

COMPARATIVE ANALYSIS OF MORTALITY AND CONFIRMED CASES OF THYROID CANCER IN NORTHERN BRAZIL FROM 2013 TO 2023: AN EPIDEMIOLOGICAL PROFILE

George de Sarges Azevedo¹, Isabela Campos Mota²

¹Universidade Federal do Pará

²Universidade do Estado do Pará

Introduction: Thyroid cancer is the most common type of endocrine neoplasm and generally has a favorable prognosis. However, mortality rates can vary across Brazilian regions, reflecting disparities in access to early diagnosis and appropriate treatment. Analyzing confirmed cases and deaths allows for the identification of regional disparities and weaknesses in healthcare systems. **Objective:** To conduct a comparative analysis of confirmed cases and mortality due to thyroid cancer in the Northern Region of Brazil, based on the disease's epidemiological profile. **Methods:** This is a descriptive, cross-sectional and quantitative epidemiological study based on secondary data obtained from the Informatics Department of the SUS (DATASUS) and the Oncology Brazil Panel. Records of confirmed cases and deaths from thyroid cancer were analyzed in the seven states of the Northern Region between 2013 and 2023. Data were organized and analyzed using Microsoft Office Excel 2019, with calculation of the proportional mortality rate by state. **Results:** From 2013 to 2023, a total of 1,611 cases of thyroid cancer were reported in the Northern Region. The state of Amazonas accounted for the highest proportion of cases (40.9%), followed by Pará (36.6%). The lowest numbers were observed in Amapá (1.4%) and Acre (1.8%). The majority of cases occurred in females (82.4%), consistent with the higher prevalence of the disease in women. The most affected age groups were 40–44 years (11.8%) and 45–49 years (12.5%). In the same period, 618 deaths from thyroid cancer were recorded. Pará registered the highest number of deaths (48.4%), followed by Amazonas (23.8%), while Acre (4.2%) and Amapá (2.4%) reported the fewest. Although most deaths occurred in women (65.0%), the sex ratio (M:F = 1:1.86) indicates relatively higher mortality among men. Most deaths were concentrated in older age groups, particularly in the 60–69 (23.1%), 70–79 (24.3%), and 80+ (21.0%) age groups. The proportional mortality rate (deaths/cases) varied notably among states. Pará had the highest rate (50.7%), exceeding the regional average of 38.3%. Conversely, Rondônia (21.5%) and Amapá (26.3%) had the lowest rates, possibly reflecting disparities in access to timely diagnosis and treatment, or limitations in data quality and reporting. **Conclusion:** The comparative analysis revealed significant regional disparities in thyroid cancer mortality across Northern Brazil. Pará exhibited the

highest proportional mortality rate, indicating potential gaps in diagnosis, treatment, or healthcare infrastructure. Although incidence was higher in women, men showed greater proportional lethality. Mortality rates increased progressively with age, emphasizing the need for age-targeted screening strategies. These findings emphasize the urgency for implementing public policies aimed at ensuring equitable cancer care and strengthening the specialized oncology network throughout the Northern Region.

Keywords: Thyroid cancer; epidemiological profile; northern Brazil.