



An Epidemiological Analysis of Hospitalizations for Migraine and Other Headache Syndromes Over the Last 15 Years in Brazil

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Category: Epidemiologia, Desfechos e Impacto das Cefaleias

Introduction

Headaches constitute one of the most relevant clinical manifestations in the field of medicine, and among them, migraine stands out as one of the most debilitating and incapacitating forms, significantly affecting the quality of life of individuals of all ages. Alongside other headache syndromes, migraine has represented a persistent burden for countless people in recent years, both globally and, more specifically, within the Brazilian population. The prevalence and impact of migraine extend beyond mere headaches, encompassing physical, emotional, and socioeconomic aspects. Therefore, a comprehensive understanding of this condition and its epidemiological trends in the Brazilian context over the past decade is crucial for enhancing clinical management, improving patients' quality of life, and shaping related healthcare policies.

Objectives

This study aims to conduct an epidemiological analysis of migraine in Brazil over the last 15 years, exploring the key sociodemographic factors associated with hospitalizations for this condition.

Methodology

The main data source used was DATASUS. The research strategy involved associating the year of processing with the number of hospitalizations for migraine and other headache syndromes with the analyzed demographic factors, including age group, gender, region, and ethnicity. Data were obtained from January 2008 to July 2023 as a result of these searches, and this data was subsequently tabulated and processed using Google Sheets and Jamovi applications.

Results

Over the past 15 years, there were 122,066 hospitalizations for migraine in Brazil, with an average of 7,710 hospitalizations per year until 2022. The lowest number of hospitalizations occurred in 2008, with 2,822 hospitalizations, while the highest was in 2019, totaling 11,996 hospitalizations. In 2022, there were 10,292 hospitalizations. Compared to 2008, there was an approximate 265% increase in the last 15 years. Up to July 2023, 6,416 hospitalizations were recorded, demonstrating an approximate 12% increase compared to the 5,731 cases reported during the same period last year. Regarding ethnicity, there was a predominance of hospitalizations involving White (42.3%) and Brown (33.6%) ethnicities, compared to Black (3.1%), Yellow (1.8%), and Indigenous (0.0007%) ethnicities, with no information available for ethnicity in 19.1% of migraine-related hospitalizations. Furthermore, starting in 2021, there was a higher prevalence of hospitalizations among people of Brown ethnicity, representing 53% of the total hospitalizations up to July 2023. In terms of gender, a significant predominance of females (65.7%) over males (34.3%) was observed, which remained stable over the analyzed period. Analyzing the age group factor, a slightly higher prevalence was noted in the age groups of 30 to 39 years (18.7%) and 20 to 29 years (18.5%), followed by the 40 to 49 age group (16.9%). Concerning the region of hospitalizations, the majority occurred in the Southeast (36.1%), followed by the South (26.6%) and the Northeast (25.7%), with the North (6.1%) and the Midwest (5.5%) having considerably lower values. Despite the expected predominance of the Southeast due to its larger population, in recent years, the South (2019 and 2020) and the Northeast (2018, 2021, and 2022) were the regions with the highest number of hospitalizations.

Conclusion

Migraine is an extremely debilitating and incapacitating condition that affects thousands of Brazilians, leading them to be hospitalized in healthcare facilities across the country. It becomes apparent that further studies involving patients' social class, hospitalization duration, and associated costs, along with more information regarding patients' ethnicity, are needed to better assess the impact of migraine and other headache syndromes on the Brazilian Unified Health System (SUS) and the Brazilian population as a whole.

Keywords: Migraine; Epidemiology; Brazil; Hospitalizations; Headache Syndromes.