

IMPACT OF GASTRIC CANCER IN BRAZIL: ANALYSIS OF EPIDEMIOLOGICAL TRENDS AND REGIONAL DISPARITIES (2020-2024)

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Introduction: Gastric cancer is one of the main causes of morbidity and mortality in Brazil, with adenocarcinoma accounting for 95% of cases. This type of cancer is strongly related to unhealthy diets and *Helicobacter pylori* infections and mainly affects individuals over 50 years of age. In Brazil, gastric cancer is the fourth most common among men and the sixth most common among women, with high incidence and mortality rates, especially in the North and Northeast regions, where there are large disparities in access to health care. **Objectives:** We analyzed the gastric cancer incidence and mortality rates in Brazil between 2020 and 2024, focusing on regional disparities across different areas of the country. **Methods:** This study was conducted through a descriptive and retrospective analysis using data from the Brazilian National Cancer Institute (INCA) and Population-Based Cancer Registries (RCBP) from 2020 to 2024. The sample included diagnosed cases of gastric cancer from all regions of Brazil. Incidence and mortality rates per 100,000 inhabitants were calculated and analyzed by region, and a one-sample *t* test was conducted to test differences between years. **Results:** In 2020, the North (19.6 cases per 100,000 inhabitants) and Northeast (17.8 cases) regions had the highest incidence rates, while the South (12.2 cases) and Southeast (13.4 cases) regions showed lower values. From 2021 to 2024, incidence rates significantly increased in the North and Northeast ($t = 2.37$; $p < 0.01$), while remaining stable in the South and Southeast, with minor fluctuations ($t = 1.37$; $p = 0.22$). Mortality rates followed similar patterns, with the highest rates observed in the North (12.9 deaths per 100,000 inhabitants) and Northeast (15.4 deaths). Between 2020 and 2024, mortality significantly increased, especially in the North and Northeast regions ($t = 2.49$; $p < 0.01$), reflecting difficulties in accessing adequate healthcare. Most diagnosed cases involved patients over 50 years old, and education level emerged as an important factor, with most patients belonging to lower educational strata. Additionally, patient migration from the North and Northeast to the South and Southeast was observed, driven by the search for better diagnostic and treatment infrastructure, highlighting regional inequities in healthcare access. **Conclusion:** The study revealed persistent regional disparities in gastric cancer in Brazil, with the North and Northeast regions showing the highest incidence and mortality rates. Limited healthcare infrastructure and

restricted access to adequate medical care exacerbate these disparities, emphasizing the need for effective public policies to improve early diagnosis and treatment and reduce regional inequalities.

Keywords: Incidence; Mortality; Stomach neoplasm.