

## Original Article

# Traditional and spiritual medicine among Sudanese children with epilepsy

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## ABSTRACT

This cross sectional hospital based study, carried out simultaneously in Khartoum and in Wad Madani, Al Gezira State, aimed to study the impact of spiritual beliefs on explanation of the epilepsy etiology and the choices and methods of spiritual and traditional medicine used in the management of epilepsy in Sudan. The study included 180 care givers of whom 165 (91.7%) were mothers. Their ages ranged between 30-40 years. The majority (88.8%) were educated and 60 (33.3%) of them live in rural areas. Fifty eight (32.2%) attributed epilepsy to supernatural causes while 41 (22.8%) and 90 (50%) thought that epilepsy is an untreatable and contagious disorder, respectively. Traditional and spiritual medicine for the treatment of epilepsy was used by 70.5%. The common spiritual technique used was incantations (45.6%), spitting cure (37.2%) and ritual incensing (36.7%). Herbs, black cumin (*Nigella sativa*), honey and olive oil were mentioned among others as a traditional treatment for epilepsy. About two fifth

(42.5%) started traditional or spiritual treatment before seeking any medical advice. Nevertheless, only 2.4% stopped the medical treatment as advised by the traditional healer. Fifty five (43.3%) thought that spiritual and/ or traditional treatment were effective in the management of epilepsy, 60(47.2%) found no difference while 12(9.45) got worse. The majority of patients with epilepsy, although on medical treatment, used traditional and spiritual methods as well. Traditional and spiritual healers may be involved positively in the management of epilepsy and extensive public educational programs are needed.

**Key words:** Epilepsy; Traditional and spiritual medicine; Child; Alternative medicine; Sudan.

## INTRODUCTION

Throughout mankind's history, epilepsy has been perceived as mysterious and supernatural disorder. People with epileptic seizures were seen either as demonic or holy [1]. In the year 400 B.C Hippocrates

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wrote the first book on epilepsy, refuting the idea that epilepsy is a curse or a prophetic power, but it's a brain disorder. Up to now many communities in Africa and other developing countries believe that epilepsy results from witchcraft or possession by evil spirits and therefore treatment should be through the use of herbs from traditional doctors and spiritual leaders. Hence, spiritual and socio-cultural beliefs influence the nature of treatment and care received by people with epilepsy [2].

Despite the perception of modern medicine as more efficacious, traditional medicine continues to be practiced. More than 70% of the developing world's population still depends primarily on the complementary and alternative systems of medicine. Dr. Tigani El Mahi (1911-1970) a distinguished Sudanese intellectual, a psychiatrist and social scientist recognized that belief in supreme beings or supernatural existence is widely accepted by Sudanese people, not only among illiterates but also among well educated people, influencing all aspect of lives of both groups. In rural areas, cultural beliefs and practices often lead to self-care, home remedies of epilepsy or consultation with traditional healers with a definite impact on the care of people with epilepsy [3]. Holy persons like wali, fagir or sheikh, all are Muslims' clerics, have the privilege of exercising power through the Baraka (blessing) or intercession (shifaa) acquired from their ancestors and the blessed knowledge they have learned. Those holy persons use their blessing of God to heal through prayer, charms, summons and amulets [3].

Pagans, in some southern parts of the Sudan, and other African countries, believed in one Supreme Beings who manages human life through a number of uro spirits living in the next world. They act through mediums on earth, like the Kujurs who are capable of producing a state of trance and dissociation interpreted as spirit possession act as intercessors between spirits and people. Epilepsy is strongly believed to be

afflicted by these spirits, and the kujjur is the only person to alleviate this punishment. The Dago tribes in the Nuba Mountains of Sudan and other tribes in Southern Sudan like Mndari, the Nuer, Dinka and Azande have their kujjurs. These tribes maintain rites of a purely animist nature with which the kujjurs are particularly associated [3].

The aim of this study is to explore the influences of religious and cultural beliefs on explanation of the cause of epilepsy and choice and methods of religious and traditional medicine used in the management of epilepsy in Sudan.

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## MATERIALS AND METHODS

In 2011 we conducted this cross sectional hospital based study at the pediatric epilepsy and neurology referred clinics at Saad Abualila Khartoum University Hospital and the epilepsy clinics at Wad Medani University Hospital. A designed questionnaire including believes about causes of epilepsy, traditional and religious methods used in management of epilepsy and the impact of this on seizure control was distributed to a total of 180 care givers of epileptic children after taking their consent. The data was analysed using SPSS software for windows version 16.0.

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## RESULTS

The study included 180 care givers of whom 165(91.7%) were mothers, ten (5.5%) fathers, two (1.1%) grandmothers and three (1.7%) were other relatives. The majority were in the age group 30-40 years. One hundred and sixty (88.8%) were educated, of whom 35(21.9%) attained university level, 55(34.4%) higher school, 60 (37.5%) primary school and 10 (6.2%) were educated at Khalwa (religious school), compared to 20(11.2%) with no education. Seventy (38.9%) were living in urban, 60(33.3%) in rural and 50(27.8%) in sub rural areas.

Fifty eight (32.2%) of the study group think that the main cause of epilepsy is related to supernatural causes (witchcraft, evil spirit and sinister eye) compared to 50(27.8%) who think that epilepsy is a brain disease (Table 1), while 72(40%) related epilepsy to other causes as shown in Tables 2 and 3. Forty one (22.8%) of the study group thought that epilepsy is not a curable condition compared to 50(90%) who believed that epilepsy can be treated. Ninety (50%) of them thought that epilepsy is a contagious disease as shown in Table 2.

One hundred twenty seven (70.5%) of the study group used traditional and religious medicine for the treatment of epilepsy of whom 102(80.3%) used religious methods, 50(39.3%) used traditional methods while 25(19.7%) used both. One hundred two (56.7%) used different religious methods to treat epilepsy. Incantations (al-rugia), Spitting cure (al-azima) and Ritual incensing (al-takhriga and al-bakhra) were mentioned among others as shown in Table 3. Fifty (27.8%) used different traditional methods to treat epilepsy the commonest were herbs, black cumin (*haba-tal Baraka, Nigella sativa*), honey, olive and /or sesame oil as shown in Table 4.

Fifty four out of 127(42.5%) started traditional or religious treatment before seeking any medical advice, while 57(45%) used traditional and religious treatment after starting the medical treatment while 16 (12.5%) used it at the same time. Nineteen (15%) decreased the dose of antiepileptic drugs and 25(19.7%) stopped one drug, while three (2.4%) stopped the medical treatment as advised by the traditional healer. Fifty five (43.3) thought that religious and or traditional treatment were effective in the management of epilepsy, 60(47.2%) found no difference while 12(9.45) got worse.

Table 1- The causes of epilepsy which were mentioned by the study group (n=180)

| Causes                 | No. | %    |
|------------------------|-----|------|
| Supernatural causes    | 58  | 32.2 |
| Brain disease          | 50  | 27.8 |
| Head injury            | 31  | 17.2 |
| Hereditary             | 27  | 15.0 |
| Injury during delivery | 08  | 04.4 |
| Psychological          | 03  | 01.7 |
| Others                 | 03  | 01.7 |
| Total                  | 180 | 100  |

Table 2- Perceptions about epilepsy among the study group (n=180)

|  | Yes         | No         | Don't know |
|--|-------------|------------|------------|
| Do you think that epilepsy is treatable?                                     | 49 (27.2%)  | 41 (22.8%) | 49 (27.2%) |
| Do you think that your child with epilepsy will be normal like his peers?    | 62 (34.4%)  | 74 (41.1%) | 44 (24.4%) |
| Do you think that epilepsy will change your child's behaviour?               | 129 (71.7%) | 46 (25.6%) | 05 (2.7%)  |
| Do you think that your child with epilepsy will have cognitive difficulties? | 110 (61.1%) | 69 (38.3%) | 01 (0.6%)  |
| Do you think that epilepsy is contagious?                                    | 90 (50)     | 56 (31.1)  | 34 (18.9%) |

Table 3 - Religious healing techniques used in the treatment of epilepsy among the study group (n=180)

| Method   | No. | %    |
|--|-----|------|
| Incantations ( <i>al-rugia</i> )                       | 82  | 45.6 |
| Spitting cure ( <i>al-azima</i> )                      | 67  | 37.2 |
| Ritual incensing ( <i>al-takhriga and al- bakhra</i> ) | 66  | 36.7 |
| Erasure ( <i>al-mihaya</i> )                           | 56  | 31.1 |
| Phylacteries ( <i>hijab</i> )                          | 36  | 20.0 |
| Amulet ( <i>huruz</i> )                                | 23  | 12.8 |
| Sitting by the grave ( <i>al- barakah</i> )            | 14  | 7.8  |
| Living in <i>Al Khalwa</i>                             | 14  | 7.8  |

Table 4 - Traditional methods used in the treatment of epilepsy among the study group

| Method   | No. | %    |
|--|-----|------|
| Herbs  | 48  | 26.7 |
| Black cumin ( <i>haba-tal Baraka : Nigella sativa,</i> )                 | 35  | 19.4 |
| Honey  | 28  | 15.6 |
| Olive and /or sesame oil   | 19  | 10.6 |
| Sniffing of <i>samin</i> (ghee: clarified butter) mixed with black cumin | 10  | 05.6 |
| Dietary restriction (protein)  | 8   | 04.4 |
| Wet and dry cupping  | 02  | 01.1 |
| Others   | 8   | 04.4 |

## DISCUSSION

Traditional medicine includes diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral based medicine, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain wellbeing as well as to treat, diagnose or prevent illnesses [4]. A large sector of Sudanese population use traditional and religious medicine to meet their primary health care needs. In addition to being accessible and affordable, it is part of their belief systems. In spite of reported and unreported complications in traditional practice, people seek traditional healers regularly and confide in them, they respect them and hold them in

high regard [3]. Despite being a common disorder, epilepsy is perhaps the neurological condition least well understood by the general public and most likely to be associated with a wide range of misconceptions. As most people with epilepsy reside in developing countries with limited access to medical care, in sub-Saharan Africa and Arab world traditional healers play a prominent role in caring for patients with epilepsy [5,6]. In spite of the increasing health facilities and educational level of caregivers, still the belief in supernatural existence is widely accepted in Sudan not only among illiterate but also among well educated people [4].

Fifty eight (32.2%) of the study group thought that the main cause of epilepsy is supernatural, linked with evil spirit and demonic attack.

This is similar to the world wide believes that supernatural and spirit influence human being and affect their wellbeing and health especially in epilepsy [7-11]. Both the Holy Quran (the Holy Book bestowed upon Prophet Muhammad) and Sunna/ Hadith (Prophet Muhammad advices and directions) have admitted the presence of magic yet opposed it, as it is associated with heathenism and involve appeals to being other than God [12]. A study carried out in Pakistan and Turkey showed that only 3% of patients in Pakistan, but 71% of patients in Turkey, believed that their illness was due to supernatural causes [13]. A Comprehensive Epilepsy Control Program on Knowledge Attitude and Practice survey of epilepsy among schoolteachers in Pakistan; showed that very few ascribed epilepsy to supernatural causes. This relatively positive perception of epilepsy among Pakistanis may be attributed to the extensive public educational programmes [14]. In many other African and Asian countries, studies showed that epilepsy is most frequently considered as a religious or magic mental affection and afflicted by dijjinn (demons)[14,15].

A common misconception is that epilepsy is contagious and ninety (50%) of the study group believed in that. This concept is widely spread among African, Middle East and Western populations [7-10,13,16]. In Nigeria, epilepsy is commonly thought to be contagious, even among medical students [17]. In Burkina Faso, epilepsy is considered to be contagious by 44% in one report [18].

Islam is the main religion in Sudan, and it is believed firmly that Allah almighty shapes life and orders people's behavior. In Sudanese Muslims, the Quran has influenced the type and content of most techniques used by religious healers, because for the Muslim the words of the

Holy Book are a sure means of help whenever invoked [19]. One hundred and two (80.3%) of the study group used religious methods for treatment of epilepsy. Eighty two (45.6%) of the respondents used the incantations (al-rugia) which is a popular practice by Muslim healers in Sudan. Sixty seven (37.2%) used Spitting cure (al-azima) which is the mumbling of selected Quranic verses, incantations by Faki (a Muslim clerk), while doing so he lays his hand on the patient head and spits at the patient after each verse to transfer Baraka [4]. Also, 66 (36.7%) used ritual incensing (al-takhriga and al-bakhra) which is another constant element in the treatment regimens of most healers. It is a sheet of white paper on which the Faki writes some astrological formulas, Number Square with verses from Quran. The paper is then folded, given to patients, who burn it and inhale the perfumes [4,20]. Fifty six (31.1%) of the study group used erasure (al-mihaya), which is a drink prepared by writing certain verses of Quran, then washed and the fluid is given to the patient to drink. Another method mentioned by the study group is(hijab) which is a sheet of white paper on which selected Quranic verses are written with one or more of the 99 names of God, folded and wrapped or hanged around the neck, trunk, arm or waist [4, 20]. Other well known methods in Sudan is Zars which are possession cults that had been practiced extensively 50 years ago or more among Muslims in central Sudan and probably non- Muslims, but are now rarely practiced [19]. Seventy five (41.7%) of the study group used herbs as a treatment option which was described by their local traditional healers. In many cultures around the world, herbs have been used for centuries by people with epilepsy, clinical trials of herbal therapies, their efficacy or safety are scarce. Generally herbs are believed to be safe, but

this is not always true as severe toxicity resulting from use of herbs had been documented in many occasions including hepatotoxicity, teratogenicity and carcinogenicity. Furthermore, some herbs may be pro-convulsant or may alter antiepileptic drugs efficiency [3]. Commonly used substances are black cumin (habat-al Baraka, *Nigella sativa*), Honey and olive and /or sesame oil. Ten (5.6%) of our patients mentioned sniffing of samin (a clarified butter or ghee) mixed with black cumin as method of treatment. Eight patients (4.4%) used a traditional method commonly used all over the world, known as wet or dry cupping [21,22], which is pressing a glass cup tightly against the skin of the patient, in order to draw blood to the surface, then incise and let blood out [4].

Although only one patient among our study group was referred to hospital by a traditional healer, traditional healers in many African countries, including Sudan, recognize a role for modern medicine in treating seizures and thus refer patients to the hospital at times [6,21]. The treating doctor often has a tension between respecting the patient's religious beliefs and pursuing the patient's best interest. Although the entire group were receiving medical treatment, they used traditional and religious methods as well. We have no knowledge of the extent to which people with epilepsy may have been using traditional therapies without being in contact with medical services. Fifty four (42.5%) patients started traditional or religious treatment, before seeking any medical advice; this mirrored those reported among people with epilepsy in many African countries [24-26]. Collaborative relationships between physicians and traditional and religious healers are needed to bridge the treatment gap in Sudan as was suggested by the late professor Tigani El Mahi who collaborated with respected faith healers

by mutual visits, transfer of expertise, two way referral arrangements and conjoined activities. His pioneer work led to notable achievement of winning corporation of Islamic Faith healers in Sudan, making it possible for people with mental health to access the modern psychiatric services [27]. It is therefore important for clinicians to be aware of their patient's lay beliefs about their illnesses and alternative treatments that they may choose. In Sudan, traditional birth attendants were trained and utilized in a family planning program. They succeeded in increasing the use of contraceptives from 13% to 21% [28].

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## CONCLUSION AND RECOMMENDATIONS

In spite of improvement in health services and educational level of care givers, still there is a strong belief in religious and traditional medicine .The majority of our patients used these methods in addition to medical treatment. There is a need to utilize the available manpower resources of traditional and religious healers, who are well accepted by the community and accessible to the people, in addition to the strong belief in them, to facilitate and improve knowledge, attitude and management of epilepsy in Sudan. Improved health facilities, outreach epilepsy clinics in collaboration with religious and traditional healers, and a community clinic-based health education have the potential to dispel contagious aberrant beliefs.

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