

Epidemiological Analysis of Leukemia Hospitalizations Among Children and Adolescents in Brazil (2021–2024): Insights for Improving Pediatric Cancer Care and Public Policies

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INTRODUCTION & AIM

Leukemia, particularly acute lymphoblastic leukemia (ALL), is the most common cancer among children and adolescents in Brazil, significantly impacting the Unified Health System (SUS). This study aims to analyze the epidemiological profile of hospitalizations for leukemia in the SUS from 2021 to 2024, considering age, sex, and hospitalization characteristics, to support improvements in care strategies and public policies for pediatric cancer in Brazil.

METHOD

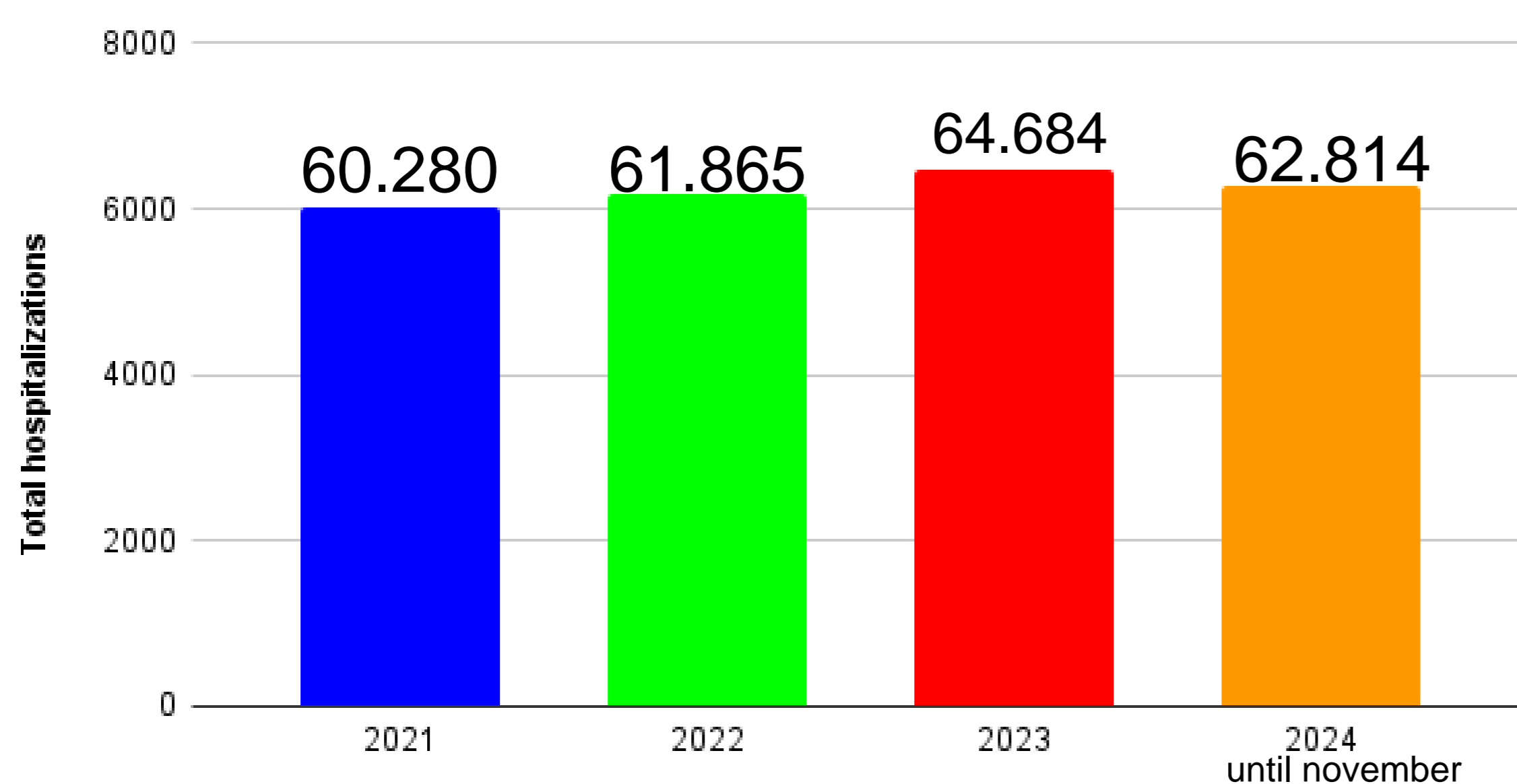
This cross-sectional study used data from the DATASUS platform. The variables analyzed included the total number of hospitalizations for neoplasms and leukemia in Brazil, segmented by age group (0-19 years) and sex, from 2021 to 2024.

KEYWORDS

Leukemia; Acute lymphoblastic leukemia; Pediatric cancer; Hospitalizations; Epidemiology; Brazil; Unified Health System (SUS); Public health policies; Early diagnosis; Cancer care; DATASUS; Childhood cancer; Adolescent cancer; Health data analysis.

RESULTS & DISCUSSION

Hospitalizations for neoplasms among children and adolescents versus Coluna 1



percentage of leukemia cases
35.08% 34.59% 33.37% 34.02%

	MALE PREDOMINANCE	PREDOMINANT AGE GROUP
2021	12,424 cases	1 to 4 years (6,657 hospitalizations)
2022	12,210 cases	1 to 4 years (6,663 hospitalizations)
2023	12,560 cases	5 to 9 years (6,626 hospitalizations)
2024 until november	12,440 cases	1 to 4 years (6,644 hospitalizations)

CONCLUSION

The persistently high rate of leukemia-related hospitalizations among children and adolescents in Brazil, predominantly in males and in the 1-4 age group, **emphasizes the need for strengthened early diagnosis and treatment efforts in the SUS**. The increasing hospitalization trend from 2021 to 2024 highlights the **urgency of improving public policies and the importance of an integrated approach to pediatric cancer care in Brazil**.