



National Epilepsy Programme for India



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Treatment Gap



- **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

Meinardi et al. Epilepsia 2001;42:136-149

Radhakrishnan et al. Epilepsia 2000;41:1027-1035

Anti – Epileptic Drugs



Drug	Unit Cost (Rs)	Cost per year	
		Rupees	US \$
Phenobarbitone (60mg)	0.25 – 0.96	90 - 350	2 - 8
Phenytoin (100mg)	0.45 – 0.92	164 - 336	4 - 7
Carbamazepine (200mg)	1.0 – 1.9	365 - 694	8 - 15
Sodium Valproate (200mg)	1.5 – 1.9	548 - 694	12 - 15

Ratio of Neurologists / population

Country	One Neurologist/ population
France	38000
Holland	25000
Italy	8000
UK	170000
USA	18000 to 50000
India	1000000

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

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graph TD; A[Community Mental Health Unit] --> B[Daily OP Services  
General / Neuro Psychiatry]; A --> C[Mobile Health Care  
Twice a week  
3 Peripheral centers];
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**Daily OP Services
General / Neuro Psychiatry**

**Mobile Health Care
Twice a week
3 Peripheral centers**

NIMHANS Satellite Clinic Model

(Started in 1982)



NIMHANS Satellite Clinic Model (1982-2001)

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**

An aerial view of a residential development featuring several multi-story yellow buildings with red-tiled roofs. The buildings are arranged in a grid-like pattern with green spaces and palm trees interspersed. A central green banner with a 3D effect contains the text 'DISTRICT MODEL'. In the foreground, a group of people is standing near a road that leads into the development through a white archway. The entire scene is framed within a circular vignette on a dark blue background.

DISTRICT MODEL



28 States and

7 Union territories

640 districts

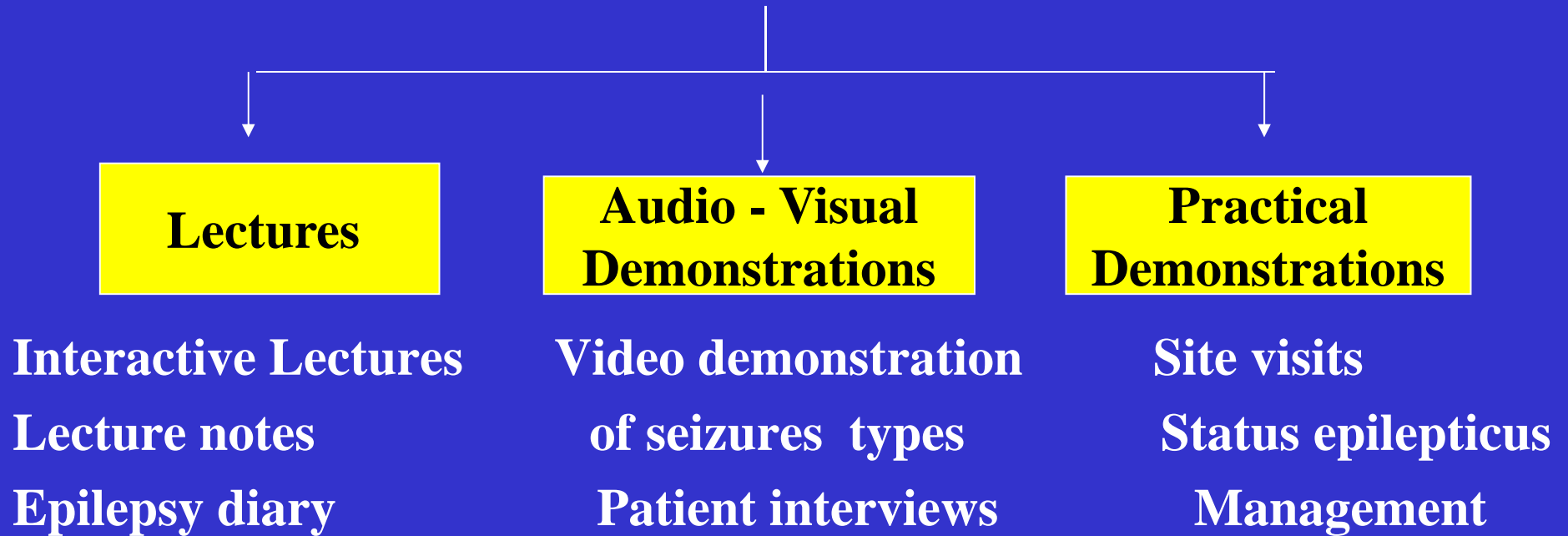
Average population

1.5 – 2 million

Training of District Medical Officers

- ✦ **Target Group:**
Physicians, Paediatricians, Psychiatrists
- ✦ **Training focussed on following issues of Epilepsy**
 - â **Diagnosis**
 - â **Management**
 - â **Counselling**
 - â **Psychosocial aspects**

District Medical Officers Training Programme



Training manual

Guidelines for the Management of Epilepsy in India

**GEMIND
2008**

**Indian Epilepsy Society
Indian Epilepsy
Association
18th International
Epilepsy Congress Trust**

INDIAN EPILEPSY SOCIETY
Guidelines for the
Management of Epilepsy
in India

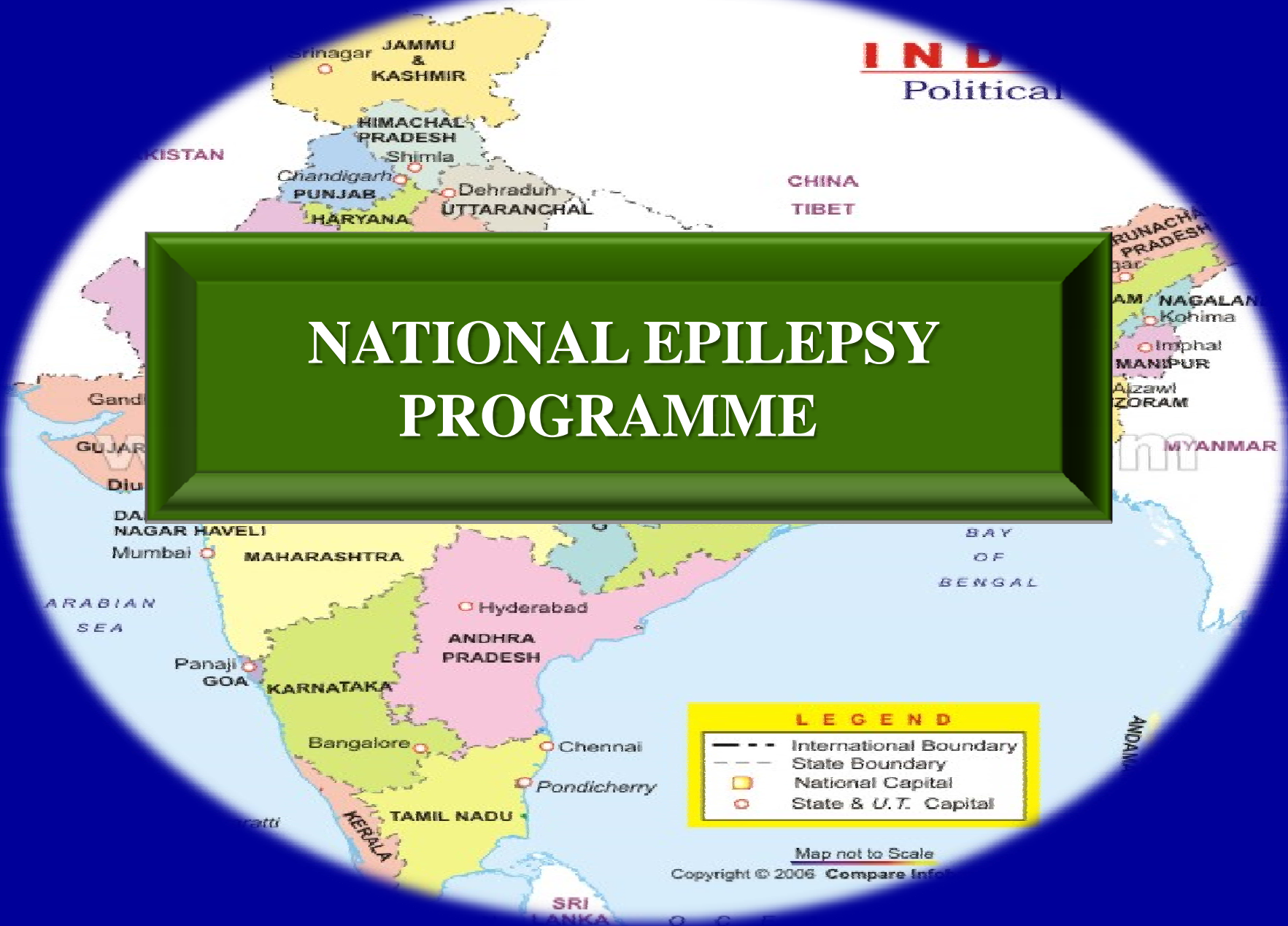


**INDIAN EPILEPSY ASSOCIATION-
18th INTERNATIONAL EPILEPSY CONGRESS TRUST**

INDIA

Political

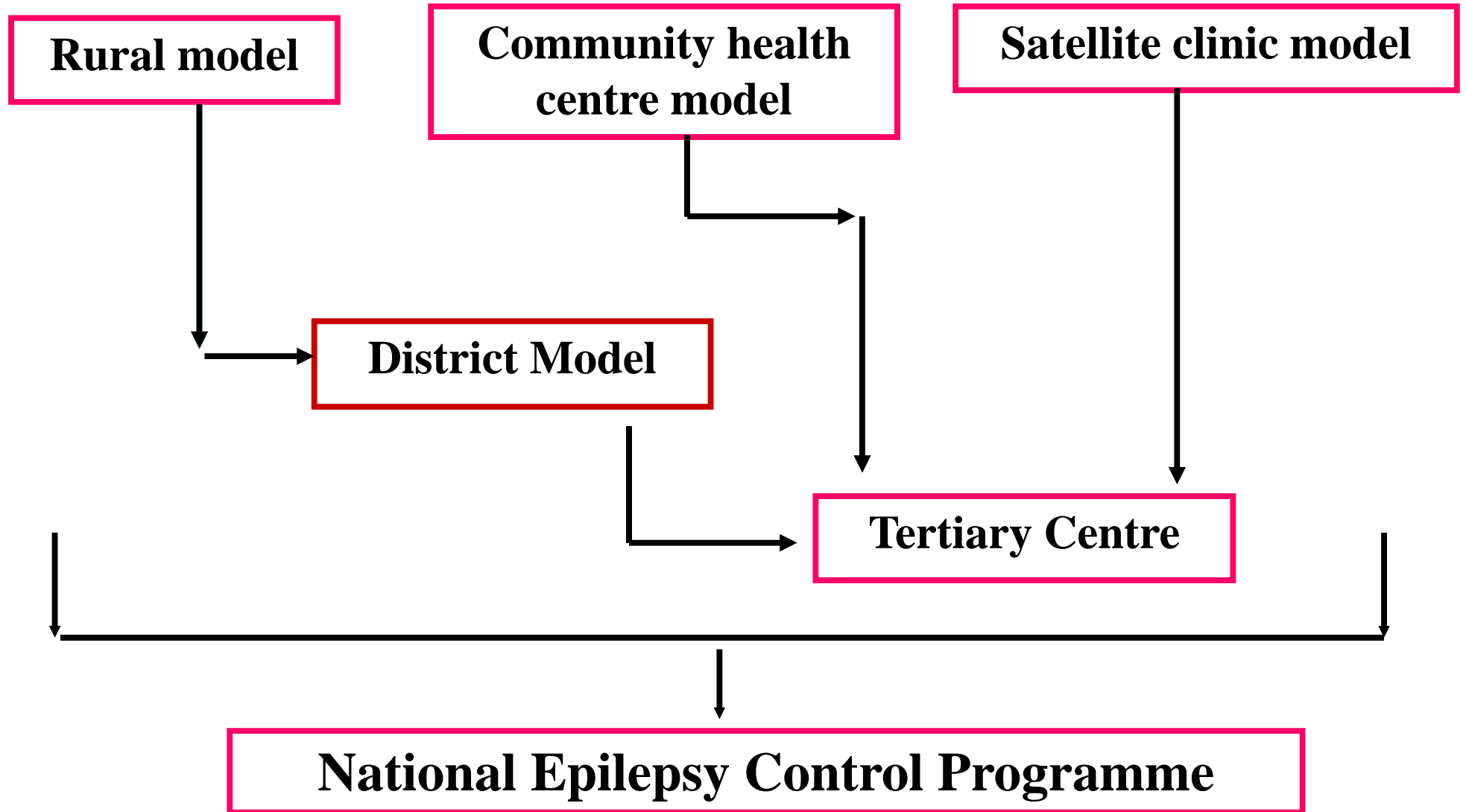
NATIONAL EPILEPSY PROGRAMME



Map not to Scale

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Models for Epilepsy Control



National epilepsy 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.**