

EPIDEMIOLOGICAL PROFILE OF PROSTATE CANCER MORTALITY: A COMPARATIVE ANALYSIS BETWEEN THE STATE OF PARÁ AND THE NORTHERN REGION OF BRAZIL FROM 2020 TO 2023

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Introduction: Prostate cancer is one of the most common malignant neoplasms among men, particularly after the age of 60, originating from the uncontrolled proliferation of cells in prostate tissue. Structural and functional alterations in the prostate—the gland responsible for seminal fluid production—may indicate the presence of the disease.

Objective: To analyze the epidemiological profile of prostate cancer mortality in the state of Pará from 2020 to 2023, identifying demographic and regional patterns in comparison with the Northern Region of Brazil. **Methods:** This ecological, descriptive and retrospective study was based on secondary data obtained from the TabNet platform, managed by the Department of Informatics of the Brazilian Unified Health System (DATASUS). Deaths due to malignant neoplasm of the prostate (ICD-10: C61) recorded in the Mortality Information System (SIM) between 2020 and 2023 were analyzed. The geographic scope included the state of Pará and the entire Northern Region of Brazil, enabling a comparative analysis. Variables considered were place of occurrence and year of death. Data were extracted from the “Deaths by Occurrence” section and tabulated using Microsoft Excel® for organization and proportional calculations. **Results:** From 2020 to 2023, a total of 3,695 deaths from malignant neoplasm of the prostate were recorded in the Northern Region of Brazil, distributed as follows: 881 in 2020, 922 in 2021, 871 in 2022, and 1,011 in 2023. The data revealed relative fluctuations in the initial years, followed by a marked increase in 2023, which represented the highest mortality during the period. In the state of Pará, 1,585 deaths were registered: 403 in 2020, 392 in 2021, 371 in 2022, and 419 in 2023, accounting for more than 42% of all prostate cancer deaths in the Northern Region over the four-year period. Pará showed a slight decline in mortality from 2020 to 2022, followed by an approximate 13% increase in 2023, remaining the state with the highest absolute number of deaths in the region. The remaining 57.1% of deaths

were distributed among the other six states—Amazonas, Acre, Roraima, Rondônia, Amapá and Tocantins—consistently highlighting Pará as the most affected federative unit. **Conclusion:** The elevated prostate cancer mortality observed in Pará compared to the rest of the Northern Region reflects sociodemographic disparities in access to screening, diagnosis and treatment, particularly in areas distant from the state capital. These findings emphasize the importance of expanding targeted screening strategies in more vulnerable regions to reduce prostate cancer mortality and promote equity in access to health care services.

Keywords: Prostate cancer; Cancer-related deaths; Epidemiology.