

Abstract

Title: Subjective perception of antiepileptic adverse effects in patients with epilepsy

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Epilepsy is a chronic seizure disorder that can negatively affect the quality of life, cognition, or affectivity. Antiepileptics used to treat this disease have number of more or less known side effects. The difficulties that patients themselves attribute to the adverse effects of antiepileptic drugs might be an important source of information despite a certain extent of subjectivity and should be taken into account in subsequent therapies.

The thesis deals with the subjective evaluation of adverse effects of antiepileptic drugs in patients with epilepsy. The theoretical part provides basic information about the disease itself and its impact on the quality of life or cognition and deals with some of the mental disorders that are often linked to epilepsy. Furthermore, the theoretical part deals with antiepileptic pharmacotherapy. Due to the nature of the work, these chapters are not conceived in depth, their primary focus is on the overview of antiepileptic drugs in use and some specifics associated with their therapeutic use. The core of the theoretical part lies mainly with the adverse effects of antiepileptics, their classification and expression from the patient's subjective viewpoint. In other words, the thesis deals with the question of which side effects the patient attributes to antiepileptic pharmacotherapy and how they experience these effects, focusing in particular on cognition, affectivity, and somatic manifestations.

The empirical part examines the variables which may affect the subjectively perceived side effects of antiepileptic drugs. Liverpool Adverse Event Profile (LAEP) was used to measure perceived adverse reactions. For LAEP Cronbach's alpha (0.9) was calculated. Data were collected from 164 patients and subsequently subjected to statistical analysis. The assumption was that the patient's experience of the adverse effects of antiepileptic drugs will differ depending on the variables, such as socio-demographic data (age, education or gender), and clinical data related to the individual nature of the disease (seizure count, seizure type, form

of epilepsy, duration of the disease). Individual anti-epileptic drugs and their number were examined depending on their potential impact on the experience of anti-epileptic side effects. The research also undertook the validation of the LAEP method itself, which is probably the first validation of the Czech version ever.

Research suggests that socio-demographic data explained 20% of adverse effects, and their effect was statistically significant overall ($p < 0.05$; $R^2 = 0.20$). People of higher age or lower education feel more burdened with the adverse effects of anti-epileptics and are more likely to be women than men. The overall effect of clinical data on the experience of adverse events was not statistically significant ($p > 0.05$; $R^2 = 0.21$). Patients with prolonged epilepsy experience more sensitive side effects of antiepileptic drugs. Antiepileptic drug therapy explained about 16% of the adverse event variation and was not statistically significant overall ($p > 0.05$; $R^2 = 0.16$). As far as particular drugs are concerned, the research has discovered that valproate, topiramate, clonazepam and phenytoin contribute to an increase in the felt burden of adverse effects. The results confirm that depressivity, anxiety and poor quality of life heighten the more severe adverse effects of antiepileptic drugs, and that patients with polytherapy experience more stress induced by the adverse effects of anti-epileptics. Polytherapy was more frequent in patients with low quality of life and in patients where depressivity was increased. The research also provided data on the number of drugs used and their impact which indicate that the more antiepileptics a patient takes, the more heavily they experience their side effects.

Key words: epilepsy, antiepileptics, side effects, subjectively perceived side effects, cognition, emotions