

## Sleep quality in patients with epilepsy

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The aim of the study was to assess the sleep quality and daytime sleepiness in epilepsy patients. Patients completed several questionnaires, the information on epilepsy etiology, type of seizures, instrumental findings, and treatment were collected. Sleep quality was assessed by Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS) and Insomnia Severity Index (ISI). Data were processed with Microsoft Excel 2016, and analyzed by IBM SPSS® (version 23.0). Results: 167 cases (96 (57.5%) – women), mean age -  $36.05 \pm 15.75$  years, mean epilepsy duration –  $14.35 \pm 11.82$  years were analyzed. 58.1% had poor sleep quality according to PSQI. According to ESS, 25.1% had pathological, 18% - average, and 56.9% - normal level of daytime sleepiness. According to ISI, 21.6% of patients had moderate severity or severe insomnia, 37.7% had subthreshold insomnia and 40.7% did not have clinically significant insomnia. A weak negative correlation ( $r = -0.211$ ,  $p < 0.05$ ) between age and ESS result was observed. No correlation was detected between epilepsy duration and PSQI, Epworth and ISI scores. When analyzing groups of patients with lamotrigine treatment ( $n = 62$ ) and without ( $n = 105$ ), no statistically significant differences were obtained. When the PSQI score was predicted, it was found that age (Beta = 0.123,  $p < 0.05$ ), duration of antiepileptic treatment (Beta = -0.231,  $p < 0.05$ ) and duration of epilepsy (Beta = 0.261,  $p < 0.05$ ) were not significant predictors. The overall model fit was  $R^2 = 0.042$ . Conclusions: Many patients with epilepsy have poor sleep quality and experience daytime sleepiness. Every fifth patient with epilepsy suffers from moderate or severe insomnia. Worse sleep quality is related to irregular sleep time habits, nighttime and longer seizures. We didn't find significant sleep quality difference in patients with focal vs generalized epilepsy according to ESS, ISI and PSQI.