features with spondyloarthopathies, needle or open biopsy is usually required for definitive diagnosis.

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Prevalence of Epilepsy in Rural Rajasthan — A Door-to-Door Survey

Sir,

Epilepsy is world wide health problem. Figures ranging from 1.28 to 8.87 per 1000 have been given in various studies from India. Very few neuroepidemiological studies have been possible in rural areas. This door-to-door survey was conducted in part of rural Rajasthan, with the aim to study the prevalence rate of active epilepsy and clinical profile including attitude and beliefs of people about epilepsy in Churu Tehsil (Rajasthan).

The study was conducted during the period of January, 2005 to October, 2005. Patients of active epilepsy were included in the study. Febrile seizures and pseudo-seizures were excluded. The study was conducted in 3 steps. In the first step, health workers and others posted at Primary Health Centres (PHCs) and subcentres did a door-to-door survey for finding epileptic patients using standard validated 9 questions screening questionnaires, having 92% specificity and 98% sensitivity. Positive cases were referred to the rural epilepsy center at Ratan Nagar where this study was conducted on every first Saturday of month for confirmation of epilepsy by the neurologist team. A team of 70 health workers and 16 doctors conducted the survey.

As a second step, to improve the case finding, pamphlets and public address system, mobile vans with posters were used to detect any cases of epilepsy which may have been missed during the step one of the study. As a third step a team of neurologist confirmed the diagnosis of epilepsy in patients referred from step-1 and step-2. They recorded the patient details and epilepsy was classified according to classification of ILAE (1981).

The total population under this study was 1,72,442 which was distributed in 11 PHC areas. 596 cases were referred as positive cases of epilepsy by peripheral field workers. They were screened by a team of neurologist, and 517 patients were confirmed as patients of epilepsy. Thus prevalence rate of active epilepsy in this area of rural Rajasthan was found to be 3/1000. This is the only such survey for epilepsy in Rajasthan. Other studies from India show a prevalence rate of 4.7/1000 in Parsi Community, Bombay; 4.74/1000 in Kerala. In our survey, sex prevalence is slightly higher in men than women, male:female 1.1:1. This could be due to the tendency of head of the family interviewed in the survey to conceal epilepsy in females due to social stigmas. The mean age of onset of epilepsy in our study was 16.2 years. Considering only the clinical data; generalized seizure were the most common type present in 78% of our patients.

In our study treatment gap is nearly 40%. A variety of pre-disposing risk factors are thought to be significant in developing countries. In our study mental retardation was seen in 12.8% cases and family history was present in 4.2% cases. Patients beliefs regarding cause of epilepsy revealed that 23.5% of patients thought it to be due to disease of brain, 26.4% as evil spirits and 4.7% as a familial cause. These results were similar to study done by Birback GL et al.

Such studies may be of help in properly mobilizing the services of both government and non-government organization in controlling the seizures in maximum number of cases.

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The Burden of Chronic Airflow Obstruction in India

Table 1 : Showing features differentiating tuberculosis of spine with brucellosis of spine

<table>
<thead>
<tr>
<th>Feature</th>
<th>Tuberculosis</th>
<th>Brucellosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspicion of disease</td>
<td>History of TB/endemic area</td>
<td>History of contact with animals</td>
</tr>
<tr>
<td>History of contact with animals or unpasturized milk</td>
<td>May be present</td>
<td>Usually present</td>
</tr>
<tr>
<td>Constitutional symptoms</td>
<td>+ve</td>
<td>+ve</td>
</tr>
<tr>
<td>Area Involved</td>
<td>Dorsal spine</td>
<td>Lumbosacral spine</td>
</tr>
<tr>
<td>Complications</td>
<td>Neurological deficits, angular deformities</td>
<td>Less common</td>
</tr>
<tr>
<td>Histopathology</td>
<td>Granulomatous inflammation</td>
<td>Granulomatous inflammation</td>
</tr>
<tr>
<td>Radiology</td>
<td>Joint widening and erosions</td>
<td>Joint widening and erosions</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Clinical, radiology, mantoux test</td>
<td>Clinical, radiology, brucella antibodies by ELISA</td>
</tr>
</tbody>
</table>
The editorial on the 'Burden of Undiagnosed Airflow Obstruction in India' in the August 2007 issue of the journal highlights the enormous burden caused by chronic obstructive pulmonary disease.1 But it is not correct to state that the data from India on the epidemiology of COPD is scarce. There is a fair amount of data available on the subject in Indian literature. The national burden of COPD for 1996 was estimated at over 12 million, based on the median age-adjusted prevalence rates of several different studies from population studies sponsored by the Indian Council of Medical Research (ICMR), on 35295 adults of > 35 years age out of a total study population of more than 73000 individuals.4 The smoking association in a ratio of 2.65 was similar to that reported from other Asian countries such as China and Japan.2 The other important finding in this study was the clear demonstration of a causal relationship of environmental tobacco smoke (ETS) i.e. passive smoking exposure with COPD (Odds Ratio of 1.535) in large nonsmoker population of 8668 adults.

The World Health Corporation, India and the Government of India have therefore taken initiatives to effectively implement and improve the prevention and management of COPD at all different levels of health care. It is therefore of critical importance to continue efforts to improve our strategies to tackle this disabling illness.

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Reply from the Authors

Sir,

I am grateful to Prof. Jindal for his comments on my editorial. I continue to maintain that there is a paucity of data on the epidemiology of COPD from India. Prior to 1995, a detailed Medline search reveals only 11 studies; the majority of which looked at very small population samples.3

In 2006, Jindal et al published or best available population based-survey on the prevalence of COPD.2 In this well conducted study which sampled 35,295 subjects the prevalence of COPD was estimated to be 4.1%. Although carefully executed and meticulously compiled, there are some obvious flaws:
1. The population sampled was not representative of the country as a whole. The authors themselves admit that this study of ‘COPD epidemiology from four centers only, does not in any way speak of the national epidemiology’.
2. This study was based on a positive response to mainly one cardinal symptom; chronic cough. Patients presenting only with breathlessness were not considered thus excluding the emphysema-end of the COPD spectrum and under-estimating prevalence.
3. Finally, and most importantly, spirometry was not performed in any of the subjects. This should really be the gold-standard in any COPD prevalence study.

Jindal’s study is a big step in the right direction but clearly the epidemiological data currently available is thin and must be backed up by objective spirometry.

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Knowledge, Attitude and Behaviour Regarding Diabetes Amongst Family Members of Diabetes Patients

Sir,

Diabetes is an iceberg disease, affecting vast population worldwide. India today leads with its largest number of diabetic subjects in the world as compared to any given country. Diabetes education and awareness programmes are integral and essential contents of diabetes care. There is now irrefutable evidence that diabetes education, awareness and motivation for self care, improves diabetes care, reduces diabetic complications and thus reduces economic burden of diabetes.1

A hospital-based, cross-sectional study conducted at Diabetes Centre, KLES Hospital and Medical Research Centre, Belgaum over a period of one year on knowledge, attitude and behaviour regarding diabetes amongst family members of diabetic patients is reported. 513 family members participated in the program. The health education regarding basic knowledge about diabetes, risk factors, prevention of complication and control of diabetes was imparted to them without assessing their existing level of knowledge, attitude and behaviour. It was given in groups, each group consisting of approximately 100 members. The health education sessions were conducted every month over a period of one year, by lectures, slide projections, charts, pamphlets, video-show and distributing book...