Comparative Analysis of Congenital Toxoplasmosis Notifications in the Northeast Region Between 2020 and 2024

ESTER GOMES REIS[1], JOÃO MARCOS BASTOS ARAÚJO[2], ARISTEU VIEIRA DA SILVA[1]

[1]STATE UNIVERSITY OF FEIRA DE SANTANA, BAHIA, BRAZIL,[2]FEDERAL UNIVERSITY OF BAHIA, BAHIA, BRAZIL

Toxoplasmosis, a widespread zoonosis, is caused by Toxoplasma gondii. Congenital Toxoplasmosis (CT), acquired during pregnancy or reactivated in immunosuppressed individuals, leads to ocular and neurological damage or fetal death. In Brazil, its impact is linked to socioeconomic inequalities, poor sanitation, and limited healthcare access. This study examines CT distribution in Brazil, particularly in Bahia, assessing epidemiological data, confirmation rates, and sociodemographics.
A retrospective longitudinal study analyzed SINAN/SUS data (2020–2024). Cases were grouped by macro-region, focusing on the Northeast and Bahia. Microsoft® Excel® (2019) was used. From 2020 to 2024, 23,193 CT cases were reported: North (2,173), Northeast (6,722), Southeast (7,822), South (3,902), and Central-West (2,574). In the Northeast,
Pernambuco (1,325), Ceará (1,166), and Bahia (1,126) had the most cases. In Salvador, cases increased from 2020 to 2022, then declined in 2023.
Of the cases, 74.91% were in mixed-race individuals, followed by white (6.81%), black (6.36%), and Asian (0.54%). In Bahia, 57.17% of cases were confirmed. CT cases were concentrated in the Northeast, especially Bahia. Salvador had the highest notifications, followed by Vitória da Conquista and Ilhéus, suggesting greater surveillance. The data highlight the link between social vulnerability and incidence, revealing inequalities in diagnosis and prenatal care. The predominance in mixed-race individuals may reflect socioeconomic barriers. The lack of confirmation in some cases suggests the need for improved diagnostics and surveillance. Early detection and adequate care are essential to reducing CT morbidity and mortality.

Keywords: Congenital toxoplasmosis, Epidemiological surveillance, Health disparities