## **Abstract**

### **Purpose**

Medication-overuse headache (MOH) is a condition that is widely preventable, yet it is estimated to affect 63 million people worldwide. Despite MOH being caused by a variety of common medications for headache, data assessing patient's knowledge of the condition is lacking. This study aimed to describe the understanding of MOH by participants.

#### Methods

This study was approved by the Southern Illinois University Edwardsville Institutional Review Board. Informed consent was obtained from participants prior to the beginning of the survey. This study was conducted using an 18 item, descriptive survey that contained both qualitative and quantitative questions. The survey was anonymously distributed using Amazon MTurk, a validated social sciences research tool, that offers respondents a financial incentive for completion of surveys. The survey remained open for responses until 400 responses with correct completion codes were obtained. The content of the survey addressed demographic information, frequency of headaches, severity of headaches, type of headaches experienced, medication use frequency, perceived risk of specific medications, and knowledge of the term "medication-overuse headache." Medications assessed in the survey included non-steroidal anti-inflammatory drugs (NSAIDs), ergotamine and dihydroergotamine, triptans, aspirin, opioids, acetaminophen alone, acetaminophen/aspirin/caffeine, and butalbital. Survey responses were included if respondents provided correct completion codes. Responses were excluded if the validity question was answered inappropriately or respondents took less than one minute to complete the survey. Descriptive statistics and Fischer's Exact tests were used in analyzing data. In analysis, overuse was defined as using a medication for 10 or more days per month.

## Results

A total of 415 responses were received but 83 were excluded based on our validity assessment. This left a sample size of 332 participants. About half of respondents were between the ages 18 and 30 years old. The next most frequent age group was 31 to 40 years old. The most common type of headache reported was tension-type headache, with 43.4% (n=144) indicating this. About 10% (n=32) of survey respondents suffer from chronic daily headache, or headache that is present on at least 15 days per month. Of the survey respondents, 26.8% (n=89) had never heard of the term "medication-overuse headache." Of those who were familiar with the term, a pharmacist was the most common source of information identified. A significant number of participants who reported overusing various medications also reported that they had never heard of the term "medication-overuse headache."

# **Conclusion**

With proper education, MOH is highly preventable. This study shows that many of the respondents, including some who use analgesics or abortive medications for headaches, were not familiar with the condition. The information obtained from this study suggests that patients may benefit from further education on MOH.