



## Brazilian Medical Students' Knowledge and Interest in Headache and Other Common Pain Conditions: A Comprehensive Survey

Fernanda Firmiano Casarotto, Caroline Matielo Ricci, Isadora Miarelli Fortuna, Lucas da Silva Oliveira, Hilton Mariano da Silva Júnior

Departamento de Neurologia da Faculdade de Medicina da Pontifícia Universidade Católica, Campinas, São Paulo

### Introduction

Pain is a pervasive issue in healthcare, necessitating that future doctors are well-versed in various pain syndromes, their origins, diagnoses, and treatments. Assessing their preparedness to manage diverse pain types in emergency and outpatient settings is crucial. However, there are few studies estimating medical students' knowledge and interest in primary pain syndromes(PS), particularly headaches.

### Objectives

The study aims to assess medical students' knowledge of the main PS, quantify the frequency of pain-related classes in medical school, and identify potential gaps in the medical curriculum.

### Methodology

This cross-sectional, descriptive study involved medical students from various Brazilian universities. Data was collected using an online questionnaire that included demographic information (age, gender, university, year of graduation, faculty, city, and state), objective questions to assess knowledge of main PS, and questions about the frequency of pain-related classes during medical school. The questionnaire was distributed through university communication channels, social media, and student organizations, with responses collected over seven months. Results were subsequently analyzed.

### Results

Responses were obtained from 520 undergraduate medical students across 54 medical universities nationwide. Although most students (90%) recognize the frequency of headache complaints in the emergency room, a large portion (56.9%) have not had classes on evaluating these patients initially, and about 70.6% have never participated in conferences on this complaint. In contrast, only 33.7% have not had classes in the emergency department to evaluate patients with chest pain, and only 26.7% have not learned how to approach abdominal pain in the emergency room. These data highlight the negligence of educational institutions regarding headaches compared to other types of pain frequently encountered in hospital settings.

### Conclusion

Our results reveal a substantial knowledge gap concerning headaches and other pain syndromes in the medical education curriculum, despite their high prevalence in clinical practice. This deficiency in training leads to patient dissatisfaction, frequent cases of malpractice, and undertreatment. It is crucial for future doctors to address this issue. Therefore, medical students must receive comprehensive education on headache management, particularly in emergencies. Integrating dedicated classes and events into the academic curriculum can enhance proficiency in pain management in clinical practice and healthcare services.