

Children's epidemiology: aspects related to Brazilian health

Epidemiologia infantil: aspectos relacionados à saúde Brasileira

Epidemiología infantil: aspectos relacionados con la salud Brasileña

RESUMO

Objetivo: descrever aspectos epidemiológicos infantis referentes à saúde brasileira. Método: trata-se de uma revisão integrativa, da modalidade descritiva e qualitativa, organizada na primeira semana do mês de Janeiro, ano de 2022, nas bases de dados e bibliotecas: Scientific Electronic Library Online (SciELO) e Google acadêmico. Para realizar a busca, estabeleceu-se alguns critérios de inclusão e exclusão, foram reunidos 6 artigos, publicados entre os anos de 2017 a 2021. Resultados: Os parâmetros epidemiológicos encontrados foram abrangentes, averiguando resultados desde 1999 até 2019, ou seja, são dados em um período significativo para a pesquisa. Em relação ao tempo de publicação, os estudos contemplaram o ano de 2020 forma predominante. Conclusão: Foi contemplado na pesquisa, que no que concerne a epidemiologia infantil, os principais assuntos encontrados são: a criança na rede de atenção à saúde, mortalidade infantil, investigação de óbito e crianças com doenças crônicas e assistência à saúde.

DESCRIPTORES: Epidemiologia; Infantil; Brasil.

ABSTRACT

Objective: to describe children's epidemiological aspects referring to Brazilian health. Method: this is an integrative review, of the descriptive and qualitative modality, organized in the first week of January, in the databases and libraries: Scientific Electronic Library Online (SciELO) and Google go. To perform the exclusion, among the results found, up to the comprehensive results were found, or ascertaining 2021. Results: in a significant period for the research. Regarding the time of publication, the studies predominantly contemplate the year 2020. Conclusion: It was contemplated in the research, that with regard to child epidemiology, the main issues are found: the child in the health care network, infant mortality, death investigation and children with chronic diseases and health care.

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RECEBIDO EM: 07/03/22 APROVADO EM: 10/05/22

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INTRODUCTION

In the temporal trajectory, there were many social achievements in the field of health, through the Federal Constitution of 1988, the Municipal Organic Laws and, later, the Organic Laws 8,080 and 8,142 of 1990, which contributed deeply to outline the transformations in the Brazilian health model, as well as with regard to children's health. This set of actions provided an important decline in Infant Mortality.⁽¹⁾

The health system in Brazil, for many years, kept child health linked to maternal health through the Maternal and Child Health Care Policy. From 1984, Brazil implemented the Comprehensive Assistance Program for Children's Health (PAISC) and then the National Policy for Integral Attention to Children's Health (PNAISC) as a strategy to face adversities in the health conditions of the child population, specifically with regard to their survival.⁽²⁾

The PNAISC focuses on promoting health in an integral way, prioritizing children belonging to risk groups and seeking to qualify assistance and increase the coverage of health services. Actions include monitoring growth and development; encouragement of breastfeeding; control of diarrheal diseases and Acute Respiratory Infections (ARIs) in addition to immunization.⁽³⁾

The Brazilian Constitution of 1988 provides in its article 227 that it is a duty of the family, society and the State,

to offer and guarantee the child and adolescent, priority, right to health, food, leisure, culture and other benefits.⁽⁴⁾

The Child and Adolescent Statute, created on July 13th, 1990, was a great achievement for children and adolescents, regulating the articles of the Constitution referring to the guarantee of protection to childhood and adolescence, thus recognizing children and adolescents as subjects of rights. Changing the concept of care for children and adolescents, thus ensuring that their needs are met as a priority by the family, society and the State.⁽⁵⁾

The fight against infant mortality is, therefore, an old problem that has been faced. The Ministry of Health (MH) and the Pan American Health Organization (PAHO) together with the United Nations Children's Fund (UNICEF), in order to reduce the number of deaths from diseases prevalent in childhood, protocols were developed to be systematically developed by professionals from Basic Health Units (BHU) in child care, resulting in a favorable response.⁽⁶⁾

Integrated Management for Childhood Illnesses (IMCI) aims to reduce morbidity and mortality related to underlying diseases, such as acute respiratory infection (ARI), anemia, dehydration, diarrhea and malnutrition, contributing to the healthy growth and development of children. For this, it is necessary that health professionals maintain the practice of prevention and promotion, producing an early diagnosis and correct treatment.⁽⁷⁾ Thus, the objective is: to describe children's epi-

demiological aspects related to Brazilian health.

METHOD

This study is an integrative review, of the descriptive and qualitative modality. The research was organized in the first week of January, year 2022, in the databases and libraries available for access, which were: Scientific Electronic Library Online (SciELO) and Google academic. To carry out the search, some inclusion criteria were established, they are: articles in Portuguese, English and Spanish, free on the platforms, that respond to the objective of this research and published between the years 2017 to 2021. Excluded: abstracts and complete papers published in congress, experience reports, editorials and book reviews. The search criteria were based on the PRISMA steps. The research question followed the guidelines of the PICO strategy (acronym for P: population/patients; I: intervention; C: comparison/control; O: outcome/outcome) for its elaboration, which were: What are the descriptors related to child epidemiological health in the current literature?

The descriptors were selected from the descriptors in Health Sciences (DeCS), they are: Epidemiology (Epidemiologia) AND Children's (Infantil) AND Brazil (Brasil). The intention was to observe the available parameters regarding child health and epidemiology in Brazil, highlighting the main points found. A total of 88 articles on the topic were found, but wi-

thin the proposed theme in the objective of the article, only 6 could continue under analysis, after reading the titles, abstracts and articles in full. The reading followed in an organized and detailed way, in which the 6 articles were organized in a single table and discussed later in a descriptive way. The search was validated by two invited researchers working on the proposed theme.

RESULTS

In the table below, the following information relevant to the topic of the article was organized: name of authors, title, year of publication, epidemiological period of data collection, published journal.

The epidemiological parameters found were comprehensive, verifying results from 1999 to 2019, that is, they are data in a significant period for the research. Regarding the time of publication, the studies predominantly covered the year 2020, with four articles this year.

DISCUSSION

Child health is an important standard of living indicator, with emphasis on infant mortality, and it has a highly impacting character as a health indicator. Although the decline in the infant mortality rate is a Brazilian achievement, approximately 70% of deaths in children under one year of age are still considered preventable, that is, reducible by health actions.⁽¹²⁾

Infant mortality, composed of neonatal and post-neonatal deaths, is a coefficient that depicts the living conditions of a population, being used as an indicator of the level of development and quality of life of nations, as well as the quality and organization of the assistance provided at its various levels and organization of health services.⁽⁷⁾

To reduce infant mortality, Brazil has adopted several surveillance and epidemiology policies and actions for investigations. These began with the creation of the Unified Health System (SUS), which guaranteed universal access to health, from the Federal Constitution of 1988.⁽³⁾

TABLE 1: Characterization of publications found in the database search: João Pessoa, Paraíba, 2022.

Authors	Title	Year of publication	Epidemiologic period	Journal
Quixabeira MGP ⁽⁷⁾	Epidemiological indicators of maternal and child health status in Brazil from 2007 to 2016. <small>(Indicadores epidemiológicos do estado de saúde materno-infantil no Brasil no período de 2007 – 2016.)</small>	2019	2007 to 2016	Universidade Federal do Mato Grosso
Silva AAM da, Peixoto SV ⁽⁸⁾	Scientific production in Epidemiology in the Revista Ciência & Saúde Coletiva. <small>(A produção científica em Epidemiologia na Revista Ciência & Saúde Coletiva.)</small>	2020	1996 to 2019	Ciência & Saúde Coletiva
Dias BAS et al. ⁽⁹⁾	Spatial analysis of preventable infant deaths in Espírito Santo, Brazil, 2006-2013. <small>(Análise espacial dos óbitos infantis evitáveis no Espírito Santo, Brasil, 2006-2013.)</small>	2019	2006 to 2013	Epidemiologia e Serviços de Saúde
Silva SIS da, Moraes ACF de, Lisieski N. ⁽¹⁰⁾	Infant mortality: epidemiological profile of the middle Vale do Itajaí region. <small>(Mortalidade infantil: perfil epidemiológico da região do médio Vale do Itajaí.)</small>	2020	2014 to 2019	Revista Científica de Enfermagem
Reis LC ⁽¹¹⁾	Prevalence and epidemiological profile of congenital anomalies in Maranhão. <small>(Prevalência e perfil epidemiológico das anomalias congênitas no Maranhão.)</small>	2020	2001 to 2016	Universidade Federal do Rio Grande do Sul
Melanda VS ⁽¹²⁾	Case management and the assessment of maternal vulnerability as a strategy to face infant death in Brazil: the case of Paraná. <small>(A gestão de casos e a avaliação da vulnerabilidade materna como estratégia de enfrentamento ao óbito infantil no Brasil: o caso do Paraná.)</small>	2021	2008 to 2012	Universidade Nova de Lisboa
Martins IPM, Nakamura CY, Carvalho DR. ⁽¹³⁾	Variables associated with maternal and infant mortality: an integrative review. <small>(Variáveis associadas à mortalidade materna e infantil: uma revisão integrativa.)</small>	2020	1999 to 2018	Revista de Atenção à Saúde

Source: survey data, 2022.

Infant mortality, however, represents the living and health condition of a given

population. According to estimates by the Ministry of Health, in 2000, the infant

mortality rate (CMI) in the country was 26.1 per thousand live births, which was reduced to 12.4 per thousand live births in 2015.⁽⁹⁾

This expressive decline in infant mortality was mainly due to improvements in the population's living conditions, including the expansion of the water supply network, increased schooling and reduced fertility, in addition to the adoption of public policies aimed at specific actions, such as vaccination campaigns, breastfeeding programs, the introduction of the rotavirus vaccine and oral rehydration therapy in health care.⁽⁹⁾

Epidemiological Surveillance is defined by Law No. 8,080/90 as a set of actions that promote knowledge, detect or prevent changes in factors that may interfere

with individual or collective health, with the objective of proposing measures for the prevention and control of the main diseases or aggravations.⁽⁴⁾ Studies that address children's epidemiological data are relevant for the construction of public policies, in addition to strengthening health actions, new practices and ways of caring for children.^(13,11,10) In view of the findings, it is clear that the performance of state and municipal administrations is relevant in the process of professional training, early identification in child epidemiology, monitoring of cases and strengthening of health services.⁽¹⁴⁾

CONCLUSION

Thus, this study approached what was

initially proposed, reaching its objective in an effective and grandiose way. Child epidemiology is necessary to build advances in the area of health, by detecting and evaluating results relevant to the themes studied.

It was noticed that there are few studies that address the epidemiology related to child health, which implies the need for further research to deepen the topic and expand the knowledge of other health professionals and those interested in this type of study. It was contemplated in the research, that with regard to child epidemiology, the main issues found are: the child in the health care network, infant mortality, investigation of death and children with chronic diseases and health care.

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