Attitudes of Omani physicians to people with epilepsy

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ABSTRACT

Objective: This study reports the results of a questionnaire design to elicit doctors views about epilepsy.

Methods: Sixty-two percent of medical staff working in different regions of Oman responded. The questionnaire covered certain topics regarding the source of the knowledge of the doctors on seizure disorders and the personalities and behavior of people with epilepsy.

Results: The study suggests that although doctors in Oman gained knowledge on epilepsy prior to medical education, more doctors judged people with epilepsy 'negatively' compared to 'positively' for normal people.

Conclusion: A developing country such as Oman needs to inculcate perceptions and attitude that are more realistic amongst their doctors toward people with epilepsy.

Keywords: Epilepsy, cross-cultural, medical personnel, attitude, behavior, personality, developing country.

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Epilepsy is one of the oldest known brain disorders. The word 'epilepsy' is derived from a Greek word meaning 'a condition of being overcome, seized, or attacked'.

It was mentioned more than 2,000 years ago and references to it can be found in ancient papyri and Vedic texts, the Bible and the tradition of Prophet Mohammed. Decades ago, the 'falling sickness' was believed to be caused by a demon or angel, and epilepsy became known as a 'demonic possession' or 'sacred disease'.

Furthermore, people with epilepsy (PWE) were held to be personality disordered, congenitally predisposed to criminality and therefore an appropriate object of eugenic policies. Such a background has been a breeding ground for myths, stigma, or even fear towards PWE.

It has been suggested that social attitudes are more devastating than the disorder itself and other family members suffer because an immediate family member has epilepsy.

Indeed, historical and cross-cultural studies on PWE have reported active discrimination, high rates of psychosocial problems and poor compliance to treatment. Recently epilepsy has been suggested as a culturally devalued condition.

Once this negative label is applied to a person with seizures that person endures negative community and society reactions that lower the suffers self-esteem, creating the inner sense of being discredited or discreditable, which over time spoils his or her sense of identity.

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Nationwide opinion polls on the knowledge of and public attitude towards epilepsy have been undertaken in several countries.\textsuperscript{11-16} Caveness and Gallup's\textsuperscript{5,7} longitudinal studies and others\textsuperscript{18,19} have shown increased awareness and social acceptance of epilepsy but negative attitudes still persevere in many countries.\textsuperscript{18,20} Surprisingly, many of the stereotyped attitudes about epilepsy that have been identified within the general community were also found within the medical profession.\textsuperscript{21-26} Medical education has been re-evaluated in the light of the prevailing attitude.\textsuperscript{27,28} Although empirical evidence suggests that the incidence of epilepsy is high in pre-industrialised countries and seizures are often attributed to supernatural forces,\textsuperscript{13,16} there is a lack of research on general and specific knowledge of epilepsy amongst health-care professionals in these countries. Oman, a Gulf country, offers an interesting study area since comprehensive health services have only recently been introduced; its diverse society has experienced minimum acculturation and many of its customs (e.g. consanguinity) and geographical features (mountainous) may exacerbate the incidence of epilepsy.\textsuperscript{29}

The aim of this paper is to investigate the general and specific attitudes towards PWE amongst practising doctors in Oman. Since physicians from many parts of the world staff Oman’s health care system, it offers an opportunity to audit the effect of worldwide campaigning to eradicate negative stereotypes towards PWE. Since this area has been poorly researched, it is a virgin field for study.

**Methods.** The questionnaire was adapted from Davies and Scambler\textsuperscript{23} and Beran and Reads.\textsuperscript{21} The questionnaire contained items on the demographic information, sources of knowledge of epilepsy and perceived attributes of PWE and attitudes towards PWE. The questionnaires were distributed to doctors working in different parts of Oman during a conference on 'Primary Health Care' held at Sultan Qaboos University. Those attending the conference took responsibility for distributing the questionnaires to eligible respondents in their respective region of Oman and sending them back.

**Results.** 

### Demographic variables.

One hundred and twenty one doctors participated in the study, which constitute sixty-two percent of questionnaires returned. Sixty-six percent of the doctors were males and 34% females. Their mean ages were 37.57 ± 9.61 (range 24-66). Forty percent were Indian nationals; 31% were Omani; 10% were Sri Lankans; the remainders were Jordanians, Pakistanis or Egyptians. Forty percent had acquired an additional qualification in India and 25% in the UK. This study group is a representative sample of the doctors in Oman.\textsuperscript{30}

### Table 1 - Response comparing people with epilepsy with normal people for selected attributes (%) (Much less than normal people 1-7 Much more than normal).

<table>
<thead>
<tr>
<th>Attributes</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>No Response</th>
<th>Mode</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral problems</td>
<td>1.7</td>
<td>4.1</td>
<td>1.7</td>
<td>3.3</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>1.7</td>
<td>5</td>
<td>5.10</td>
</tr>
<tr>
<td>Mood swings</td>
<td>7.4</td>
<td>9.1</td>
<td>14.0</td>
<td>17.4</td>
<td>4.1</td>
<td>14.9</td>
<td>19.0</td>
<td>-</td>
<td>1.7</td>
<td>4.73</td>
</tr>
<tr>
<td>Ability to relate to others</td>
<td>39.7</td>
<td>30.6</td>
<td>30.6</td>
<td>30.6</td>
<td>44.6</td>
<td>32.2</td>
<td>32.2</td>
<td>5.0</td>
<td>4.35</td>
<td>3.47</td>
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<tr>
<td>Emotional problems</td>
<td>15.7</td>
<td>24.8</td>
<td>19.0</td>
<td>6.6</td>
<td>15.7</td>
<td>30.6</td>
<td>8.3</td>
<td>3.3</td>
<td>4.54</td>
<td>5.93</td>
</tr>
<tr>
<td>Aggression</td>
<td>17.4</td>
<td>24.8</td>
<td>19.0</td>
<td>6.6</td>
<td>15.7</td>
<td>30.6</td>
<td>8.3</td>
<td>3.3</td>
<td>4.54</td>
<td>5.93</td>
</tr>
<tr>
<td>Intelligence</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>4.37</td>
<td>3.72</td>
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<tr>
<td>Ability to concentrate</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>29.8</td>
<td>5.16</td>
<td>5.16</td>
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<tr>
<td>Irritability</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>4.54</td>
<td>5.93</td>
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<tr>
<td>Absenteeism (school or work)</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>4.54</td>
<td>5.93</td>
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<tr>
<td>Productivity (school or work)</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>4.37</td>
<td>3.72</td>
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<tr>
<td>Ambition</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td>4.37</td>
<td>3.72</td>
</tr>
<tr>
<td>Accident at work</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>4.37</td>
<td>3.51</td>
</tr>
<tr>
<td>Ability to accept discipline</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>4.37</td>
<td>3.51</td>
</tr>
<tr>
<td>Tendency to violence</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>4.37</td>
<td>3.51</td>
</tr>
<tr>
<td>Ability to assume responsibility</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>11.6</td>
<td>4.37</td>
<td>3.51</td>
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**Sources of knowledge of epilepsy.** The doctors were asked when they had first witnessed an epileptic seizure, at what stage they gained most of their knowledge of epilepsy and while practising in Oman, have they encountered any person with epilepsy. In response to the first question, 63% said they saw their initial seizure in their pre-student days, 7% whilst at medical school, 9% in junior and 3% in senior hospital posts. The remaining 6% did not specify. On the second point where they learned most about epilepsy, 6% replied in their pre-student days, 61% whilst in medical school, 5% in junior hospital posts, 2% in senior hospital posts and the 26% were unable to specify. On the last point asking whether they have seen any epileptic patient in Oman, 63% responded affirmative, 19% said no, whilst the remainder could not remember.

**Perceived attributes of people with epilepsy.** The doctors were asked to judge whether a list of 15 attributes were more or less common amongst PWE than amongst other 'normal' persons. The respondents were told to answer with reference to people with well-controlled epilepsy who have an uncomplicated seizure disorder. The results are presented. Two aspects of these results need to be highlighted. Firstly, on 11 of the 15 attributes, the majority of our subjects responded that there were no differences between epileptic and normal populations - mode being neutral score of 4. On the remaining three attributes, namely 'behavioural problems', 'emotional problems' and 'accident at work', our subjects perceived PWE as having these attributes or problems much more than normal people. Based on small mean scores, which ranged from 3.5 to 5, there was a general reluctance to make firm distinctions between people with epilepsy and normal people. Detailed analysis of the means suggest that, at least based on the attributes listed, more doctors judged PWE 'negatively' compared with normal people than 'positively' compared with normal people.

**Discussion.** Our results showed, despite their diverse cultural background, the majority of doctors in Oman had initially encountered an epileptic person before joining medical school and had acquired most of their exposure to seizure disorders during medical school. This contrasts with an earlier study by Beran & Read, who found, in their sample of general practitioners, earliest exposure occurred after qualification. However, it is compatible with the finding that there is higher incidence of epilepsy and lower provision of treatment in developing countries where our respondents mainly came from. This could mean that doctors in Oman were likely to have encountered cases of epilepsy much more frequently in day-to-day life, than those in developed countries. Does such higher incidence of contact increase mutual understanding as postulated by 'contact hypothesis'?

On perceived attributes of PWE, the doctors were asked to judge whether fifteen attributes were more or less common amongst people with well-controlled epilepsy than amongst other 'normal' persons. The respondents were requested to give their answers with reference to people with well-controlled epilepsy, who have uncomplicated seizure disorders. Three questions, those relating to behavioural and emotional problems and accident proneness, were emphatically judged negatively by our respondents. It is of interest that similar trends have been noted in other studies where doctors judged PWE much more negatively compared to a 'normal' population. On the remaining 12 questions, our respondents were non-committal and did not make firm distinctions between PWE and those who are healthy normal. However, it is to be noted that personality and behaviour attributes mentioned in our questionnaire are found in "healthy" population, and not unique to PWE.

Limitations of this study should be highlighted. Firstly, considerations of the importance of bias risk owing to the non-respondent group, as 38% did not respond to our questionnaire. Secondly, our respondents probably may have answered differently in face-to-face interview than in self-administered questionnaires. Finally, the question remains whether these attitude differences, however realistic and justifiable would translate into any form of discrimination against PWE in clinical practice or in the "real life".

Although more recently Kokkonel have reported that the social course of epilepsy is largely associated with neurological and cognitive impairments other than epilepsy, the social experience of epilepsy cause considerable problems for patients and their relatives in many parts of the world. Attempts have also been made to define doctors' views of epilepsy based on the assumption that representatives view of epilepsy amongst the public towards PWE is similar among the medical professionals. Only a few studies have reported the medical profession's awareness and attitude towards PWE in developing countries like Oman. This paper attempts to quantify the same amongst doctors in Oman.

As it has been often alluded, physicians are amongst the makers of opinion in their respective societies, and tend to influence the decisions made by the public and by the government. The present finding suggests that many doctors in Oman are harbouring negative attitudes towards PWE. As Alport informed us, "attitudes determine for each individual what he will see and hear, what he will think and what he will do". However, it is well established that attitudes are not permanent, rather, constantly evolving. In Oman, therefore, time and effort should be invested to educate doctors to develop more realistic attitudes towards people with epilepsy; that the person with seizures has as much
potential as anyone else; that in most cases our attitudes cause more problems than the seizure itself.  

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References