

ANALYSIS OF THE IMPACT OF THE COVID-19 PANDEMIC ON CANCER DIAGNOSIS IN BRAZIL.

Geanne Rayssa Monteiro¹, David Borges Gonçalves¹; Ially Melissa Magalhães¹; Giovanna Rodrigues da Silva de Oliveira¹; Igor Vinicius Veras¹; Glauciane Ribeiro Monteiro².

¹State University of Pará (UEPA)

²Federal University of Pará (UFPA)

Introduction: The COVID-19 pandemic, caused by the SARS-CoV-2 virus, profoundly impacted global public health, disrupting healthcare systems and exacerbating preexisting inequalities, particularly in Brazil. One major consequence was the decline in screening and diagnostic procedures for diseases such as cancer, compromising incidence rates in several countries. Thus, epidemiological studies on this topic in the pandemic context are essential, as they reveal the vulnerability of public healthcare services and highlight regional disparities in access to diagnosis. **Objectives:** To analyze and describe the impact of the COVID-19 pandemic on cancer diagnoses in Brazil between 2019 and 2022. **Methods:** This descriptive, retrospective, and quantitative study used data from the Oncology Panel, available through the Informatics Department of the Brazilian Unified Health System (DATASUS). Cancer diagnoses from 2019 to 2022 were analyzed, stratified by region, age group, therapeutic modality, and type of diagnosis. Statistical analysis was performed in Microsoft Excel version 365, with annual percentage variation calculations to assess pandemic-related trends. **Results:** A total of 2,278,350 cancer diagnoses were recorded in Brazil. From 2019 to 2020, a 9.7% decrease occurred (from 564,154 to 509,196 cases), followed by a 24% recovery in 2022 (633,142 cases). Regional analysis showed that the Southeast and South accounted for 67% of diagnoses (1.54 million), while the North and Northeast, home to nearly 40% of the population, accounted for only 23% (613,106 cases). In 2020, the Northeast saw a 16.6% decrease in diagnoses (from 134,607 to 112,294), while the North showed apparent stability likely due to chronic underreporting. Regarding treatment access, the Southeast performed 42.5% of chemotherapy sessions (218,101 out of 513,653) and 44% of radiotherapy procedures (87,351 out of 198,657). In contrast, the North performed only 4.6% and 4.9% of these treatments, respectively. **Conclusion:** There was an initial sharp decline in diagnoses, followed by gradual recovery, reflecting reduced pressure on the health system and the resumption of services post-crisis. Regional disparities in diagnosis and treatment access worsened, especially in the North and Northeast, which had higher proportions of malignant neoplasms, lower therapeutic coverage, and potential underdiagnosis, regions historically neglected. These findings underscore the urgent need for public policies aimed not only at equalizing cancer screening and access to care, particularly in underserved areas, but also at addressing the structural weaknesses that rendered the healthcare system unprepared for such a crisis.

Keywords: Pandemic; Neoplasm; Epidemiology.