International Journal of Health Science

EVALUATION OF THE GEOGRAPHIC DISTRIBUTION OF CASES OF ROTIDIDE POISONING IN THE PEDIATRIC POPULATION IN BRAZIL

Ana Catarina Falcão de Lima Ferreira

Centro Universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0001-3298-074X

Demetrius Lucena Sampaio

Hughes Hall, University of Cambridge Cambridge, UK https://orcid.org/0000-0002-1874-8098

Fabíola Falcão de Lima Ferreira

Universidade do Estado do Amazonas (UEA) Manaus-AM https://orcid.org/0009-0007-5119-4123

Elaine Danielle Luz Ozawa

Faculdades Integradas do Tapajós Altamira-PA https://orcid.org/0009-0006-8923-6141

Lucas de Carvalho Capobiango

Centro Universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0001-7273-6151

Luiggi Schramm Trigueiro

Centro universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0007-3126-4286



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Mayara Garcia Feijó

Centro Universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0004-5459-9730

Patrícia Barbosa Lima

Centro Universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0004-9918-3093

Vanessa Fernanda Fernandes Rodrigues

Centro Universitário Fametro (FAMETRO) Manaus-AM https://orcid.org/0009-0004-1974-3653 **Abstract:** Rodenticide poisoning in children is a public health concern due to its prevalence and serious consequences for children's health. This study analyzed the geographic distribution of these cases in Brazil between 2020 and 2022, aiming to identify areas with the highest incidence and age groups most affected. The results revealed 2,526 registered cases, with the Southeast, Northeast and South as the most affected regions and children aged 1 to 4 years as the most vulnerable. These findings highlight the need for targeted preventive strategies to protect the vulnerable. **Keywords:** Toxicity; Demographic survey; Poisoning; Rodent control; Pediatric health.

INTRODUCTION

Rodenticide poisoning in children represents a significant public health concern. The pediatric population is a particularly high-risk group, which makes education about the dangers of ingesting unknown substances important (ADALBERTO et al., 2022). Exposure to these substances occurs due to the ubiquitous presence of these chemical agents intended to eradicate rodents in urban and rural environments, and can result in serious consequences for children's health.

According to the Brazilian Society of Pediatrics (SBP), poisoning causes easily identifiable signs and symptoms in children, such as vomiting, excessive salivation, drowsiness, fainting, among others. Given this scenario, a careful analysis is necessary to understand the geographic distribution of cases in Brazil.

OBJECTIVES

Analyze and describe the geographic distribution of cases of rodenticide poisoning in children between 2020 and 2022, identifying areas of greatest prevalence and age groups most affected, providing relevant insights for the implementation of preventive strategies aimed at children's safety.

METHODOLOGY

Descriptive, quantitative study, with secondary data from DATASUS. Data on rodenticide poisoning in children under 14 years of age were collected by regions between 2020 and 2022 in the "Epidemiological and morbidity" section of the Disease and Notification System (SINAN). The data was tabulated and the description was carried out.

RESULTS

In the period covered by the study (2020-2022), 2,526 cases of rodenticide poisoning were recorded in children under 14 years of age. The most affected regions were the Southeast, Northeast and South, standing out as areas with the highest prevalence of these adverse events. The year 2020 stood out as the period with the highest number of recorded cases of rodenticide poisoning, totaling 878 occurrences. The Southeast region emerged as the protagonist, contributing significantly to this scenario, with 305 cases reported. As for the most affected age group, children aged 1 to 4 were the most vulnerable, representing a total of 1,714 cases. When comparing the years 2020 and 2022, a general downward trend in the number of cases was observed in all regions. However, it is worth highlighting that the Northeast and Central-West regions presented an exception to this trend, increasing the number of reported cases.

FINAL CONSIDERATIONS

The results presented suggest that despite the overall drop in case numbers between 2020 and 2022, some regions and age groups remain challenging in terms of preventing rodenticide poisoning in children. Analysis of this data can guide targeted efforts in specific areas, as well as awareness-raising policies and preventive measures, aiming to reduce these incidents globally and protect the most vulnerable children.

REFERENCES

SOCIEDADE BRASILEIRA DE PEDIATRIA. **Intoxicações Exógenas**. SBP. Disponível em: https://www.sbp.com.br/especiais/ pediatria-para-familias/prevencao-de-acidentes/intoxicacoes-exogenas/. Acesso em: 09 de dezembro de 2024.

ADALBERTO STUDART, et al. Medicina de emergência: abordagem prática (USP). 16a edição. São Paulo: editora Manole, 2022

DATASUS. **Doenças e agravos de notificação (SINAN)**. Ministério da Saúde. Disponível em: https://datasus.saude.gov.br/ acesso-a-informacao/doencas-e-agravos-de-notificacao-de-2007-em-diante-sinan/. Acesso em: 8 de dezembro de 2024.