## **Epilepsy Treatment Gap in India: Is It Too High a Peak to Scale?**

Multiple studies across different regions of India have shown huge treatment gap for epilepsy ranging from 50%–90%.[1,2] There have been little sincere attempts to investigate the reasons for this wide treatment gap and to improve the situation. Various medical and social factors including limited access to medical care and unavailability and unaffordability of basic antiepileptic drugs (AEDs) contribute to this wide treatment gap.[3] A longitudinal follow-up study from West Bengal reported that 620 (43%) of the 1450 patients with epilepsy discontinued their treatment within one year after initiation. The main reasons for discontinuing the treatment were financial overburden (90%), unemployment (29%), frustration and despair (21%), nonavailability of medicines locally (20%), and superstitions about epilepsy (17%).<sup>[4]</sup> With the improvement in country's economy and health care cover in rural areas, it is assumed that treatment gap would have improved in India.

In this regard, the study by Singh and colleagues in this issue of the journal is an eye opener. They studied the availability of common AEDs at 46 pharmacy outlets in public, private, and charitable health setups within Ludhiana city. In this urban population, 78% of the outlets did not have stock of even one essential AED. Moreover, majority of AEDs were deemed to be unaffordable to most people. Availability of particular drug (s) at a pharmacy is determined by multiple factors including local prescription patterns and type of patients attending the health setup. Hence, extrapolating these results to indicate wide treatment gap can be difficult and may even be misleading. Still, nonavailability of even basic AEDs at public health setups raises serious concerns and indicates wider ignorance and neglect of this eminently treatable disease among primary care physicians.

What can we do to improve the situation? It is evident that there is no single solution. Many neurologists are attempting to improve the situation by holding epilepsy camps and providing free AEDs. However, these attempts are not sustainable and are unlikely to be successful in the absence of regular follow-ups. Any solution will require involvement of all the stakeholders including state and district health officers and primary care physicians in remote places. We need to sensitize the government agencies to ensure regular availability of basic AEDs in public health setups and involve their wide network of primary health centers and health workers to dispel misconceptions and improve awareness and early detection

of epilepsy. Primary care physicians should be trained for the diagnosis and management of early epilepsy. There is an urgent need to simplify the treatment approaches for initial management of epilepsy in remote areas and this will require large scale community-based validation studies. [6] For this to happen, the usually lethargic government machinery has to rise up and neurologists have to move out of air-conditioned offices to work at community level. This can be achieved if each neurologist in India adopts a taluka place and regularly works with government machinery. Indian neurology has a potential to do it and should rise to occasion and scale the peak.

## Chaturbhuj Rathore, Kurupath Radhakrishnan<sup>1</sup>

Department of Neurology, Smt. B. K. Shah Medical Institute and Research Center, Sumandeep Vidyapeeth, Vadodara, Gujarat, ¹Department of Neurosciences, Avitis Institute of Medical Sciences, Nemmara, Palakkad, Kerala, India

Address for correspondence: Dr. Kurupath Radhakrishnan, Department of Neurosciences, Avitis Institute of Medical Sciences, Nemmara, Palakkad - 678 508, Kerala, India.

E-mail: kurupath.radhakrishnan@gmail.com

## REFERENCES

- Sridharan R, Murthy BN. Prevalence and pattern of epilepsy in India. Epilepsia 1999;40:631-6.
- Radhakrishnan K, Pandian JD, Santhoshkumar T, Thomas SV, Deetha TD, Sarma PS, et al. Prevalence, knowledge, attitude, and practice of epilepsy in Kerala, South India. Epilepsia 2000;41:1027-35.
- Radhakrishnan K. Challenges in the management of epilepsy in resource-poor countries. Nat Rev Neurol 2009;5:323-30.
- Das K, Banerjee M, Mondal GP, Devi LG, Singh OP, Mukherjee BB. Evaluation of socio-economic factors causing discontinuation of epilepsy treatment resulting in seizure recurrence: A study in an urban epilepsy clinic in India. Seizure 2007;16:601-7.
- Singh K, Setia RK, Sharma S, Bansal N, Bansal RK, Chaudhary A, et al. Antiepileptic drug prices, availability and affordability in a resource limited setting. Ann Indian Acad Neurol 2020;23:674-80.
- Mani KS, Rangan G, Srinivas HV, Srindharan VS, Subbakrishna DK. Epilepsy control with phenobarbital or phenytoin in rural south India: The Yelandur study. Lancet 2001;357:1316-20.

Submitted: 23-Aug-2020 Revised: 01-Sep-2020 Accepted: 08-Sep-2020 Published: 08-Dec-2020

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

DOI: 10.4103/aian.AIAN\_919\_20