

EPIDEMIOLOGICAL ANALYSIS OF MORTALITY FROM CARCINOMA IN SITU AND MALIGNANT NEOPLASIA OF THE CERVIX IN THE STATE OF PARÁ (2019-2023)

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Introduction: Cervical cancer (CC) is caused in approximately 95% of cases by persistent infection with human papillomavirus (HPV), predominantly transmitted through unprotected sexual contact. This infection leads to alterations in the cell cycle of cervical epithelial cells, potentially resulting in precursor lesions, such as carcinoma in situ — an early and localized stage of the disease — which, if left untreated, may progress to invasive cancer. In the state of Pará, CC is the second most frequent cancer among women, reflecting significant socioeconomic disparities and limited access to healthcare services. In this context, an updated analysis of mortality trends is essential for guiding public health strategies. **Objectives:** To analyze the epidemiological profile, temporal trends, and geographic distribution of mortality due to carcinoma in situ and invasive cervical cancer in the state of Pará from 2019 to 2023. **Methods:** This is a retrospective, descriptive, and ecological study based on secondary data extracted from the Mortality Information System (SIM/DATASUS). Deaths related to malignant neoplasms of the cervix (ICD-10: C53) and carcinoma in situ of the cervix (ICD-10: D06) from 2019 to 2023 were analyzed. Variables included total number of deaths, year, municipality, age group, and race/ethnicity. **Results:** In the period analyzed, 1,912 deaths from malignant neoplasms and carcinoma in situ of the cervix were recorded in Pará, with an average of approximately 382 deaths per year. The year 2022 recorded the highest number of deaths (417; 21.8%) and 2021 the lowest (349; 18.3%). Belém was the municipality with the highest number of deaths (425; 22.2%), while the municipalities with the lowest records (1 death each; 0.05%) were: Abel Figueiredo, Aveiro, Cumaru do Norte, Pau D'Arco, Peixe-Boi, Placas, Santa Luzia do Pará, Santa Maria das Barreiras, and Sapucaia. The most affected age group was 40 to 49 years old (483; 25.3%) and the least affected were 15 to 19 years old (1; 0.05%). The predominant race/ethnicity was brown (1,504; 78.7%) and the least represented was Asian ancestry (6; 0.3%). **Conclusion:** The temporal analysis revealed a relatively stability in the mortality rate from CC and carcinoma in situ in the state of Pará between 2019 and 2023, highlighting the need to strengthen preventive measures, such as expanding Pap smear test coverage and increasing HPV vaccination rates, in order to reduce these indicators. The persistently high number of

cases over the years reinforces the importance of ensuring adequate monitoring and appropriate treatment for patients already diagnosed. The higher mortality rate observed in Belém may reflect its high population density and its role as a regional healthcare hub. The greater impact on brown-skinned women aged 40 to 49 reinforces the urgency of intensifying screening and health promotion actions aimed at this group, identified as being at greater risk.

Keywords: Uterine cervical neoplasms; mortality registries; Brazil.