

## QUANTITATIVE AND QUALITATIVE ANALYSIS OF COLORECTAL CANCER HOSPITALIZATIONS BETWEEN 2017 AND 2024 IN 5 BRAZILIAN MACRO-REGIONS: NORTH, NORTHEAST, MIDWEST, SOUTHEAST AND SOUTH

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**Introduction:** Malignant neoplasms of the rectosigmoid junction represent a significant subset of colorectal cancers, occurring at the transition between the sigmoid colon and rectum. These tumors are characterized by abnormal and aggressive cell growth and commonly present symptoms such as changes in bowel habits, rectal bleeding, abdominal pain, and signs of intestinal obstruction. These symptoms often lead patients to seek urgent medical care, resulting in high hospitalization rates. Analyzing the epidemiological profile of these hospitalizations is essential to identify trends in incidence, demographic characteristics, and healthcare demands, thereby supporting early detection strategies, hospital management, and public health planning. **Objective:** To analyze the epidemiological profile of hospitalizations due to malignant neoplasms of the rectosigmoid junction in Brazilian regions from 2017 to 2024. **Methods:** This is a descriptive, retrospective, and quantitative study based on data collected from the SUS Hospital Information System (DATASUS) and the National Cancer Institute (INCA). The study covers the period from 2017 to 2024 and analyzes variables such as the number of hospitalizations, type of admission (elective or emergency), age group, gender, and geographic distribution across Brazil's North, Northeast, Midwest, Southeast, and South regions. **Results:** Between 2017 and 2024, a total of 277,669 hospitalizations occurred in Brazil, with the highest number in 2024 (40,346). There was a general upward trend, except in 2019 (33,218) and 2020 (31,267), likely due to the impact of the COVID-19 pandemic. The Southeast had the highest proportion of hospitalizations (47.7%), followed by the South (28.3%), Northeast (15.7%), Midwest (5.5%), and North (2.7%). Emergency admissions accounted for 51%, surpassing elective ones (49%) in all regions except the Northeast. The 60–69 age group had the highest number of hospitalizations (85,856), with a progressive increase up to that range, followed by a decline in the older age groups. Males (146,312) were hospitalized more than females (131,357), except in the North and Northeast regions. **Conclusion:** Understanding the hospitalization patterns for colorectal cancer is crucial, as it is the second most common type of cancer and the third leading cause of cancer-related deaths in Brazil. Regional differences reflect the country's sociodemographic disparities. The most affected group consists of men aged 60 to 69.

The decline in hospitalizations in 2019 and 2020 is attributed to the COVID-19 pandemic, while the increase in subsequent years reflects the rising global cancer incidence.

**Keywords:** Retosigmoid neoplasms; hospitalization trends; colorectal cancer epidemiology.