

IMPACT OF COVID-19 ON THE TREATMENT OF STOMACH NEOPLASM IN THE STATE OF PARÁ FROM JANUARY 2019 TO DECEMBER 2023

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Introduction: The COVID-19 pandemic significantly disrupted global healthcare systems, resulting in delays in cancer diagnoses and treatments. In Brazil, a 28% reduction in cancer-related surgical hospitalizations was observed between March and July 2020 compared to the same period in 2019¹. Given that gastric cancer remains one of the leading causes of cancer-related mortality in Brazil, assessing the pandemic's impact on its treatment is crucial. **Objectives:** To evaluate the annual frequency of treatments for stomach neoplasms in the state of Pará between January 2019 and December 2023, with the aim of identifying potential variations associated with the COVID-19 pandemic. **Methods:** This is a descriptive, cross-sectional and quantitative epidemiological study based on secondary data extracted from the Department of Informatics of the SUS (DATASUS). The study focused on the number of treatments for stomach neoplasms performed in the state of Pará between January 2019 and December 2023. Data were collected by "month/year of treatment" and aggregated annually to assess trends over the five-year period. A time series analysis was performed to evaluate treatment volume variations, with percentage changes and the compound annual growth rate (CAGR) calculated to estimate annual fluctuations. Statistical processing and data organization were conducted using Microsoft Excel 2019, which also facilitated trend visualization through graphs. **Results:** A total of 873 stomach neoplasm treatments were recorded in the state of Pará between January 2019 and December 2023. In 2019, 174 treatments were registered, which decreased to 149 in 2020, representing a 14.5% reduction likely associated with the initial impact of the COVID-19 pandemic. In 2021, treatments increased to 181, marking a 22% rise compared to 2020. The upward trend continued in 2022, reaching 186 treatments (2.8% increase from 2021), before a slight decline in 2023 to 183 treatments (1.6% decrease compared to 2022). Overall, treatment volumes in 2023 remained 5.2% higher than the pre-pandemic levels of 2019, indicating a gradual recovery of oncological care services. **Conclusion:** Therefore, this study demonstrates that the COVID-19 pandemic significantly impacted the treatment of stomach cancer cases. In 2020, the initial surge of COVID-19 cases led to a 14.5%

reduction in the treatments compared to 2019, likely due to reduced diagnostic activity and limited healthcare access. This decline may have resulted from decreased demand of non-COVID related medical evaluations, leading to underdiagnosis and delayed treatment initiation. Starting in 2021, a gradual recovery was observed, coinciding with the implementation of enhanced structured public health measures, improved clinical management of COVID-19, and the nationwide vaccination rollout. These factors appear to have restored public confidence in seeking medical care, enabling treatment numbers in 2021–2023 to approach or slightly surpass pre-pandemic levels.

Keywords: Impact of COVID-19; stomach neoplasm; treatment