

Dissemination of nursing knowledge – Publications

Mona Baran, Mark M Stecker. (2007)

Epilepsy in a rural elderly population. *Epileptic Disorders*, 9(3,): 256-70.

Purpose. The first goal of this study was to describe the characteristics of elderly patients with epilepsy and the antiepileptic drugs used to treat them. Next, the factors (such as epilepsy type, seizure frequency, medical comorbidities, etc.) influencing antiepileptic drug choice and living situation were explored.

Methods. Retrospective chart review of patients older than 70 with epilepsy seen in a rural health care system. This yielded 449 patients with epilepsy, 54 patients with isolated seizures and 38 patients with syncope as the primary diagnosis.

Results. The most commonly used antiepileptic drug was phenytoin. New generation AED's which had fewer side effects were used much less frequently than old generation AED's but the probability of using new generation AED's was increased in patients with renal failure and congestive heart failure as well as in patients that had seen a neurologist. Patients with acute symptomatic seizures, dementia, chronic obstructive pulmonary disease, frequent seizures and advanced age were less likely to be independent. Patients that had seen a neurologist as an outpatient were more likely to live independently.

Conclusions. The elderly are a vulnerable population because of difficulty communicating their symptoms and their needs. This leads to the suboptimal use of AED's as well as poor outcomes. Careful attention to seizure control and medication side effects is critical in promoting good outcomes in this patient group. This retrospective study suggests that access of elderly patients with epilepsy to specialty care improves outcomes in terms of living status. This important information needs to be confirmed by prospective studies.