

## A comparison between prescription of antiepileptic drugs (AEDs) in Iranian epileptic population.

Z. Zahra Tolou Ghamari, M. Zare, J. Mehvari Habibabadi, M. Najafi, S. Mousavi

*Isfahan Neuroscience Research Centre1 and Department of Neurology, Faculty of Medicine, Isfahan University of Medical Sciences Isfahan, I.R. Iran.*

**Background and Aims:** AEDs are widely used in epilepsy and other indications. The efficacy of these drugs are often equivalent therefore, its' prescription is often determined by adverse effects. The aim of this study was a comparison between prescriptions of AEDs in Iranian epileptic population.

**Methods:** A cross-sectional study of fifty-four patients' located at the Epilepsy Ward of Kashani Hospital of Isfahan University of Medical Sciences was carried out during the year 2011. Female (n=23) and male subjects (n=31) with a mean age of 27 years (range; 7-74 years) were studied. 3684 variables including sex, age, age of seizure onset, type and number of AEDs were recorded and statistical analyses of d-Base were performed using SPSS (version 18) for windows.

**Results:** Mean age of epilepsy onset was 15.6 years (range: birth-74 years). Preliminary analysis of medical prescriptions implicated: valproic acid (n=41) > carbamazepine (n=31) > phenytoein (n=18) > lamothrigin (n=15) > topiramate (n=14) > clonazepam (n=8) >levetiracetam (n=7) > clobasam (n=6) > primidone (n=5), zonisamide (n= 5) > phenobarbital (n=3) > ethosuximid (n=2), gabapentin (n=2), risperidone (n=2), oxcarbazepine (n=1).

**Conclusions:** The result of this study showed that treatment were intense on two compounds, carbamazepine and valproic acid. It is suggested that selection of AEDs for polypharmacy could be assisted by attentive exposure turnover evaluation modified to each patient and potential side effects in respect to prediction of AEDs performance in epileptic patients. This may merit future investigation.

**Keywords:** AEDs; Prescription; Comparison; Epilepsy