

Assessing general population knowledge about medication-overuse headache

Hayley Turner, Pharm.D. Candidate, Naomi Bailey, Pharm.D. Candidate, Timothy Cruz, Pharm.D., Chris Herndon, Pharm.D., BCACP

SOUTHERN ILLINOIS
UNIVERSITY
EDWARDSVILLE
SCHOOL OF PHARMACY

BACKGROUND

- Medication-overuse headache (MOH) is a condition that is widely preventable yet is estimated to affect 63 million people worldwide.
- MOH can be caused by a variety of common medications used to treat headaches.
- Data assessing patient's knowledge on MOH is lacking.

OBJECTIVE

To describe the understanding of MOH by participants

METHODS

Study Design

- Descriptive 18-item survey that contained both qualitative and quantitative questions
- Distributed anonymously using Amazon Mturk

Inclusion Criteria

- At least 18 year of age
- Provided correct completion codes

Exclusion Criteria

- Completion of survey in less than one minute
- Validity question was answered inappropriately

<u>Survey</u>

- Content of survey:
 - 3 demographic questions assessing age, gender, and education
 - Frequency of headache
 - Description of headache experienced
 - Severity of headache on a scale of 0 to 10
 - Clinical diagnosis, if applicable
 - Questions from the Migraine Disability Assessment Test (MIDAS)
 - Frequency of use various medications used to treat headaches
 - Perceived risk of various medications used to treat headaches
 - Familiarity with term 'medication-overuse headache' or 'rebound headache' and from where they had heard it
- Intention to seek medical care for headaches
- Intention to share information regarding medication-overuse headache
- Frequency of headache question (repeated as a validation tool)
- Medications addressed
 - Butalbital
 - Acetaminophen alone
 - Acetaminophen with aspirin and caffeine
 - Opioids

- Aspirin alone
- Triptans
- Ergotamine/dihydroergotamine
- NSAIDs

Data Analysis

 Descriptive statistics for analysis of raw data, and Fischer's Exact tests were used in the in the analysis of medication overuse and familiarity with the term MOH

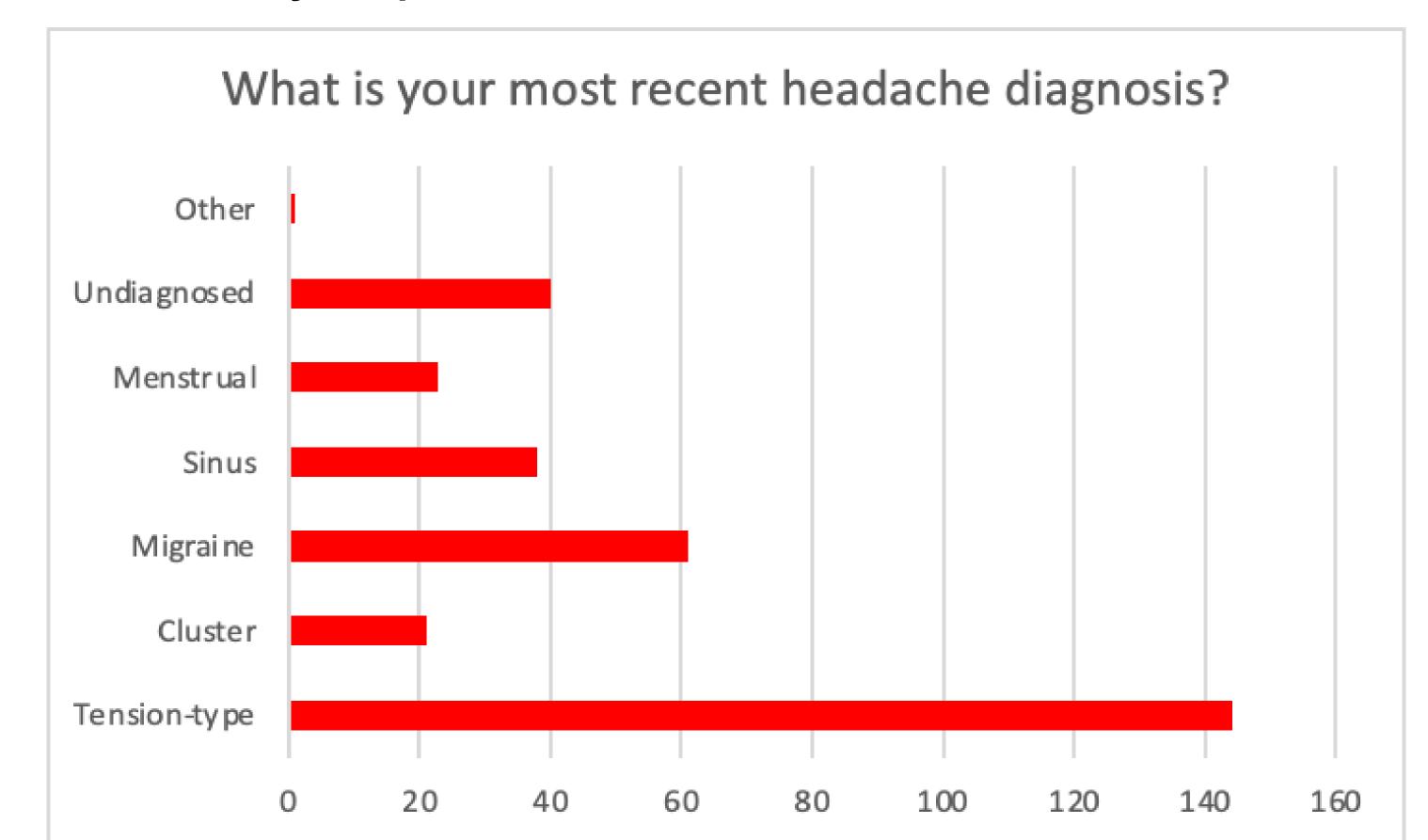
RESULTS

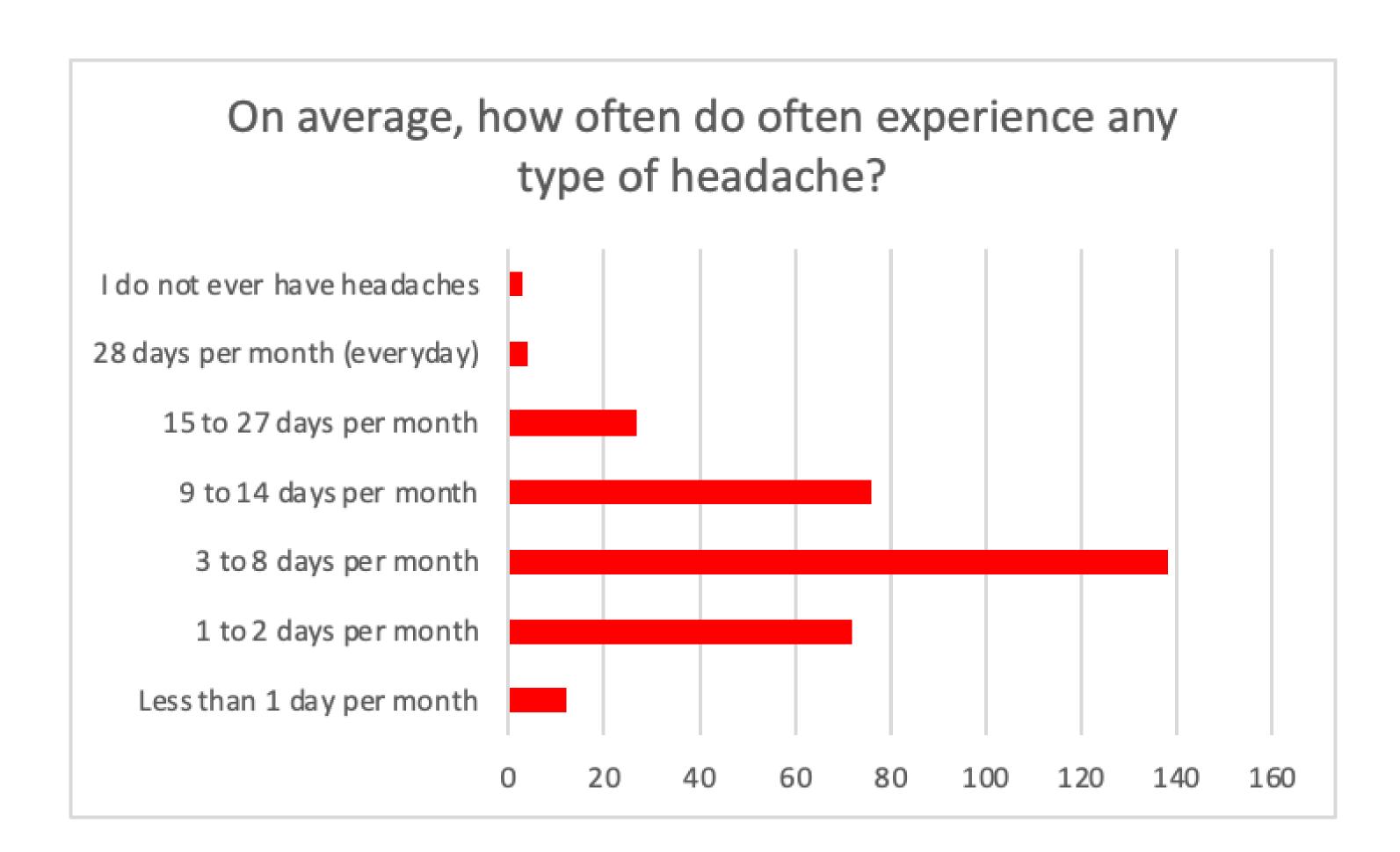
Table 1: Demographic Information

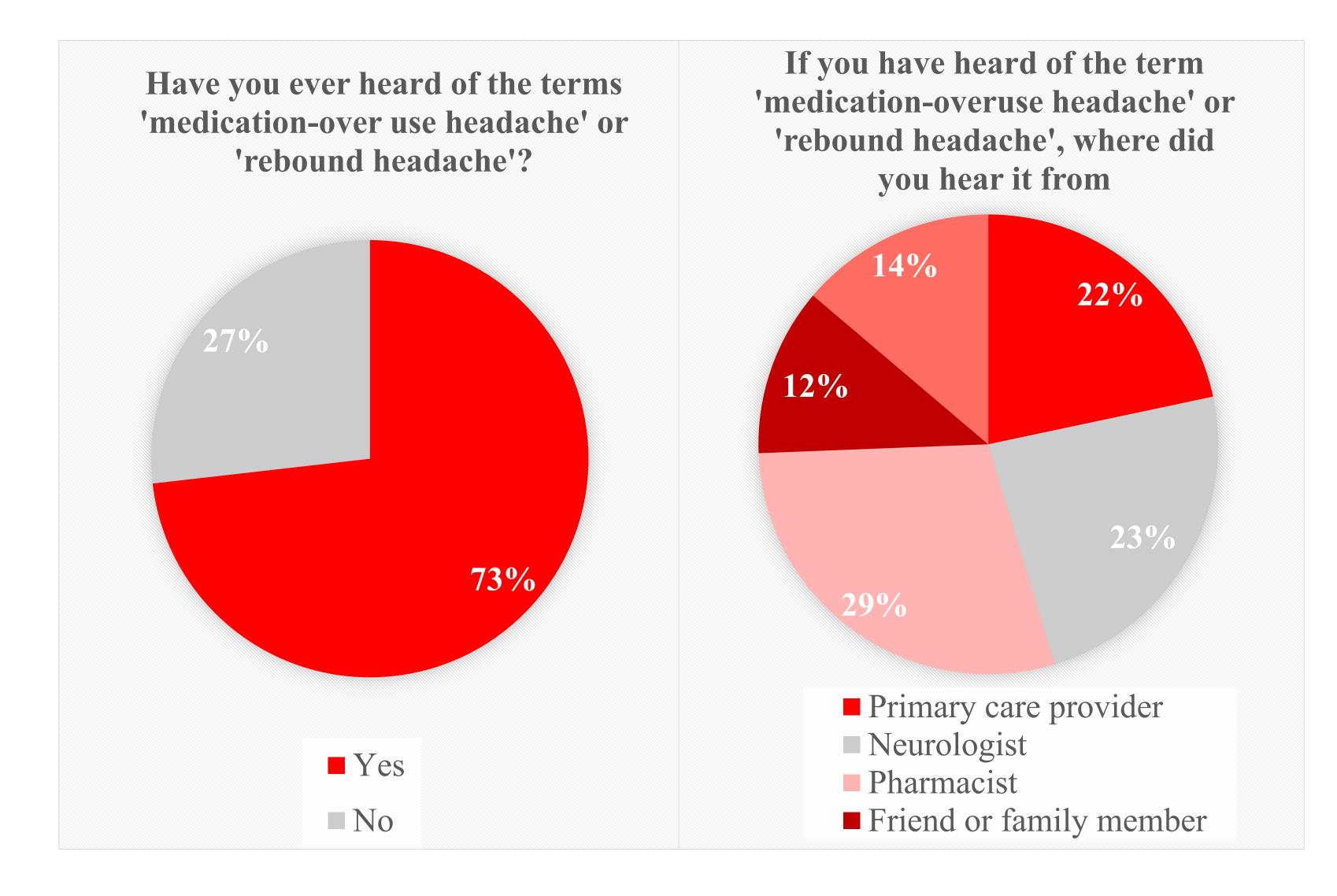
Characteristic	No. (%)	Characteristic	No. (%)	
Age (years)		Education		
18-30	156 (47)	No degree	3 (0.9)	
31-40	96 (28.9)	High School Diploma	16 (4.8)	
41-50	45 (13.6)	Associate's Degree	14 (4.2)	
51-60	27 (8.1)	Bachelor's Degree	242 (72.9)	
61-70	8 (2.4)	Master's Degree	54 (16.3)	
Gender		PhD / Doctoral Degree	3 (0.9)	
Male	193 (58.1)			
Female	139 (41.9)	Total Participants	332 (100)	

RESULTS

Figures 1-4: Survey Response Data







RESULTS

Table 2: Participants who overuse medication and have not heard of the term medication-overuse headache

medication-overuse neadache			
Medication Overused	No. (%)		
Butalbital	16 (18.8)		
Acetaminophen alone	17 (18.5)		
Acetaminophen w/ aspirin and caffeine	15 (20%)		
Opioids	13 (15.1)		
Aspirin alone	13 (15.5)		
Triptans	12 (14)		
Ergotamine/dihydroergotamine	17 (17.5)		
NSAIDs	18 (19.6)		

LIMITATIONS

- Overuse risk varies from medication to medication
- Unable to make true assessment of validity of participant response due to study being conducted using a survey
- Potential for difference in participants interpretation of questions

CONCLUSION

- 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.

REFERENCES

- Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2015;386(9995):743-800. doi:10.1016/S0140-6736(15)60692-4
- Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. Cephalalgia. 2018;38(1):1-211. doi:10.1177/0333102417738202

