

Insufficient sleep is prevalent among migraineurs: a population-based study

M. K. Chu¹, S. Hwangbo¹, J. Kim⁴, S-J. Cho¹, C-H. Yun⁵, W-J. Kim³, K-I. Yang²

¹*Neurology, Hallym University, South Korea*

²*Neurology, Soonchunhyang University, South Korea*

³*Neurology, Yonsei University, South Korea*

⁴*Neurology, Pusan National University, South Korea*

⁵*Neurology, Seoul National University, South Korea*

Background: The aim of this study was to evaluate the association between perceived insufficient sleep and migraine using the data of the Korean Headache-Sleep Study (KHSS). **Methods:** The KHSS is a nation-wide cross-sectional population-based survey regarding headache and sleep for all Korean adults aged 19 to 69 years. A difference of one hour or more between sleep need and average sleep duration indicated insufficient sleep. **Results:** Of 2,695 participants, 727 (27.0%) individuals were classified as having insufficient sleep. The prevalence of insufficient sleep among individuals with migraine (45.5%) was significantly higher compared to that among individuals with non-migraine headache (32.9%, $p = 0.004$) or among non-headache (20.4%, $p = 0.001$). Average sleep duration did not differ among migraine, non-migraine headache, and non-headache groups (7.3 ± 1.2 vs. 7.2 ± 1.2 vs. 7.3 ± 1.4 , $p = 0.207$). Multivariable logistic regression analyses demonstrated that migraine had an increased odds ratio (OR) for insufficient sleep after adjusting for sociodemographic variables, short sleep duration, insomnia, poor sleep quality, anxiety, and depression [OR = 2.8, 95% confidence interval (CI) = 1.9 – 4.2, $p < 0.001$]. **Conclusions:** The prevalence of insufficient sleep was significantly higher among migraineurs compared to that in non-migraine headache or non-headache group.