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potential risk for mixed feeding – particularly mastitis (associated with engorged breasts) – is avoided.

Third, in settings such as ours, where social taboos linked to engorged and dripping breasts may be of concern, the use of a rapid and effective option for breast milk suppression is likely to minimize the social pressure on mothers and facilitate empowerment.

Finally, the drug is likely to be useful for 'weaning' among those who opt for exclusive breast feeding, as transition from breast milk to other feeds can often be relatively abrupt. A dried-up breast will avoid the possibility of feeding with breast milk and other feeds for greater than one day, and this might favourably impact upon HIV-transmission.

About one in three mothers in our setting were aware of other methods of breast milk suppression, namely traditional medicine or breast compression. Although breast compression is recommended for suppression of lactation in resource-limited settings,^{1,2} this method had low acceptability, and, in the absence of cabergoline, the great majority of mothers would have resorted to using traditional medicine.

In resource-limited countries such as Malawi, the focus of preventive MTCT has so far been on limiting the risk of MTCT transmission around the time of delivery. However there is a need to minimize the substantial HIV- transmission that is still occurring through breast feeding. Cabergoline is an acceptable, safe and effective drug that could be of significant operational benefit in PMTCT programmes.

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Myths and fallacies about epilepsy among residents of a Karachi slum area

Majid Shafiq мввs мд Mansoor Tanwir мввs мд Asma Tariq мввs Ayesha Saleem мввs Monaa Zafar мввs Ali Khan Khuwaja мввs FCPs

Department of Community Health Sciences, Aga Khan University, Karachi 74800, Pakistan

Correspondence to: Majid Shafiq, 156, Male Hostel, Aga Khan University, Stadium Road, Karachi 74800, Pakistan Email: majid.shafiq@aku.edu

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SUMMARY Misconceptions about epilepsy may explain the considerable stigma accompanying it. We aimed to identify such fallacies through questionnaire-based interviews of 487 adult residents of a slum area in Karachi, Pakistan. Of those interviewed, 25% believed that epilepsy was caused by evil spirits, black magic and envy by others – those without a school education were more likely to hold these views (P < 0.05). Perceived complications included impotence and cancer. Shoe-sniffing was considered a treatment modality by 13%. It appears that misconceptions abound regarding epilepsy's causes, complications and methods of treatment. However, those who had received a school education were less likely to link epilepsy with supernatural phenomena.

Introduction

Epilepsy is one of the most common neurological illnesses.¹ Epileptics comprise 1% of the Pakistani population and most sufferers are under 19 years old.²

Negative attitudes toward epilepsy are prevalent across the globe. Often the social stigma associated with epilepsy becomes a greater handicap than the associated seizures or the side-effects of medication.^{3,4}

Negative attitudes arise from misconceptions and lack of knowledge about the illness. A study by Qidwai *et al.*⁵ assessed the prevalence of myths and fallacies regarding various health issues among patients visiting a family medical centre in Pakistan. Only two questions were asked about epilepsy: 13% believed that evil spirits could cause epilepsy, while 73% thought that psychological stress could do so. No other study assessing the misconceptions regarding this illness in Pakistan has been published. Identification of local misconceptions is important in order to increase awareness and improve attitudes towards epilepsy. Our study examines the various myths and fallacies regarding epilepsy among residents of a Karachi slum area.

Methods

In this cross-sectional study, we interviewed 487 people using a structured questionnaire presented in the local language (Urdu). All subjects were at least 16 years old and were residents of Sultanabad, a typical slum area of Karachi. The majority of the residents have migrated from various parts of the country for economic reasons and have a low socioeconomic status.

Due to the haphazard assortment of residences in Sultanabad (in terms of size, type and a lack of numbering), subjects were selected through convenience sampling. Apart from demographics, questions were asked about the causes, effects and the various treatments of epilepsy. Structured questions with yes/no responses were supplemented with open questions.

Data was analysed using Statistical Package for Social Sciences version 13.0. Univariate analysis of responses with gender and schooling was performed using the χ^2 -test, wherein 0.05 was kept as the level of significance (α).

Results

In all, 59% of the respondents were 16–30 years old, 63% were male, 68% were married, 69% had received at least some school education, 53% were employed and 40% had a monthly household income of less than Pakistani Rupees 5000 (about US\$ 83).

The most common myths regarding the cause of epilepsy were: psychological stress (52%); evil spirits (39%); black magic (38%) and 'nazar' (i.e. others' envy) (27%). Less commonly cited causes included exposure to fire or water (5.2%) and exposure to cat hair (1.9%). Isolated responses included anger, sitting under a tree, exposure to dirt/contamination, poverty, love marriage, sinfulness, exposure to sudden loud noise and falling to the ground during an earthquake. Talking about the disease was also deemed by a few to be a cause of epilepsy.

Making the epileptic sniff a shoe during a seizure was identified as a treatment modality by 13%. Other cited treatments included marriage and warming the patient's palms and soles. According to 41 (9.7%) respondents epilepsy could cause cancer. Nineteen (4.5%) respondents believed that antiepileptic drugs could cause impotence and 18 (4.2%) believed that they could cause infertility.

Female respondents were more likely to cite psychological stress as a cause of epilepsy (P < 0.01). Male respondents were more likely to identify shoe-sniffing as a treatment modality (P < 0.01). Those who had received some schooling were less likely to state that epilepsy could be caused by evil spirits (P = 0.01), black magic (P < 0.01) or envy by others (P < 0.01).

Discussion

Epilepsy is one of the most common neurological illnesses worldwide, especially among younger people. It is often associated with social stigmatization,^{1,2,4} due to misconceptions and lack of knowledge about the disease. We have identified various myths and fallacies about epilepsy in the studied population.

In our study, a major proportion of the respondents believed epilepsy could be caused by evil spirits or black magic. Similar findings have been reported from China and Hong Kong.^{5,6} Irrational customs associated with epilepsy are also entrenched in some other cultures. Examples include traditional scarifications on the forehead in Togo

Those who had received even a basic school education were less likely to believe in supernatural causes of epilepsy. This suggests that education alone could bring about significant changes in people's attitudes.

In conclusion, our data suggest that misconceptions abound regarding epilepsy's causes, its effect on the patients and about the various methods of treatment. Since school education is associated with a lesser prevalence of these myths, it might be useful to include information in the school curricula. In addition, further research is needed to ascertain the true prevalence of fallacies identified in study. Research data shows that concerted public awareness campaigns are urgently required. A nationwide campaign providing information about epilepsy should be instituted.

It is no wonder, given the existing misconceptions, that the stigma surrounding epilepsy forces people with this disorder into the shadows.

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