



## Migraine Preventive Treatment Failure: A Real-World Study in a Tertiary Clinic in Brazil

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**Categoria:** Epidemiologia, Desfechos E Impacto Das Cefaleias

### Background

Migraine is an overlooked chronic pain disorder that remains undertreated and mistreated. In Brazil, there is a scarcity of evidence on migraine burden in patients who have experienced previous preventive treatment failure (PPTF).

### Objective

To evaluate the associations between  $\geq 3$  PPTF and clinical, psychiatric, and medical and procedures history data.

### Methods

In a retrospective, cross-sectional study, the medical records of migraine patients who first visited a tertiary specialized clinic were examined. We selected adults of both sexes aged  $\geq 18$  years who attended their first appointment between March and July 2017. Ordinal logistic regression models were employed to estimate the associations between number of PPTF (no previous treatment, 1 PPTF, 2, and  $\geq 3$  PPTF) and chronic migraine, number of diagnosis exams performed (0, up to 3, and  $\geq 4$ ), number of abortive drugs classes used (0, 1, 2, and  $\geq 3$ ), and severe depression (PHQ-9  $\geq 15$ ), adjusted for sex, age, and years with disease.

### Results

Data from 463 patients (72.1 % female) with a mean (SD) age of 37.3 (13.0) years were analyzed. The frequency of patients with no previous treatment was 40.4 % (187/463), while 30.5 % (141/463) showed  $\geq 3$  PPTF. In patients with  $\geq 3$  PPTF, 35.5 % (50/141) had episodic migraine and 64.5 % (91/141) had chronic migraine. Compared to no previous treatment group, patients with  $\geq 3$  PPTF showed higher odds for having chronic migraine [OR = 2.50 (1.57, 3.99),  $p < 0.001$ ], severe depression [OR = 1.97 (1.03, 3.76),  $p = 0.039$ ], severe anxiety, [OR = 1.98 (1.07, 3.66),  $p = 0.029$ ],  $\geq 4$  diagnosis exams [OR = 6.06 (3.78, 9.73),  $p < 0.001$ ], and used  $\geq 3$  abortive drug classes [OR = 17.4 (10.5, 28.7),  $p < 0.001$ ].

### Conclusion

In this tertiary clinic, patients first visiting a headache specialist had a high frequency of  $\geq 3$  PPTF, which was associated with higher migraine burden in terms of chronification, psychiatric comorbidity, acute medication inefficacy, and unnecessary exams.

**Keywords:** Migraine; Preventive Therapy; Treatment Failure; Healthcare Resources; Disease Burden; Chronic Migraine.