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EPIDEMIOLOGICAL PROFILE OF INFANT MORTALITY DUE TO PNEUMONIA IN BRAZILIAN REGIONS

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Abstract: Pneumonia is an infectious inflammatory disease that affects the lungs and is one of the main causes of child death in the world. In Brazil, it is responsible for around 20% of deaths in children. The incidence is higher in areas with limited access to health care. Pneumonia can cause severe damage to the respiratory system, leading to respiratory failure and death in severe cases. The Southeast and Northeast were the regions with the highest number of deaths from pneumonia in children between 2016 and 2020. Therefore, it is important that those responsible are aware of the initial symptoms of the disease and that vaccination against pneumococci and other infectious agents be encouraged. Statistical analyzes are essential to monitor the evolution of the disease and the effectiveness of the measures implemented, with the aim of reducing deaths from pneumonia and promoting a healthier life for Brazilian children.

Keywords: Pneumonia, Infant mortality, Brazil.

INTRODUCTION

Infant mortality is a crucial indicator of a nation's health and reflects the effectiveness of health systems, as well as the socioeconomic and living conditions of the population. Among the various causes of child mortality, respiratory diseases, such as pneumonia, play a significant role, especially in developing countries. In the Brazilian context, understanding the epidemiological profile of infant mortality from pneumonia in different regions is essential to direct public health policies and effective interventions.

In this sense, pneumonia in children is a significant public health concern in Brazil and around the world. It is an inflammation of the lungs, usually caused by bacterial, viral or fungal infections and especially affects children under 5 years of age, and the infant mortality rate associated with pneumonia is an important concern.

According to data from the Ministry of Health, pneumonia is responsible for around 20% of child deaths in Brazil and it is estimated that the incidence is higher in precarious regions with limited access to healthcare. As it is a serious disease, especially in children, it requires immediate care, a fact that justifies its urgency, as pneumonia can cause serious damage to the respiratory system and lead to respiratory failure, shock or even death in more serious cases.

GOAL

To analyze the epidemiological profile of the child population aged 0 to 4 years, from 2016 to 2020, of fatal victims of pneumonia in Brazilian regions.

METHOD

Descriptive observational study with a quantitative approach, using secondary data obtained through the Ministry of Health/ SVS – Mortality Information System (SIM), available on DATASUS.

RESULTS AND DISCUSSIONS

After analyzing data from DATASUS, a total of 4243 cases of pneumonia were observed in the period from 2016 to 2020, of which 1659 (39.09%) were children born in the gestational period of 37 to 41 weeks, a period considered full-term. The prevalent maternal age was 22.27% aged 20 to 24 years, followed by 18.02% of mothers aged 15 to 19 years. Therefore, to understand the epidemiological profile of infant mortality from pneumonia, it is essential to analyze specific data from each region of Brazil.

The Northern Region of Brazil is characterized by vast rural areas and limited access to health services in some locations. This region also often faces challenges related

to infrastructure and access to medical care. Analysis of data from DATASUS - TABNET was able to reveal the incidence and distribution of infant mortality due to pneumonia in this region, accounting for a total of 1034 infant deaths between the periods of 2016-2020.

The Northeast is a region with great socioeconomic and infrastructure diversity. Some urban areas have relatively good access to health services, while rural and peripheral areas can face significant obstacles. Data analysis revealed a total of 1334 infant deaths within the analyzed period.

The Central-West Region, in turn, is home to the Federal District and states with different realities. While the Federal District has more developed health services, other parts of the region may have limited access. Data analysis can provide insights into the effectiveness of implemented health policies and identify gaps in the most affected areas.

The Southeast is the region with the greatest economic development in Brazil and is home to densely populated urban centers. However, it also faces greater challenges of inequality and socioeconomic disparities. Cases of childhood pneumonia may also have a close influence on the climate and urbanization of this region. Data analysis was able to show that this greater population concentration has a relevant impact on child mortality from pneumonia, accounting for a total of 1340 pediatric deaths.

Finally, the South of Brazil is known for its quality of life and relatively good access to health services, which is reflected in the number of child deaths from pneumonia within the period analyzed. This is the region with the lowest number of deaths, accounting for a total of 228 cases, that is, only 5.37% of the total number of deaths recorded.

Furthermore, according to the literature, it was possible to analyze that around 51.22% of deaths were of children under 1 year of age and that mothers, regardless of the age of their children, went directly to hospitals in 84.25% of cases.

CONCLUSION

Pneumonia in children is a significant public health concern in Brazil, but prevention measures, early diagnosis and adequate treatment have contributed to reducing the infant mortality rate associated with this disease.

The epidemiological profile of infant mortality from pneumonia in Brazilian regions is an important indicator of children's health and the effectiveness of regional health systems. Analysis of data from DATASUS - TABNET allows trends, risk areas and gaps in health services to be identified.

Analyzing these data, it is concluded that the region with the highest number of child deaths from pneumonia is the Southeast, with 31.58% of cases, followed by the Northeast region with 31.44%. It is necessary for those responsible to pay attention to the first symptoms of the disease, in addition to vaccination against pneumococci and other common infectious agents.

To understand this data is essential to direct public policies and allocate resources effectively, aiming to reduce child mortality from pneumonia across the country.

Therefore, statistical analyzes are crucial to monitor the evolution of the disease and the effectiveness of the measures implemented. Actions that promote equal access to quality healthcare and education on respiratory disease prevention can ultimately have a significant impact on improving the health of Brazilian children.

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