Headache Prevalence and Management Strategies Among Student Pharmacists

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BACKGROUND

- Headache is a prevalent and debilitating condition that negatively impacts many aspects of our lives.[1]
- Approximately half of all adults globally have been affected by headache, yet many have not sought professional help. [1]
- Headache is often overlooked or considered an inevitable burden.
- Studies have investigated the prevalence and management of headache in targeted populations,[2,3,4,5] but has not been well-investigated among student pharmacists.

OBJECTIVES

1. To examine the relationship between prevalence of headache and graduating class year.
2. To examine the relationship between management of headache and graduating class year.

METHODS

- Data were collected using an online questionnaire designed and administered through a Research Electronic Data Capture (REDCap) secure web-based survey in April, 2021.
- An e-mail invitation was sent out to all students enrolled in the University of Arizona College of Pharmacy PharmD program, with reminder emails issued after one and two weeks.
- The questionnaire collected data on:
- Headache characteristics
- Associated symptoms
- Headache triggers
- Impact of headache
- Pharmacological & non-pharmacological management strategies
- Demographic & descriptive items
- Data were analyzed using Chi-square and Kruskall-Wallis tests.

RESULTS

- 150 students completed the survey, among them, 111 students (74%) had reported experiencing headache.

Figure 1.
Participant response to: "Do you experience headache?"

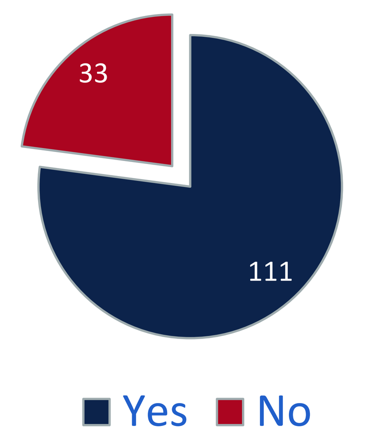


Table 1. Demographic characteristics of study participants

Variables	P1 N=27	P2 N=33	P3 N=30	P4 N=21	p-value
Gender, N (%)					0.3470
Female	23 (85.2)	27 (81.8)	20 (66.7)	16 (76.2)	
Male	4 (14.8)	6 (18.2)	10 (33.3)	5 (23.8)	
Race, N (%)					0.0581
White	15 (55.6)	25 (75.8)	21 (70)	19 (90.5)	
Other	12 (44.4)	8 (24.2)	9 (30)	2 (9.5)	
Perceived Health Status, Median (Interquartile range)	2 (1)	2 (1)	2 (1)	2 (1)	0.8933

P1=first year student pharmacists; P2=second year student pharmacists; P3=third year student pharmacists; P4=fourth year student pharmacists. Differences between groups gender & race compared using chi-square tests. Differences between groups for perceived health status compared using Kruskal-Wallis test.

- There was a significant difference in the intensity (mild, moderate, severe, incapacitating) of headache between graduating class years.
- There was also a significant difference in one trigger (amount of amount of screen time) for headaches between graduating class years.
- There were no other significant differences in the prevalence of headache.

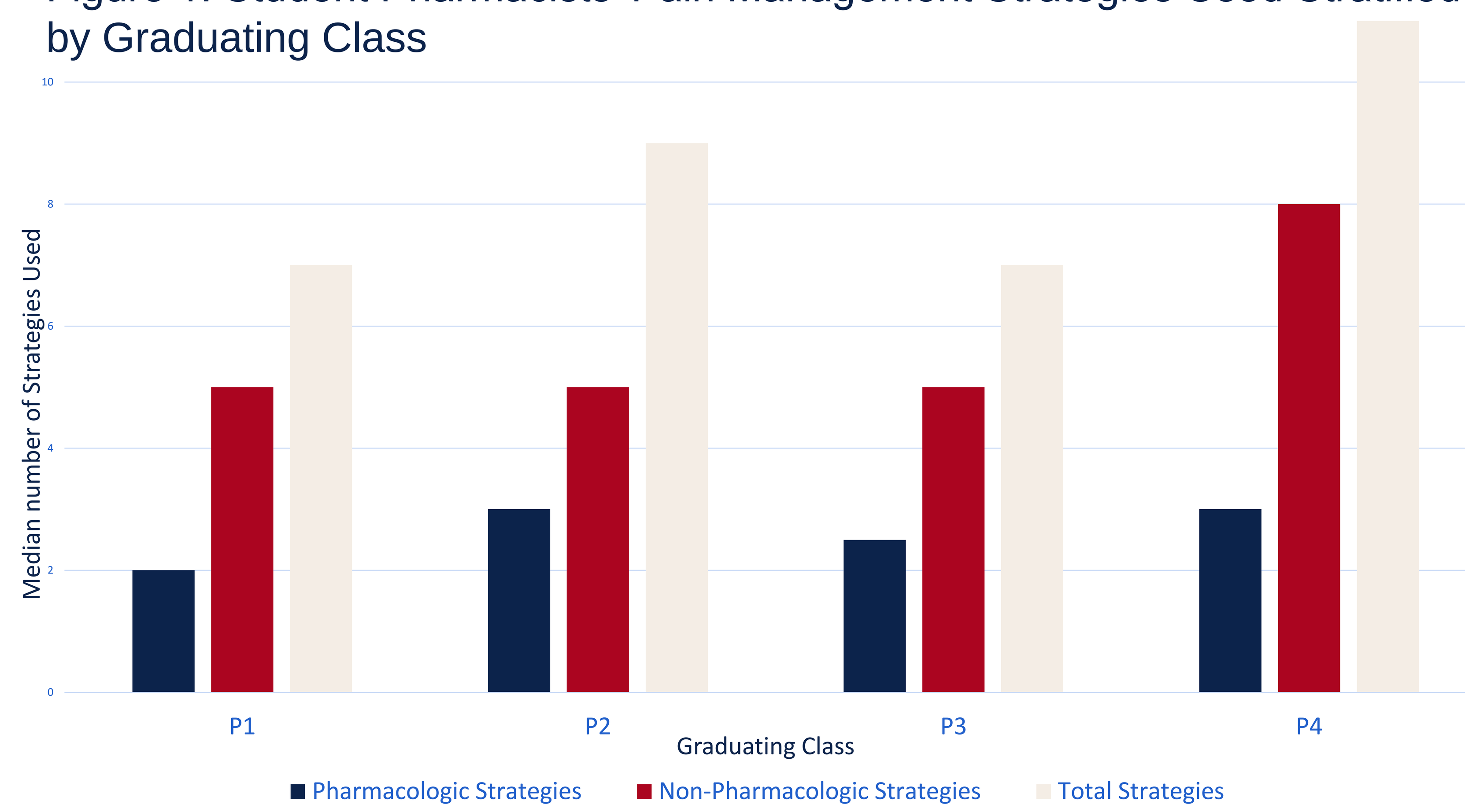
Table 2. Headache Intensity, Frequency, and Duration Among Graduating Classes

Variables	P1 N=27	P2 N=33	P3 N=30	P4 N=21	p-value
Intensity, Median (Interquartile range)	2 (0)	2 (1)	2 (0)	2 (1)	0.0344
Frequency, Median (Interquartile range)	1 (1)	2 (2)	2 (2)	2 (3)	0.0847
Duration, Median (Interquartile range)	1 (1)	1 (1)	2 (1)	2 (1)	0.2070

P1=first year student pharmacists; P2=second year student pharmacists; P3=third year student pharmacists; P4=fourth year student pharmacists. Differences between groups compared using Kruskal-Wallis test.

RESULTS

Figure 1. Student Pharmacists' Pain Management Strategies Used Stratified by Graduating Class



P1=first year student pharmacists; P2=second year student pharmacists; P3=third year student pharmacists; P4=fourth year student pharmacists. Differences between groups compared using Kruskal-Wallis test.

- This study found no significant differences in the management of headache (pharmacological, non-pharmacological, and total strategies) between graduating class years.

CONCLUSIONS

- This study showed that headache is prevalent and can negatively impact the lives of student pharmacists.
- More research is needed to allow for colleges of pharmacy to better understand the burden of headache among students.
- Further studies may also be needed to investigate the differences between headache intensity and triggers among student pharmacists.

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