

The factors influencing sleep quality

Sir,

We have read the study of Duman *et al.* entitled "Sleep changes during prophylactic treatment of migraine" with great interest. In this study, they aimed to assess sleep quality in patients with primary headaches before and after prophylactic treatment using a validated sleep-screening instrument. They evaluated a total of 147 patients including 63 tension type headache (TTH) patients and 84 migraine patients.^[1] They reported that poor quality of sleep prior to prophylactic treatment was observed in 61.4% of the migraine patients and in 77.7% of the TTH patients. Comparison of sleep quality scores before and 3 months following treatment showed a significantly improved quality of sleep in all the treatment groups; the greatest significance was detected in migraine patients treated with amitriptyline.^[1]

When we inspected the article in the model of the study, exclusion criteria were thought to be as mentioned below: Any of the following symptoms of depression, anxiety, or other comorbid psychiatric disorders; other types of headache disorders or more than one type of headache (e.g., migraine and TTH attacks in the same patient); other clinical conditions characterized by sleep disturbance (e.g., obstructive sleep apnea, restless leg syndrome); chronic use of drugs known to affect sleep (e.g., benzodiazepines, antidepressants, anticonvulsants, antipsychotics, antihistamines); morbid obesity (body mass index >35 kg/m²); epilepsy; and pregnancy or breast-feeding.^[1]

Available literature data regarding sleep quality studies indicate that many factors influence sleep quality such as diabetes mellitus, cardiac diseases, menopause, and eating and drinking habits.^[2-8] In a study, it was shown by using the Pittsburgh Sleep Quality Index that patients with type 2 diabetes mellitus were more likely to have poor quality of sleep.^[3] It was reported that the severity of complaints in sleep disturbances increased when there were occurrences of cardiovascular risk factors and diseases and elevated levels of fibrinogen and C-reactive protein (CRP).^[4] Another cause affecting sleep is menopause. It was indicated that women who were into perimenopause were more likely to have sleeping problems.^[5,6] The prevalence of sleep complaints increased dramatically from 12% to 40% during this period.^[7] Leah A Irish *et al.* also stated that caffeine, nicotine, and alcohol have effects on sleep quality.^[8]

Unfortunately, the authors failed to consider these factors as exclusion criteria. The results in Duman's study might be controversial without taking into consideration these factors. We believe that the authors did take care of such factors and possibly a typing error occurred during the writing of the article. The authors should declare these issues and readers should keep in mind that these factors might have effects on the sleep quality.

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Conflicts of interest

There are no conflicts of interest.

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