

EPIDEMIOLOGICAL PROFILE OF MALIGNANT PANCREATIC NEOPLASMS IN PEDIATRIC AND ADOLESCENT PATIENTS IN BRAZIL FROM 2015 TO 2024

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Introduction: Malignant pancreatic neoplasms in children and adolescents are extremely rare and potentially lethal, particularly when not diagnosed and managed early. These tumors exhibit marked histological and pathophysiological heterogeneity. Previous studies indicate an association between prognosis, disease stage, and the feasibility of surgical resection, which represents the main survival factor, especially for the most prevalent tumors in the 0–19 age group, such as solid pseudopapillary tumors and pancreatoblastomas. In Brazil, updated population-based epidemiological studies on pancreatic cancer are scarce, and investigations focusing on pediatric and adolescent populations are particularly limited, despite evidence that mortality is influenced by regional and sex-related disparities. **Objectives:** To analyze and describe the epidemiological profile of pediatric and adolescent patients with malignant pancreatic neoplasms in Brazil between 2015 and 2024. **Methods:** This exploratory, epidemiological, descriptive, cross-sectional, quantitative, and retrospective document-based study used secondary data extracted from the Hospital Information System (SIH), available through the Informatics Department of the Brazilian Unified Health System (DATASUS). Hospital admissions for malignant pancreatic neoplasms recorded nationwide between 2015 and 2024 were analyzed. Patients aged 0–19 years were included, considering variables such as year of diagnosis, number of cases, and geographic region. **Results:** A total of 859 cases of malignant pancreatic neoplasms were recorded among children and adolescents in Brazil from 2015 to 2024. The average annual growth rate was 6.7%, with the number of cases increasing from 66 to 119 during the period. Marked temporal variations were observed, notably in 2021 (+27.6%) and 2017 (+24%). The Southeast region accounted for the highest proportion of cases (311; 32.6%), followed by the Northeast region (269; 31.3%), indicating significant regional disparities. Regarding age distribution, 373 cases (43.4%) occurred among individuals aged 15–19 years, while 251 cases (29.2%) were observed in the 10–14 age group, demonstrating heterogeneous distribution across pediatric and adolescent age ranges. **Conclusion:** Although malignant pancreatic neoplasms remain rare in children and adolescents, their incidence in Brazil showed a consistent increase over the analyzed period, particularly among individuals aged 15–19 years. The predominance of cases in

the Southeast and Northeast regions suggests the influence of sociodemographic factors, unequal access to specialized healthcare services, and differences in diagnostic capacity. These findings highlight the need for public policies focused on early detection, strengthening pediatric oncology care networks, and expanding epidemiological surveillance systems tailored to this specific age group.

Keywords: Epidemiology; pediatrics; pancreatic neoplasms