



## Return to the Emergency Department of a Private Hospital in the City of Recife for Patients with Headaches

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### Introduction

Headaches represent one of the most frequent reasons for seeking medical attention in an emergency department. It is estimated that approximately 50% of the population is seen at least once a year for this issue. Headaches can be classified as primary and secondary. When primary headaches are not treated correctly in the emergency department, they lead to return visits, generating high costs for both the patient and the hospital.

### Objective

To describe the returns within 90 days of patients with headaches in an emergency department and the influential variables.

### Methods

Data were obtained retrospectively from electronic medical records of a private hospital in the city of Recife using Business Intelligence (BI) tools. The study period was from January to June 2023. All patients who returned to the emergency department with a diagnosis of headache within 90 days were counted. The following data were considered: gender, age, administered medications, length of stay in the emergency department, and the cost of materials and medications used.

### Results

A total of 2,304 patients with a diagnosis of headache (ICD R51) were treated in the emergency department. Among these, 133 out of 2,304 (6.0%) returned to the emergency department for subsequent care. Of these return visits, 106 out of 133 (79.7%) patients were female, and 27 out of 133 (20.3%) were male, with an average age of 39 years. The most commonly used medications included analgesics such as dipyrone (n = 60, 45.1%), followed by antiemetics like dimenhydrinate (48.8%, n = 65), non-steroidal anti-inflammatory like ketoprofen (60.9%, n = 81), as well as opioids like tramadol (26.3%, n = 35) and corticosteroids like dexamethasone (50.3%, n = 67). It was also found that 7.5% (n = 10) of the patients received no medication in any of the visits. The average cost in the emergency department for materials and medications was R\$30.09, and the average length of stay was 4 hours and 2 minutes. Of the returning patients, 9.7% (n = 13) required hospitalization.

### Conclusion

Proper management of patients with headaches in the emergency department is important to avoid unnecessary returns and thus reduce costs for both patients and hospitals. Education and patient follow-up strategies, as well as the implementation of appropriate treatment protocols, would contribute to the efficiency of the healthcare system.

**Palavras-chave:** Urgency; Treatment; Headache; Recurrence; Hospital Management.