Inequalities in neonatal mortality in Latin America and the Caribbean

**Introduction**

The United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) has published the most recent neonatal mortality estimates, including data up to 2022. This report analyzes the estimates for 32 Latin America and the Caribbean (LAC) countries\(^1\) from 2015 to 2022, focusing on the inequalities between them. The findings of this report have the potential to significantly impact policy-making decisions and resource allocation in the region, making the document a vital source of reference for all stakeholders.

**Methodology**

The analysis follows a structured approach. First, country-level data are used to compare the most recent mortality estimates between countries and the percentage change between 2015 and 2022. Second, countries are grouped by quintile of GDP per capita\(^2\), from quintile 1 (group of countries with the lowest GDP per capita) to quintile 5 (group of countries with the highest GDP per capita). The weighted average in the mortality indicator is then estimated for each group. Inequality analyses are performed using the absolute gap as a summary measure of inequality, defined as the arithmetic difference between the weighted average for quintile 1 and that of quintile 5. Finally, a subregional analysis is performed by calculating the weighted average of the mortality indicator for each subregion\(^3\) based on the data for countries in that region. The absolute gap for each subregion is estimated as the arithmetic difference between the mortality indicator for the country with the highest value and that of the lowest value.

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[1] List of countries available in Annex A.
[3] Subregions and countries included in each subregion are available in Annex A.
Results

Figure 1 illustrates the neonatal mortality rate in 2022 for LAC countries and its percentage change during 2015–2022. The chart uses a vertical line to separates countries that achieved the SDG 3.2.2 target of fewer than 12 neonatal deaths per 1,000 births by 2022 (countries to the left) from those that have not (countries to the right). Additionally, a horizontal line separates countries where the neonatal mortality rate increased from 2015 to 2022 (countries above the line) from those where it decreased (countries below the line). Of particular concern is the case of Dominica, located in the top right quadrant, which has seen an increase in the neonatal mortality rate since 2015 and has the highest rate among the 32 analyzed countries, with more than 25 deaths per 1,000 live births. Furthermore, despite progress in reducing the neonatal mortality rate from 2015 to 2022, more efforts are still required to achieve the SDG 3.2.2 target of fewer than 12 neonatal deaths per 1,000 births in countries in the bottom right quadrant (Bolivia, Dominica, Guyana, Haiti, and Jamaica), especially in the Dominican Republic and Haiti, which have rates above 20 neonatal deaths per 1,000 live births. The data underscores the importance of immediate action and the need for increased resources and support. Finally, countries in the left-side quadrants have already achieved the SDG 3.2.2 target. The evidence underlines that most of the countries in LAC have already achieved the SDG 3.2.2 target and all high-income countries have achieved this target.

Figure 1: The neonatal mortality rate in 2022 for Latin America and the Caribbean countries and its percentage change during 2015–2022.

Source: Authors’ analysis based on neonatal mortality rate estimates from UN IGME for 32 countries of Latin America and the Caribbean.

Figure 2 presents a visual representation of the distribution of the neonatal mortality rate by quintile of GDP per capita. The first quintile comprises countries with the lowest GDP per capita, while the fifth quintile includes countries with the highest GDP per capita. As the data illustrates, the neonatal mortality rate is the highest in
the group of countries with the lowest GDP per capita, while it is the lowest in the countries with the highest GDP per capita. Furthermore, there has been a general decrease in the neonatal mortality rate in each group of countries over recent years, particularly in the group of countries with the lowest GDP per capita. Nonetheless, there has been little progress in reducing inequalities. While the absolute gap in the neonatal mortality rate between quintiles 1 and 5 decreased from 9 to 7.9 between 2015 and 2019, it has remained stagnant from 2019 to 2022. This indicates the need for further efforts to address these inequalities.

**Figure 2: The distribution of the neonatal mortality rate in Latin America and the Caribbean by quintile of GDP per capita from 2015 to 2022**

Source: Authors’ analysis based on neonatal mortality rate estimates from UN IGME and GDP per capita in constant 2021 international dollars from the World Bank for 32 countries of Latin America and the Caribbean.
Figure 3 illustrates the evolution of the neonatal mortality rate and its absolute gap by LAC subregion from 2015 to 2022. In 2022, the two Caribbean subregions (Latin and non-Latin) still had neonatal mortality rates above the SDG 3.2.2 target of fewer than 12 deaths per 1,000 live births. The Latin Caribbean subregion (comprising the Dominican Republic and Haiti) has the highest neonatal mortality rate, at over twice that of other subregions in 2022. The Non-Latin Caribbean subregion has the second highest rate. Further progress is needed in these regions to save more lives and reach the SDG 3.2.2 of fewer than 12 deaths per 1,000 live births. On the other hand, the Andean Area, Mesoamerica, and the Southern Cone all have relatively low and similar neonatal mortality rates. In terms of the inequalities, the Non-Latin Caribbean is the subregion with the most significant absolute gap (difference in the neonatal mortality rate between the countries with the lowest and highest values), which has steadily been increasing since 2015. In this subregion, the country with the highest neonatal mortality rate has had over 20 more deaths per 1,000 live births than the country with the lowest rate. The absolute gap in other subregions is lower than ten and has been generally decreasing since 2015, although at a slower rate. Considering the evolution of the neonatal mortality rate and its absolute gap, more significant progress is required in countries in the Non-latin and Latin Caribbean subregions. It is crucial to redouble efforts to reduce preventable neonatal deaths.

Figure 3: Evolution of the neonatal mortality rate (left) and its absolute gap (right) by subregion of Latin America and the Caribbean from 2015 to 2022

Source: Authors’ analysis based on neonatal mortality rate estimates from UN IGME and GDP per capita in constant 2021 international dollars from the World Bank for 32 countries of Latin America and the Caribbean.
Recommendations:

Based on the analysis presented, the following recommendations are made to governments:

- Establish robust systems and tools for data collection and analysis to monitor and evaluate inequalities in neonatal mortality, ensuring that the data collected are accurate, complete, and up to date.
- Invest in education and awareness programs that inform the population about strategies to prevent neonatal mortality.
- Develop and implement specific interventions aimed at reducing inequalities in neonatal mortality.
- Support local and regional research on the causes and solutions for inequalities in neonatal mortality, promoting collaboration between academic and governmental institutions.

Furthermore, the following advocacy activities are recommended:

- Use the findings of the report to raise awareness among decision-makers and mobilize resources that support initiatives to reduce inequalities in neonatal mortality in the region.
- Form alliances with international organizations, NGOs, and local stakeholders to implement comprehensive strategies that effectively address inequalities in neonatal mortality.
- Advocate for inclusive and equitable policies that prioritize neonatal health, ensuring that no child is left behind.
- Utilize the evidence generated by the report to influence the formulation of policies and programs, demonstrating the need for data-driven interventions to achieve sustainable improvements in health.
- Engage communities in the design and implementation of interventions, ensuring that solutions are culturally appropriate and sustainable.
- Develop periodic reports and communication materials that highlight the progress and challenges in reducing neonatal mortality, using these documents to keep the issue on the public and political agenda.
### Annex A: Countries included in the analysis by subregion

<table>
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<tr>
<th>Subregion</th>
<th>Country</th>
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| Andean Area        | 1. Bolivia (Plurinational State of)  
                    | 2. Colombia  
                    | 3. Ecuador  
                    | 4. Peru  |
| Latin Caribbean    | 5. Dominican Republic  
                    | 6. Haiti  |
| Mesoamerica        | 7. Belize  
                    | 8. Costa Rica  
                    | 9. El Salvador  
                    | 10. Guatemala  
                    | 11. Honduras  
                    | 12. Mexico  
                    | 13. Nicaragua  
                    | 14. Panama  |
| Non-latin Caribbean| 15. Antigua and Barbuda  
                    | 16. Bahamas  
                    | 17. Barbados  
                    | 18. Dominica  
                    | 19. Grenada  
                    | 20. Guyana  
                    | 21. Jamaica  
                    | 22. Saint Kitts and Nevis  
                    | 23. Saint Lucia  
                    | 24. Saint Vincent and the Grenadines  
                    | 25. Suriname  
                    | 26. Trinidad and Tobago  
                    | 27. Turks and Caicos Islands  |
| Southern Cone      | 28. Argentina  
                    | 29. Brazil  
                    | 30. Chile  
                    | 31. Paraguay  
                    | 32. Uruguay  |