



## "Not otherwise specified headache" in emergency department: an analysis of 149,603 visits to nine Upa's 24h in Fortaleza

João José de Carvalho<sup>1</sup>, Jamille Alves<sup>2</sup>, Fernanda Severino<sup>2</sup>, Virginia Reis<sup>2</sup>, Flavio Deulefeu<sup>2</sup>

<sup>1</sup>Unichristus School of Medicine, Fortaleza, Ceara, Brazil.

<sup>2</sup>Instituto de Saúde e Gestão Hospitalar, Fortaleza, Ceara, Brazil.

### Introduction

Headache is one of the most common neurological symptoms and is almost a universal experience that requires medical attention on many occasions. Patients often seek medical advice for headaches in primary or secondary health care systems. In these scenarios, establishing the correct diagnosis of headache and referring further treatment to a specialist is essential. Hundreds of low-complexity Emergency Care Units (called UPAs 24h) were opened throughout the country in the last decade. Working 24/7, many UPA 24 h are one of the preferred places by patients to treat acute headaches.

### Objectives

This study aims to evaluate the frequency of the "Not otherwise specified headache diagnoses" in patients who seek UPA's 24-h for headache.

### Methods

We evaluated the ED charts of 149,603 visits motivated by headache to nine UPAs 24h in Fortaleza, Ceará, from January 2017 to April 2022. In addition to the demographic data, the care flow chart, the MTS classification, the times of each step of care (from risk classification to discharge or death), and the final diagnosis coded by the attendant physician using the International Classification of Diseases (ICD-10). Data were analyzed using statistical software, and a  $p < 0.05$  was considered for significance.

### Results

The 149,603 consultations, which represented 3,5% of the total, were made by men and women (72 and 28% respectively) with 38.2 ( $\pm 14.6$ ) years of age, on average. Regarding the diagnosis, only 25,121 (16.8%) patients received the diagnosis of migraine, and 4,671 (3.1%) were diagnosed with "other cephalic algic syndromes". The remaining 119,811 (80.1%) had the not otherwise specified headache discharge diagnosis in their charts.

### Conclusion

The UPA's 24 h represents an important care channel for patients with acute headaches; however, most patients in this setting do not receive the correct diagnosis, which undoubtedly contributes to inadequate treatment and prognosis. A training program for the health professionals who work there is urgently needed to improve the care of thousands of headache patients.

**Keywords:** Migraine disorders, Emergency medical services, Headache, Demography.