all have to be*  
240 *there so that the smoke from the medicine can be inhaled by everyone (Participant, 19).*

241 Another study participant said, *"You have to mix the medicine with the porridge, while*  
242 *others look like the leaves, you have to crush them and soak them in the water, then after*  
243 *some time, you have to filter and drink the mixture. (Participant, 16)*

244 *He gave me a liquid medicine,..., he wrote Quranic words (Arabic) on a piece of paper,*  
245 *and then he put it on the bottle with water,..., and the liquid changed colour to pink or*  
246 *carrot. I was instructed to drink it with porridge or water in the morning and evening*  
247 *(Participant, 13)*

248 Along with the treatment the epilepsy patients received from healers, some participants were  
249 directed to give the medicine to their families to protect them from epilepsy.

250 *“While I was staying there and using the medicine, the healer instructed me to give it to*  
251 *my child as well because I was still breastfeeding, and the child could also get epilepsy.*  
252 *(Participant, 07)*

253 *I was given a medicine; the healer said, 'When you go home, rub it, apply it on your*  
254 *forehead, chest and then give it to others (Participant 05)*

255 Despite initially seeking treatment from traditional healers, many participants experience  
256 significant relief and improved seizure control after starting anti-seizure medication. This shift  
257 reflects the effectiveness of the proper medical therapies, which can provide more comprehensive  
258 and sustained management of epilepsy as expressed below.

259 *I didn't get healed after traditional treatment, but since I started using hospital drugs, I*  
260 *have been feeling better (Participant, 08)*

261 *I didn't get better, so I decided to come to the hospital; I am now doing well (Participant,*  
262 *09)*

263 *I visited several traditional healers and stayed at some of their houses, but with no success,*  
264 *until I came to the epilepsy clinic (Participant, 10)*

### 265 **3.3 Cost used in traditional healing.**

266 Unlike in the health facility settings, there was no clear information on the cost associated with  
267 traditional healing. Many participants complained that the fees paid to the traditional healers were  
268 high because they required both the patients and their assistants to stay with them in their homes  
269 for a while during treatment. As a result, patients had to pay for the treatment and other expenses,  
270 such as food, for the entire period of their stays.

271 *I spent eighty thousand shillings as the cost of the healer. Things like food had to be bought*  
272 *separately. I was staying there with my brother, who was taking care of me (Participant,*  
273 *19)*

274 *I paid three hundred thousand shillings because every month I had to pay one hundred*  
275 *thousand.*

276           *"..The costs were high; I can say, I don't know how many millions I paid. I mean, if it was*  
277           *a house, the money would have been sufficient to put a floor plus a roof (participant, 36)*

278 This study has noted that some patients were moving from traditional healers to health facilities to  
279 avoid treatment costs from the traditional healers. The patients were required to bring things like  
280 food and alcohol to the traditional healers. One of the participants said:

281           *I used to pay him even fifty thousand, and if that was not enough, I had to commit myself*  
282           *to paying him the next time I visited. I have not been able to go there this year because we*  
283           *do not have money. I have decided to go to the hospital to avoid the cost (Participant, 15).*

284           Another participant said, *"I was supposed to bring him alcohol and a packet of cigarettes.*  
285           *See, my family had no ability to buy those things every three days that I was supposed to*  
286           *go for medicine collection...; he always gave medicine sufficient for use for two days so*  
287           *that you come back with the things he required. That stopped me from going there...; apart*  
288           *from that, the medical costs were still there" (Participant, 19)*

### 289   **3.4     Restrictions during traditional healing**

290 During traditional treatment, individuals were subjected to several restrictions. For instance,  
291 medications had to be administered on a specific schedule, and they were not allowed to consume  
292 particular foods or engage in certain activities.

#### 293   **3.4.1 Food Restrictions**

294 Patients are often advised to avoid certain foods, such as spicy dishes, high-fat foods, vegetables  
295 or certain types of meat. Healers may believe certain foods can worsen seizures or hinder healing.

296           *He told me to stop consuming pork, mackerel fish, and vegetables, and I am not using them*  
297           *(Participant, 18)*

#### 298   **3.4.2 Behavioral restrictions**

299 Healers may advise patients to avoid specific habits or activities considered to be seizure triggers,  
300 including bathing and bright lights, as highlighted by some of the storytellers;

301           *I was not supposed to apply lotion on my body; if I had to do it, then I should apply cooking*  
302           *oil. Also, I was not taking a bath with soap, so I only used water (Participant, 15)*

303 *He told me I should not watch television when the screen is on, look at the moon at night,*  
304 *or take off my slippers when going to the bathroom because of the tiles. For example, if*  
305 *someone has cleaned and then there is water, I may fall (Participant, 30).*

306 *He told me to take a bath on the crossroad; I used to take a bath there at night, at two*  
307 *o'clock, and then early in the morning at eleven o'clock (Participant, 24)*

### 308 **3.4 Inappropriate behaviour**

#### 309 **3.4.1 Sexual harassment**

310 Due to their extended stays of up to one year for treatment by the healers, few female participants  
311 related their experiences of being sexually harassed by traditional healers. Their family members  
312 who accompanied them for therapy also experienced the same. A participant who acknowledged  
313 spending a year receiving treatment from the healer attested to this.

314 *There was a time when a traditional healer told my mother, "I want to marry you. You*  
315 *should leave your man, let's stay here with your child. We will live together" (Participant,*  
316 *10 ).*

317 *That day, I went alone to collect medicine the traditional healer told me, "You need to have*  
318 *sex with me" ..., by that time, I was very young; I was only 12 years old (participant, 01)*

319 *The healer told me, "First, you have to stay here with me". I asked him, "Do you mean I*  
320 *should sleep with you?" He said, "Yes" (Participant, 36)*

#### 321 **3.4.2 Physical and emotional harassment**

322 People with epilepsy also disclosed that some healers become very strict when it comes to  
323 prescribing medication, where patients are forced to take medicine and even be punished  
324 sometimes.

325 *In the evening, he brings you medicine; if you don't finish, you are told that you will be*  
326 *beaten. The medicine is very bitter; he knows that finishing a cup is not an easy task, so he*  
327 *has to beat you so that you can drink the medicine and finish it (Participant, 19).*

328 Also, another participant claimed to have experienced emotional harassment from a traditional  
329 healer.

330           *The medicine was not good for me, because he gave me something to boil and I was*  
331           *vomiting. The healer was telling me, "You are a prostitute; that's why the medicine doesn't*  
332           *stay in the body; every time you drink it, you vomit" (Participant, 36)*

### 333   **3.5 Referrals to allopathic medicine**

334   Traditional healers have advised some participants to seek health care from health facilities. This  
335   is especially when their treatments or therapies don't work; they could send people to the hospital  
336   and acknowledge that modern medication can help treat epilepsy. Occasionally, they might advise  
337   people to take traditional and allopathic medicines concurrently.

338           *He did not advise me to stop the hospital medication; he told me to continue collecting the*  
339           *hospital medication and go back to him. Therefore, I went to the hospital to collect the*  
340           *medicine and went back to the traditional healer (Participant, 02).*

341           *He gave me medicine until I recovered from the seizure, but he said I should not stop the*  
342           *epilepsy drug that I was given from the hospital, so I should continue using drugs from the*  
343           *hospital as usual (Participant, 22).*

344           *So, my mother was taking me to traditional healers while I was using drugs from the*  
345           *hospital (Participant, 13)*

## 346   **4. Discussion**

347   As in many parts of Sub Saharan Africa, traditional healing is often the first line of treatment-  
348   seeking for people with epilepsy in the Mahenge area. We focused on the experiences of people  
349   with epilepsy attending traditional healers in this area. We found that in traditional healing,  
350   individuals with epilepsy are diagnosed by recounting their medical history, and the treatment of  
351   epilepsy involves ritualistic practices and the use of herbal medicine. Additionally, individuals  
352   with epilepsy may encounter inappropriate conduct, such as physical and sexual harassment.

353   People with epilepsy revealed how epilepsy is managed during traditional healing by taking their  
354   illness history, which is then used to circumvent the cause of epilepsy to misconceptions,  
355   especially those related to witchcraft. The spiritual diagnosis from the traditional healers is focused  
356   on ritual practices due to the belief that spiritual or supernatural forces, such as ancestral  
357   displeasure, witchcraft, or curses, cause epilepsy. This concern was also raised in other studies

358 [25,26]. Traditional healers always emphasize the importance of information about the beginning  
359 of the seizures and any previous symptoms; this is said to be very significant for the type of  
360 treatment that should be given but can be used to inform a patient how he/she was bewitched and  
361 why [27].

362 People with epilepsy were given herbal medicine from plants/animals. Still, rituals were  
363 performed, like slaughtering an animal, which was believed to restore harmony between the  
364 individual, their ancestors, and the spiritual world, which is thought to be critical for healing. This  
365 concern was also raised in a study from Bulgaria; a prepared ritual dish is given to people with  
366 epilepsy and sent to the community's widows to consume after a black hen is killed by the healer  
367 as part of a sacrifice [28]. The same study discussed different types of rituals performed in the  
368 treatment of epilepsy; a piece of clothing that a person with epilepsy was wearing during the  
369 seizure is buried by the healer when the patient falls. Also, things like garlic, alcohol, or a paste  
370 made of grains are placed into the nose or mouth of people with epilepsy, believing that it can  
371 reduce fever and end seizures [25].

372 Another study from Northern Tanzania showed that the healer makes minor cuts into the skin of  
373 body parts (scarification) affected by seizures; these cuts are sometimes used as a depot for herbal  
374 medicine in other cases, the sacrifice represents the treatment. In most cases, the cuts are set on  
375 the head and chest [16].

376 Sexual harassment was also raised in this study as an experience of people with epilepsy during  
377 traditional healing; this mainly affects females. This is comparable to findings from Nigeria,  
378 showing that living with traditional healers during the period of receiving treatment can put women  
379 at risk for sexual abuse or pressure to become wives of traditional healers [29,30]. We found that  
380 some women with epilepsy who were seeking health care from traditional healers were at risk of  
381 unwanted pregnancies and sexually transmitted infections such as HIV. Sexual harassment is  
382 currently a public health concern, and women are more likely to be sexually harassed (73%) than  
383 men (27%) [31].

384 Traditional healers also may request people with epilepsy some challenging conditions like  
385 preventing lovers from making love that they are unable to meet, causing them to seem  
386 unsuccessful in their recovery because they failed to meet these conditions. Others have reported

387 that people with epilepsy are restricted from eating some foods like chicken, especially the head  
388 and feet, because these parts are used in preparing traditional medicine [11].

389 Common restrictions include staying away from certain places that carry negative spiritual  
390 influences; for instance, people may be restricted from attending public events or engaging in  
391 specific daily activities that could expose them to further perceived harm or bad omens [32]. The  
392 restriction of being socially isolated can lead to the deterioration of relationships, and restricting  
393 someone from consuming specific foods can negatively impact their health by depriving them of  
394 essential nutrients.

395 We found that unlike in health facilities where costs for the care of people with epilepsy are  
396 publicly known, traditional healing has no set price. Many participants expressed dissatisfaction  
397 with the high cost demanded by traditional healers, as well as prolonged stays recommended by  
398 the healers in their homes, which is one of the ways to maximize earnings from the patients.  
399 Contrary to a study in Burkina Faso, there were two types of payment to the people with epilepsy  
400 during traditional healing (cash and kind); money, they had to pay from 220 to 50,000 CFA francs  
401 (0.5 to 90 USD), which must be paid right at the beginning. In-kind payment could be made for  
402 chickens, goats, or sheep [33].

403 Like in other parts of sub-Saharan Africa, we found that people with epilepsy are referred to  
404 hospitals when traditional medicine is ineffective. In Zambia, if a traditional healer acknowledges  
405 that he can't treat epilepsy, he might send the person with epilepsy to the hospital. Also, some  
406 healers will refer patients with epilepsy with burns acquired during seizures to the hospital since  
407 they believe that burns cannot be treated easily. Many people with burns end up treated and  
408 receiving care at the hospital [34]. Traditional healers can give referrals to patients when they  
409 present prolonged seizures, pregnancy with breach presentation, pregnancy with body hotness and  
410 those with concomitant malaria, tuberculosis or other chronic diseases [25].

#### 411 **4.1 Strengths and Limitations**

412 The strength of our study is its insights into the cultural, emotional, and social aspects of traditional  
413 healing practices. The ethnographic method through oral history allows a rich understanding of  
414 how individuals with epilepsy perceive and experience traditional healing and their motivations  
415 for seeking it.

416 Our study also has several limitations. Approach to exploring the experience, data collection only  
417 by oral history is not ideal. It is preferred to use both oral history and observation to see how  
418 traditional healing is performed

419 Moreover, we only interviewed people with epilepsy and not traditional healers to allow the  
420 triangulation of information. We also did not interview persons with epilepsy who did not seek  
421 treatment from traditional healers. Therefore, we could not determine the proportion of persons  
422 with epilepsy in the Mahenge area who first contacted traditional healers or who continued to  
423 attend traditional healers.

## 424 **5. Conclusion and recommendation**

425 This study reveals the pervasive influence of traditional beliefs on the diagnosis and management  
426 of epilepsy in the Mahenge area, where spiritual and supernatural explanations guide traditional  
427 healing practices. Despite the availability of biomedical treatments, cultural beliefs hinder accurate  
428 diagnosis and effective treatment. The findings underscore the need for increased awareness and  
429 education on epilepsy management, particularly the use of anti-seizure medications, to enhance  
430 patient outcomes. Future research should explore strategies for integrating biomedicine and  
431 community-based approaches to improve epilepsy care in culturally diverse settings.

## 432 **List of Abbreviations**

433 AIDS – Acquired immunodeficiency syndrome

434 HIV – Human Immunodeficiency Virus

435 LMIC – Low and middle-income countries

436 PWE People with epilepsy

437 SSA – Sub-Saharan Africa

438 TBI – Traumatic brain injury

439 TSHs – Tanzanian shillings

440 USD-US Dollar

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454 **Author contributions**

455 The study was conceptualized by the EPIInA team. The data collection was coordinated and  
456 implemented by BM, PM and IM. Analysis and interpretation of the data were completed by PM  
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460 **Competing interests**

461 The authors declare that they have no known competing financial interests or personal  
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463

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