Prevalence of Various Myths about Epilepsy among Families of Epileptic Patients in Pakistani Society

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ABSTRACT
Objective: To assess the knowledge of the families of epileptic patients regarding the disease and to educate them about the treatment options through modern medicine.
Methods: Total 100 families (first-degree relatives) of the epileptic patients were registered in this study during their visit to Neurology OPD from 1st December 2016 to 28 February 2017. Patients who have one episode and pseudo-seizure were excluded from study.
Results: Thirty-two percent of the population believe epilepsy is contagious and is due to black magic. Thirty-nine percent think it is a curse of God, while 38% percent think peers (faith healers) can treat patients in a better way than professional doctors. Similarly, 38% think that shoe sniffing will cure the disease while 28% believe in dung sniffing as a cure for the epilepsy. Total 44% of population believe that patient of epilepsy cannot get education and are infertile therefore cannot get married.
Conclusion: Various myths are prevalent in the Pakistani society therefore; there is a strong need to educate common people, especially the families of the epileptic patients, about the true causes of epilepsy.

Keywords: Epilepsy, myths, Pakistan.

INTRODUCTION
Epilepsy is defined as “recurrent unprovoked seizures(1). The disease is not confined to any race, gender, age or region. It is reported that about 50 million people of the world are suffering from epilepsy and 85% among them live in developing countries(2). The prevalence of epilepsy in Pakistan is approximately 0.9%(3). It is amongst the most common and oldest neurological ailments worldwide(4) and fourth most common neurological disorder in the United State after migraine, stroke and Alzheimer disease(5, 6). The word epilepsy is derived from the Greek word “Epilembani” meaning to seize or attack(7). In Babylonic Era, it was a common concept that epilepsy occurs as a result of possessions by an evil spirit, eventually two Middle East practitioners Al Razi (865-925) and Ibn-e-Sina (980-1037) put forward this concept that epilepsy is in-fact a medical illness. Ibn-e-Sina was the first person in history who used the term epilepsy. He also described its symptoms, causes and treatment(2). In eastern countries however, the old concept remained prevalent that the epilepsy is caused by super natural forces till the late 17th to 18th centuries, until Hippocrates recognized it as neurological disorder(7). According to United Nations Educational Scientific and Cultural Organization, Pakistan ranks 180 for literacy percentage among of 221 countries of the world(8). As Pakistan’s literacy rate is very low, there is also poor knowledge regarding health issues. The objective of this study was to assess knowledge regarding epilepsy in Pakistani population and to educate people about the epilepsy that it is a medical illness, which is treatable through modern medicine.

MATERIALS AND METHODS
This cross-sectional study was conducted in the outpatient department of Sir Ganga Ram Hospital, Lahore Pakistan, from 1st December, 2016 to 28th February, 2017 after taking permission from Ethical Review Committee, FJMU, Lahore. A total 100 subjects including first-degree relatives who presented to the neurology outpatient department were recruited for this study. However, patients who have had one episode of seizures and having pseudo seizures were excluded from the study. The data was collected on the specially designed performa. Each performa consisted of 10 questions with yes or no answer. The performa was given to 100 subjects individually. The was entered and analyzed by SPSS version 22.
RESULTS
Total 100 subjects were included in this study. Among them 48 were males and 52 were females. Patients of various qualifications were included amongst them, 21 subjects had higher qualification (graduate and intermediate), 25 people had secondary education (class 8 and 10), 3 had primary and 51 were uneducated (table 1). Almost half of the subjects were uneducated in this study.

Myths were more prevalent among uneducated people (table 2). Therefore, it was seen that educated people have more awareness about epilepsy.

<table>
<thead>
<tr>
<th>Type of Myths</th>
<th>Do Believe (%)</th>
<th>Do Not Believe (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy is contagious</td>
<td>Educated 1</td>
<td>Uneducated 31</td>
</tr>
<tr>
<td>Epilepsy is curse of God</td>
<td>Educated 4</td>
<td>Uneducated 35</td>
</tr>
<tr>
<td>Epilepsy is because of black magic</td>
<td>Educated 4</td>
<td>Uneducated 28</td>
</tr>
<tr>
<td>Peer (faith healer) can treat epilepsy</td>
<td>Educated 2</td>
<td>Uneducated 36</td>
</tr>
<tr>
<td>Marriage is treatment of epilepsy</td>
<td>Educated 3</td>
<td>Uneducated 36</td>
</tr>
<tr>
<td>Dung sniffing is treatment of epilepsy</td>
<td>Educated 0</td>
<td>Uneducated 28</td>
</tr>
<tr>
<td>Shoe sniffing is treatment of epilepsy</td>
<td>Educated 35</td>
<td>Uneducated 3</td>
</tr>
<tr>
<td>Epileptic patient cannot get married</td>
<td>Educated 0</td>
<td>Uneducated 44</td>
</tr>
<tr>
<td>Epileptic patient cannot get education</td>
<td>Educated 0</td>
<td>Uneducated 44</td>
</tr>
<tr>
<td>Epileptic patient are infertile</td>
<td>Educated 0</td>
<td>Uneducated 44</td>
</tr>
</tbody>
</table>

DISCUSSION
The research shows that 32% people think that epilepsy is contagious and it spreads by touching each other and eating together. Similarly, 32% believes that it is caused by black magic. However, 68% considers it is non-infectious which is similar to the study conducted previously in Karachi (Pakistan) which showed 66.7% believes that it is non-infectious\(^9\). In a study conducted in Kuwait, it was observed that approximately 1.7% population think epilepsy is contagious while, 25% believes that it is due to evil spirits\(^10\).

A study published in Journal of Clinical Neurology presented that 81% people believe that brain cells die during seizures\(^11\). On the contrary, a study conducted in Malaysia showed that only 30% has correct knowledge about the disease\(^12\). Epilepsy is a neurological disorder but there are some triggering factors including stress, alcohol consumption, sleeping problem, poor compliance to treatment, missing meals, smoking, flickering and flashlight\(^13\).

Current study shows that 38% of the participants think that Peers (faith healers) can treat the patient in a better way than medical professionals. Other think that shoe (38%) and dung (28%) sniffing are better treatment options. Additionally, 39% consider marriage as a possible cure for epilepsy.

Previous studies also showed that such myths and misconceptions are widespread in Pakistani community. However, prevalence of certain misconceptions varies with the regional relevance as well. A study conducted previously in Karachi showed that 13% believes in shoe sniffing while 33.1% believes in religious treatment\(^9\). In Khartoum, 70.5% people believe in traditional and spiritual medicine\(^14\).

Other than treatment options misconceptions are also widespread about the physical and mental abilities of the epileptic patients. For instance, 44% believes that epileptic patients lack the ability to acquire formal education. Furthermore, they are infertile and therefore, unfit for marriages.
Similarly, in a study conducted in Kuwait 8% participants believe that epileptic should not marry while, 12.5% believe they should not have children\(^\text{10}\). In China, 87% had objected to their children marrying with epileptic\(^\text{15}\). In Malaysia 48% had objected regarding marriage\(^\text{12}\). However, previous studies indicate that epilepsy is not a contagious disease. People with epilepsy can have normal fertility and therefore, can get married\(^\text{16}\).

**CONCLUSION**

There is strong need to educate masses to eliminate myths and misperception from the society about the disease. Furthermore, people in different regions have different myths and different level of knowledge regarding epilepsy. In developed countries, the disease is less stigmatizing as compared to third world countries due to lack of knowledge and lower socioeconomic conditions.

**REFERENCES**

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