The incidence of epilepsy, excluding febrile seizures and single seizures, is approximately 20-50 cases per 100,000 persons per year, 50% of these have their first seizure before age of 18 years (1-3). As many of these patients are usually attended and cared for by parents or close relatives during a fit, it is necessary to assess the knowledge, attitude and practices of parents regarding care of their children during an acute attack. Epidemiological studies on epilepsy are available from developed and developing countries (4-7). Public attitudes towards epilepsy vary in different countries and areas. In order to study the parental attitudes towards various aspects of epilepsy specially first aid care and perceived causes, we prospectively conducted this study.

Material and Methods

Three hundred and fifty two children with grand mal epilepsy comprised the subjects for this study. Parents of these patients, who cared for them during the fit, were interviewed on an open ended, pretested questionnaire regarding the socio demographic profile, nature of care provided during the attack, and social beliefs and perceptions regarding causes of epilepsy. The patients were examined and appropriate investigations were carried out to confirm the complications.

Results

Of 352 subjects, 220 (62.5%) were males, 266 (75.5%) were from rural areas, 120 (34.1%) were Hindus and 232 (65.9%) Sikhs. Their age ranged between 4½ and 18 years. Family history of epilepsy was present in 74 (21%) of cases.

The first aid care provided to children during an epileptic fit is shown in Table 1. One hundred and eighty two (51.7%) of
TABLE I—Nature of First Aid Care Provided by Parents During an Epileptic Fit

<table>
<thead>
<tr>
<th>Nature of care</th>
<th>No.</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Harmful (n = 182)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquids by mouth</td>
<td>178</td>
<td>50.6</td>
</tr>
<tr>
<td>Social ritual 'Jhada'</td>
<td>76</td>
<td>21.6</td>
</tr>
<tr>
<td>Pressure to restrain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>convulsive movement</td>
<td>45</td>
<td>13.0</td>
</tr>
<tr>
<td>Putting some object in mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to force the teeth open</td>
<td>42</td>
<td>11.9</td>
</tr>
<tr>
<td>(b) Others (n = 170)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No treatment</td>
<td>44</td>
<td>12.5</td>
</tr>
<tr>
<td>Massage of soles and palms</td>
<td>44</td>
<td>12.5</td>
</tr>
<tr>
<td>Immediate consultation of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a doctor</td>
<td>32</td>
<td>9.1</td>
</tr>
<tr>
<td>No response</td>
<td>50</td>
<td>14.2</td>
</tr>
</tbody>
</table>

* Parents had more than one response.

The respondents administered wrong and harmful form of treatment, the commonest being the practice of giving liquids by mouth. Various liquids given were water in 101 (56.8%), milk in 47 (26.4%), milk with ghee in 23 (12.9%) and any other liquid in 7 (3.9%) of these cases. Only 9.1% of the children were immediately brought to a doctor.

Various complications arising out of the first aid treatment in the study subjects were: injury to gum, teeth or tongue 14 (3.9%), aspiration of liquids 6 (1.7%), fracture of limb bones 1 (0.3%) and foreign body in upper GIT 1 (0.3%) (Fig.).

The perceived causes of epilepsy in view of parents are mentioned in Table II. Eighty-eight parents (25%) were not able to define a cause. Two hundred and one (57%) parents irrespective of religion, literacy level and rural/urban distribution, viewed epilepsy as a social stigma and wanted to keep it as a secret.

Discussion

The present study has revealed the use of various modes of care by the parents during an epileptic fit in children. It is necessary to emphasize that no attempt should be made to put anything in the mouth or force the teeth open. This practice was observed in almost two-third patients. Similarly, it should be stressed that no attempt should be made to restrain the convulsive movement as this may only result in injury.
Optimal care is likely when patients have a clear understanding about epilepsy, which should be imparted by doctors/health educators.

Studies indicating parental misconceptions regarding etiology and treatment of epilepsy are found in many countries (8,9). Verduyn (9) in 1988 reported that the mothers formed their own hypotheses about seizure precipitants in children with epilepsy and stressed upon the advice about managing events associated with seizures to avoid needless anxiety. Wrong ideas about epilepsy influence the activities and functioning of children with epilepsy, either directly or indirectly. In a study conducted in the Netherlands, an increase in knowledge and attitude change were found directly following health education.

The observation of social stigma regarding epilepsy among parents of children with epilepsy is in accordance with the results of a study done by Taylor (10) who also found moral and ethical problems in epilepsy. According to Ross et al. (2) childhood epilepsy affects school attendance, family and personal esteem.

Nearly 27% of the parents were of the view that epilepsy occurs due to ‘evil spirit’ which goes well with the earlier reports (11). Virmani et al. (12) in 1977 reported from India that 6% of the patients from the lower socio-economic status and 35% of their families perceived epilepsy as being due to supernatural causes. From other underdeveloped communities a strong belief in a supernatural power as a cause of epilepsy has been reported (13). Nearly 23% of the parents in this study thought epilepsy to be contagious disease. This type of belief has also been reported by other workers (14-16).

To conclude wrong and harmful practices during an epileptic fit is an important practical issue, and there is a need of imparting knowledge and clear understanding regarding epilepsy to parents.

REFERENCES


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NOTES AND NEWS

THIRD SUMMER COURSE IN BIOSTATISTICS—1993

The Department of Biostatistics, CMC, Vellore, jointly with the Epidemiology and Health Management Network of India (EPIDMAN), will be organizing 5 intensive, application-oriented 3-week courses from June 14 to July 2, 1993; (a) Introduction to Biostatistics and Hospital Statistics: to develop skills in proper collection, use and interpretation of vital, health and hospital statistics; (b) Epidemiological methods and Analysis: to describe disease frequencies, design and analysis of cohort, cross-sectional, and case-control studies as well as clinical trials; (c) PC-based Statistical software in health care: both Advanced level and Introductory; (d) Applied Multivariate Techniques, to better use of statistical procedures, in different multivariate contexts; (e) Demographic analysis and their Biostatistical application, dealing with formal and practical demography. All courses include laboratory and computer time.

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