

## Patterns of Diagnosis and Acute and Preventive Treatment for Migraine in the United States: Results from the American Migraine Prevalence and Prevention Study

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This study evaluated the epidemiology and patterns of acute and preventative treatments for migraineurs using a validated headache questionnaire. Given the recent advancements in treatment options, both abortive and preventative, this study sought to identify burden of disease and patterns of healthcare utilization among patients with migraine.

*Experimental Design/Statistics:* A validated self-administered headache questionnaire was randomly sent to 120,000 households, chosen from a panel of households thought to be representative of the US population in June 2004. Participants were initially screened by reporting occasional self-defined severe headaches. If present, further questions regarding headache features were asked. They also completed the Migraine Disability Assessment (MIDAS) questionnaire (measure of headache disability) and questions regarding their headache diagnosis and treatment with acute (no treatment, treatment with OTC, treatment with prescriptions or both) and preventative medications (never used, current users taking preventative medications for their headaches, previously used in the past but not taking currently, and users taking medications effective for migraine prevention but using for other reasons). This survey had been previously validated using the ICHD-1. The authors felt this criteria was similar enough to the updated ICHD-2. Based on results from the questionnaire, patients were diagnosed with migraine if they had at least one severe headache in the previous 12 months, but less than 15 severe headaches in the prior month with unilateral/pulsating pain, and either nausea, vomiting, photophobia, phonophobia or visual/sensory aura before the headache. Statistically, logistic regression was used to assess factors associated with patterns of acute medication use and preventative medication use. Acute treatment was separated by non-prescription use (no medications and OTC) versus prescription medications (prescriptions and prescription/OTC). The authors excluded the group of patients taking medications effective for migraine prevention but taking them for alternative reasons.

*Results:* 11.7% of responders met ICHD-2 criteria for migraines. The prevalence of migraine was similar to prior studies with 17.1% in women and 5.6% in men. Approximately half (56.2%) had received a medical diagnosis of migraines. Most responders treated their migraines acutely with medications, 49% with OTC's only and 20.1% prescription medications only. Prescription medications were more commonly used by women, older participants, increased attack frequency and increased MIDAS grade. 38.7% of participants had never used a migraine preventative medication and 12.4% were current users. Most users had stopped using their preventative medication in the last one year. People more commonly using preventative medications were women, older individuals and those with typical features of migraine (unilateral pain, extreme/severe pain, associated symptoms and any form of aura), high frequency, and high MIDAS grade.

*Conclusion:* In 2007, despite many advances in approved medications for preventative and acute treatments for migraine, only about 50% of people with migraines had a medical diagnosis with very few people using prescribed medications. Those who were prescribed medications had a high rate of discontinuation. Individuals more likely to use a medication were those with typical migraine features, women, increased frequency of headaches and high levels of disability. This study drew attention to the low rates of migraine diagnosis and treatments despite medical advancements.

Summary created by Arathi Nandyala, M.D.