National Epilepsy Programme for India

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9th AOEC, Manila 23 March 2012
Developing countries: 60 to 90%
India: 38% to 80%
More in rural areas
Kerala 38% (high rate of literacy)
3 to 6 million PWE would never have been treated.

Gourie-Devi et al. Epilepsia 2003;44(suppl 1) 58-62
Radhakrishnan et al. Epilepsia 2000;41:1027-1035
## Anti – Epileptic Drugs

<table>
<thead>
<tr>
<th>Drug</th>
<th>Unit Cost (Rs)</th>
<th>Cost per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rupees</td>
</tr>
<tr>
<td>Phenobarbitone (60mg)</td>
<td>0.25 – 0.96</td>
<td>90 – 350</td>
</tr>
<tr>
<td>Phenytoin (100mg)</td>
<td>0.45 – 0.92</td>
<td>164 – 336</td>
</tr>
<tr>
<td>Carbamazepine (200mg)</td>
<td>1.0 – 1.9</td>
<td>365 – 694</td>
</tr>
<tr>
<td>Sodium Valproate (200mg)</td>
<td>1.5 – 1.9</td>
<td>548 – 694</td>
</tr>
</tbody>
</table>
## Ratio of Neurologists / population

<table>
<thead>
<tr>
<th>Country</th>
<th>One Neurologist/ population</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>38000</td>
</tr>
<tr>
<td>Holland</td>
<td>25000</td>
</tr>
<tr>
<td>Italy</td>
<td>8000</td>
</tr>
<tr>
<td>UK</td>
<td>170000</td>
</tr>
<tr>
<td>USA</td>
<td>18000 to 50000</td>
</tr>
<tr>
<td>India</td>
<td>1000000</td>
</tr>
</tbody>
</table>
Solutions for Management of Epilepsy

- Decentralization and development of resources at primary level
- Integration into existing vertical Programmes
- Role for NGOs in community programmes
- Training – of Doctors/ Paramedical personnel in Health Care pyramid
- Availability of first line AED
Epilepsy Care for the Community

- Rural Epilepsy Care
- Community Health Care Unit Model
- Satellite Clinic Model
- District Model
Rural Epilepsy Control Model

Primary Care Physicians + Para Medical Workers

Mani KS et al. Lancet 2001;357: 1316-20

- Training in practical epileptology
- Identification of disease suspects
- Institution of inexpensive AEDs (Phb and DPH)
- Home distribution of drugs
- Regular follow up by paramedical workers
- Intensive health education
Community healthcare unit model

- Attached to a Medical college / Medical Institution
- Cover population of 100,000
- Healthcare including epilepsy care at doorstep
- Free distribution of Phb/DPH to poor and needy
- Regular monthly follow up - Simple case records
- Health education, Training to primary care doctors
- Neurologists/residents involved in the programme
Community Health Care Model

National Institute of Mental Health and Neuro Sciences

Community Mental Health Unit

- Daily OP Services
  General / Neuro Psychiatry

- Mobile Health Care
  Twice a week
  3 Peripheral centers
NIMHANS Satellite Clinic Model
(Started in 1982)

- NIMHANS Expertise
- NGOs
  - Lions / Rotary
  - Local Organization
- Local Government
  - Taluk / Village Panchayat
  - Free Medicines
- Fixed Day, Time and Place
- Monthly Camp
Objectives

- To provide regular service to rural community
- Participation of NGOs and community in organization
- To provide free drugs at doorstep to needy
- Follow up at regular intervals
DISTRICT MODEL
28 States and 7 Union territories
640 districts
Average population
1.5 – 2 million
Training of District Medical Officers

- **Target Group:**
  - Physicians, Paediatricians, Psychiatrists

- **Training focussed on following issues of Epilepsy**
  - Diagnosis
  - Management
  - Counselling
  - Psychosocial aspects
District Medical Officers Training Programme

Lectures
- Interactive Lectures
- Lecture notes
- Epilepsy diary

Audio - Visual Demonstrations
- Video demonstration of seizures types
- Patient interviews

Practical Demonstrations
- Site visits
- Status epilepticus Management

Training manual
Guidelines for the Management of Epilepsy in India

GEMIND
2008
Indian Epilepsy Society
Indian Epilepsy Association
18th International Epilepsy Congress Trust
NATIONAL EPILEPSY PROGRAMME
Models for Epilepsy Control

- Rural model
- Community health centre model
- Satellite clinic model
- District Model
- Tertiary Centre
- National Epilepsy Control Programme
OBJECTIVES

1. Provide health care for people with epilepsy on a national basis within the existing health structure.

2. Establish programme to guarantee political and operational support.

3. Develop treatment guidelines.

4. Develop training programme for physicians and paramedical workers.

5. Ensure regular supply of first line antiepileptic drugs.

6. Establish monitoring system.

7. Develop parameters to assess the outcome.