



Child malnutrition in Brazil: Public health issue that needs awareness



Malnutrition is one of the most comprehensive nutritional deviations in Brazil. It corresponds to a multi-factor disease, whose main problem lies in poverty (Agência Brasil, 2022). When malnutrition occurs in early childhood, it can be related to higher infant mortality, recurrence of infectious diseases and impairments in growth and development for age (Brasil, 2022).

In developing countries, child malnutrition is considered a public health issue, and, in Brazil, there are programs supporting the fight against hunger, such as: National School Feeding Program (PNAE, in Brazilian Portuguese); Brazil Aid; Promotion of Breastfeeding and Adequate Eating Practices in Childhood and National Programs for Vitamin A and Iron Supplementation, there are regions, cities and small municipalities where high rates of child malnutrition are still observed, it is the case of north and northeast regions (Agência Brasil, 2022). Covid-19 pandemic has enabled increase in malnutrition rates, due to the number of vulnerable communities affected by the health calamity that has happened worldwide (de Albuquerque et al., 2022).

A study conducted in state of Maranhão, northeast Brazil, on malnutrition and associated factors in quilombola children, suggests high prevalence of malnutrition is related to the environmental aspects of children's families, which, for the most part, are inserted in lower economic classes and with lower purchasing power (FIOCRUZ, 2022). These children are minorities, black, brown and yellow who are currently suffering from this public health issue (da Silveira et al., 2020).

The repercussion of being in this situation of social vulnerability lies in the deficit in psychomotor, neurological and immunological development (Brasil, 2022). Stunting is commonly associated with long-term food deprivation and frequent infections and this causes serious effects to the child, besides being the main indicator of infant mortality for groups under 5 years of age (da Silveira et al., 2020).

According to the data survey of Observa Infância, which brings together researchers from Fiocruz, they showed rates of child hospitalization due to malnutrition were the highest in 13 years. Two out of three hospitalizations were of black and brown children, the region with the most interactions was the midwest and the lowest was the southern region of the country (FIOCRUZ, 2022). Although the mortality rate has not been increased, child malnutrition is alarming because these children are vulnerable and the country needs to adopt more effective measures to combat these social disparities (da Santos, 2022), especially in the most needy regions, such as the north, northeast and midwest (FIOCRUZ, 2022).

The table below presents data regarding the rates of infant hospitalization of children under 1 year to 4 years of age, related to malnutrition in the months of January to August of the years 2020, 2021, 2022 divided into five regions of Brazil: north, northeast, southeast, south and

midwest. Temporal cut-off occurred considering the month of data collection and by the standardization of the information, so that it did not present bias. Data presented in (Table 1) were extracted from the Ministry of Health, specifically DATASUS (DATASUS, 2022).

Data showed a growth in total notifications related to childhood hospitalizations due to malnutrition. The increase in hospitalizations' rate can be justified by the pandemic moment experienced because of Covid-19, according to the Brazilian Institute of Geography and Statistics (IBGE) the Covid-19 turned the country's economic situation worrying: low economic growth (average of 1% in the last three years), high unemployment - 13.90% in 2020 (da Santos, 2022). Social distancing during the pandemic was necessary to prevent the spread of the virus, however it allowed the increase in unemployment in Brazil (de Albuquerque et al., 2022), leading to hunger in the country. As a whole, the socioeconomic vulnerability of Brazilian families increased significantly in the midst of the pandemic (do Nascimento, 2022).

Table 1 shows the northeast region is most affected by hospitalizations related to malnutrition, with a percentage growth of 13.80% from 2020 to 2022 within the temporal cut from January to August. This region presents vulnerabilities within its conditions, which are related to environmental, cultural, social and economic issues.

Nevertheless, the information presented points to the need for a critical look at public health problems related to child malnutrition and morbidity and mortality of children. The health crisis experienced by Covid-19 only highlights the fact that the country already had serious administrative and public health problems, one of which was child hunger (de Albuquerque et al., 2022). The pandemic highlighted the importance of the Unified Health System (SUS) and other social programs that seek equity, in addition to facilitating and regulating access to free care for those in need (do Nascimento, 2022). The most striking sign is the country's need not only to improve people's lives during the pandemic, but to act broadly through public policies aimed at reducing inequality and vulnerability (da Santos, 2022).

Funding support

No.

Table 1
Data on child hospitalization for malnutrition.

Region	2020	2021	2022
North Region	302	311	408
Northeast Region	978	1030	1113
Southeast Region	612	663	687
South Region	341	280	351
Midwest Region	176	221	298
Total	2409	2505	2857

Source: Ministry of Health - Brazil Hospital Information System (SIH/SUS). Morbidity List ICD-10: Malnutrition, malnutrition sequels and others nutritional deficiencies of children under 1 year to 4 years of age. <https://datasus.saude.gov.br/>.

Declaration of Completing Interest

None.

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Acknowledgements

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References

- Agência Brasil (2022). *Desnutrição aumenta no Brasil; índice é maior entre meninos negros*. Empresa Brasil de Comunicação. <https://agenciabrasil.ebc.com.br/saude/noticia/2022-07/desnutricao-no-brasil-e-maior-entre-meninos-negros-aponta-pesquisa>.
- de Albuquerque, R., Macedo, F. R., Galvã, L., Oliveira, E., de Leite Rolim Neto, M., & Rose Alencar de Menezes, I. (2022). Vaccination for COVID-19 in children: Denialism or misinformation? *Journal of Pediatric Nursing: Nursing Care of Children and Families*, 64, 141–142. <https://doi.org/10.1016/J.PEDN.2022.01.015>.
- Brasil (2022). *Ministério da Saúde - Desnutrição*. Portal Da Secretaria de Atenção Primária a Saúde. <https://aps.saude.gov.br/ape/pcan/desnutricao>.
- DATASUS (2022). *Ministério da Saúde*. Governo Brasileiro. <https://datasus.saude.gov.br/>.
- FIOCRUZ (2022). *Hospitalização de bebês por desnutrição atinge pior nível dos últimos 13 anos*. Fundação Oswaldo Cruz. <https://portal.fiocruz.br/noticia/hospitalizacao-de-bebes-por-desnutricao-atinge-pior-nivel-dos-ultimos-13-anos>.
- do Nascimento, E. B. (2022). Fome no Brasil em crianças e adolescentes como expressão da questão social e violação dos direitos humanos. *Revista Científica Multidisciplinar*, 3(1), e311033. ISSN 2675–6218. <http://dx.doi.org/10.47820/RECIMA21.V3I1.1033>.
- da Santos, E. S. (2022). *E a saúde de quem não come?: uma análise sobre a fome no Brasil*. Universidade Federal de Santa Catarina UFSC. <https://repositorio.ufsc.br/handle/123456789/237648>.
- da Silveira, V. N. C., Padilha, L. L., & Frota, M. T. B. A. (2020). Desnutrição e fatores associados em crianças quilombolas menores de 60 meses em dois municípios do estado do Maranhão, Brasil. *Ciência & Saúde Coletiva*, 25(7), 2583–2594. <https://doi.org/10.1590/1413-81232020257.21482018>.

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13 November 2022

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