



## Provision of pharmacological treatment for migraine in a health region of a Brazilian southern state: a comparative analysis

Paola Regina Mombach Lazzaron, Cesar Augusto da Silva, Giovanna Lourenço Cavagnoli, Danielle Rodrigues da Silva

Federal University of Paraná, Curitiba, Paraná, Brazil

### Introduction

Migraine affects 15% of the Brazilian population and is a frequent reason for seeking medical care. Proper management requires specific pharmacological therapy. Therefore, analyzing the provision of adequate medications for migraine within the Sistema Único de Saúde (SUS) is crucial. Medication provision within SUS follows guidance from the National List of Essential Medicines (RENAME) and local adaptation through the Municipal List of Essential Medicines (REMUME).

### Objective

To diagnose the availability of pharmacological prophylactic and abortive treatments for migraine within the SUS in a health region in the southern Brazilian state of Paraná, through analyzing the REMUMEs of each municipality.

### Methods

A documentary research was carried out, consulting the REMUMEs of the municipalities in the 20th Regional Health Division of Paraná to identify the availability of medications for migraine treatment. Medications listed by UpToDate® with evidence levels 1A, 1B, 2A, 2B, and 2C were used as comparison parameters. An average availability index was calculated for prophylactic and abortive treatment medications.

### Results

The average availability index for recommended medications was 76.85% for first-line prophylactic treatment, 40.55% for second-line prophylactic treatment, and 27.77% for medications intended for abortive treatment. Among the 18 municipalities analyzed, 4 (22%) provided topiramate, an important prophylactic medication for migraines. On average, 3.4 first-line preventive treatment medications are available per municipality, highlighting tricyclic antidepressants and beta-blockers. Second-line medications have greater availability, notably anticonvulsants (83%). For abortive treatment of migraine crises, each municipality provides an average of 7.4 medications, especially analgesics and non-steroidal anti-inflammatory drugs (67.66%), while classes with high efficacy and safety in migraine treatment, such as triptans, CGRP (Calcitonin Gene-Related Peptide) antagonists, and serotonin receptor agonists, are not available in any of the surveyed municipalities.

### Conclusion

Numerous medication combinations are publicly available for the treatment of migraines in this health region. However, some first-line treatment drugs, particularly those with specific pharmacodynamics for migraines, are not widely accessible. These gaps require increased public health investment to ensure medication availability, crucial to provide effective, individualized, and safe treatment for migraines.