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The Cancer Control Challenge:
Better Understanding It to Better Face It

CANCER EPIDEMIOLOGY IN SOUTHEASTERN PARÁ (BRAZIL): A HOSPITAL-BASED STUDY FROM 2021 TO 2024

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Introduction: Cancer remains one of the main public health challenges in Brazil, with a growing impact on population morbidity and mortality. Despite advances in diagnosis and treatment, significant inequalities persist in access to oncology services, especially in regions far from major urban centers. In the 11th Health Region of Pará, which covers part of the state's southeast, this situation is worsened by the centralization of care at Ophir Loyola Hospital (HOL) in Belém, since Marabá, the largest city in southeastern Pará, had no High-Complexity Oncology Care Unit (UNACON) until April 2024. In this context, local epidemiological studies are essential to support more equitable and effective public health policies. **Objectives**: To identify the epidemiological profile of cancer patients from southeastern Pará treated at HOL between 2021 and 2024. Methods: This is a descriptive, ecological, and cross-sectional study based on secondary data. Information was extracted from medical records of patients from Southeastern Pará treated at Ophir Loyola Hospital (HOL), a tertiary cancer care center located in Belém, Pará, Brazil. Data collection was carried out in collaboration with the local research team and covered the period from 2021 to 2024. Cases were classified according to the International Classification of Diseases for Oncology (ICD-O) and the 11th revision of the International Classification of Diseases (ICD-11). Data were stratified by gender, age group, and municipality of residence, considering the Integration Regions of Carajás, Tucuruí, and Rio Capim. This study was approved by the Research Ethics Committee of Hospital Ophir Loyola, under protocol number CAAE 77006324.1.0000.5550. **Results**: A total of 4,465 cancer cases were recorded between 2021 and 2024. A predominance of

female cases was observed (2,928 cases), compared to male cases (1,537). The municipalities with the highest absolute number of cases were Tucuruí, Marabá, Parauapebas, Canaã dos Carajás, and Breu Branco. A significant increase was noted in 2024, with over 60% of cases concentrated in that year, possibly indicating changes in the reporting system or a real increase in incidence. The predominant age group was 40 to 69 years; however, a relevant proportion of patients aged 20 to 39 was noted in municipalities such as Tucuruí, Canaã, and Breu Branco, pointing to inequalities in access to cancer diagnosis. **Conclusion**: Our results present significant territorial and structural inequalities in cancer care in southeastern Pará. The abrupt increase in 2024 suggests the need to investigate possible changes in epidemiological surveillance or an actual rise in disease incidence. The younger age profile in certain municipalities may indicate early exposure to environmental and occupational risk factors. Strengthening regional epidemiological surveillance, expanding oncology services to inland areas, and developing targeted occupational health initiatives are urgently needed.

Keywords: Cancer; Health inequity; Epidemiology; Oncology; Amazon Region.