

EPIDEMIOLOGICAL PROFILE OF BRONCHIAL AND LUNG CANCER AMONG ADULTS IN BRAZIL

Júlia Ferreira Costa¹, Marcelo Braga de Oliveira¹, Ana Victória Negrão Corrêa², Jamilly Cecília Sousa de Oliveira³, Hanna Sofia Machado Soares³, André Salim Khayat¹

¹ Oncology Research Center-Federal University of Pará.

² Metropolitan University Center of the Amazon.

³ Federal University of Pará.

Introduction: Lung cancer is one of the most prevalent malignant neoplasms in Brazil, with high mortality rates, especially in advanced stages. It is classified into two main subtypes: small cell carcinoma (SCLC) and non-small cell carcinoma (NSCLC). Risk factors include smoking, occupational exposure to carcinogenic agents, and genetic predisposition. The high lethality and incidence of the disease reinforce the relevance of studies that analyze its epidemiological profile in the national territory. **Objectives:** To analyze the epidemiological profile of bronchial and lung cancer (ICD-10: C34) in adults living in different regions of Brazil, considering the distribution by region, year of diagnosis, sex and age group over the last decade. **Methods:** This is a descriptive study with a quantitative approach, based on secondary data extracted from the DATASUS Oncology Panel and the National Cancer Institute (INCA). Records of cases of malignant neoplasm of the bronchi and lungs that occurred in Brazil between 2015 and 2024 were analyzed. The variables included region, year of diagnosis, sex, age group and therapeutic modality. The data were tabulated in Microsoft Excel and analyzed descriptively, with presentation in absolute and relative frequencies. The data used were raw, without standardization, and no controls for confounding factors were applied. **Results:** The assessment by year of diagnosis of malignant neoplasm of the bronchi and lungs revealed a higher frequency of cases in 2023 (42.92%), with a predominance in the Southeast region (12.25%). In the stratification by sex, a higher incidence was observed in males (23.22%), followed by females (19.71%). The distribution by age group showed a predominance in the 65 to 69 age group (23.63%). Among men, this same age group presented a higher concentration (22.49%), while among women, the peak incidence occurred between 60 and 64 years (21.08%). Regarding the therapeutic modalities, chemotherapy was the most applied in women (42.10%), while the combination of chemotherapy, radiotherapy and surgery was more frequent among men (51.20%). **Conclusion:** This study aimed to highlight the profile of malignant neoplasms of the bronchi and lungs in adults in Brazil. The results show a higher incidence in the Southeast region, especially among men aged 65 to 69. These findings reinforce the importance of public policies aimed at prevention, such as combating smoking, and expanding access to early diagnosis, especially in regions with lower healthcare coverage. The analysis also

highlights the need for specific strategies to reduce mortality associated with this neoplasm.

Keywords: Brazilian regions; malignant neoplasm; bronchi; lungs.