

IUSSP WEBINAR SERIES



# Quantifying COVID-19-related excess mortality in Latin America: Demographic analyses of death registration data



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# What are the essential issues when analyzing the COVID-19 data?

## Key issues in COVID-19 data at sub-national level in Brazil and Ecuador

Key issues	<b>Brazil</b> Civil registry data: <a href="https://transparencia.registrocivil.org.br/especial-covid">https://transparencia.registrocivil.org.br/especial-covid</a>	<b>Ecuador</b> Ministry of Health data: <a href="https://www.salud.gob.ec/coronavirus-covid-19/">https://www.salud.gob.ec/coronavirus-covid-19/</a>
<b>Date of reference</b>	Occurrence, registration and publication	Publication
<b>Place of death coverage</b>	All COVID-19 deaths	Only COVID-19 deaths occurring in hospitals
<b>COVID-19 definition</b>	Underlying cause of death	Laboratory confirmation
<b>Magnitude and dynamics</b>	Daily and cumulative death counts (updated daily)	Cumulative death counts (updated intermittently)
<b>Sub-population disparities</b>	Geographical disparities in the distribution of health services	Age-biased reporting patterns



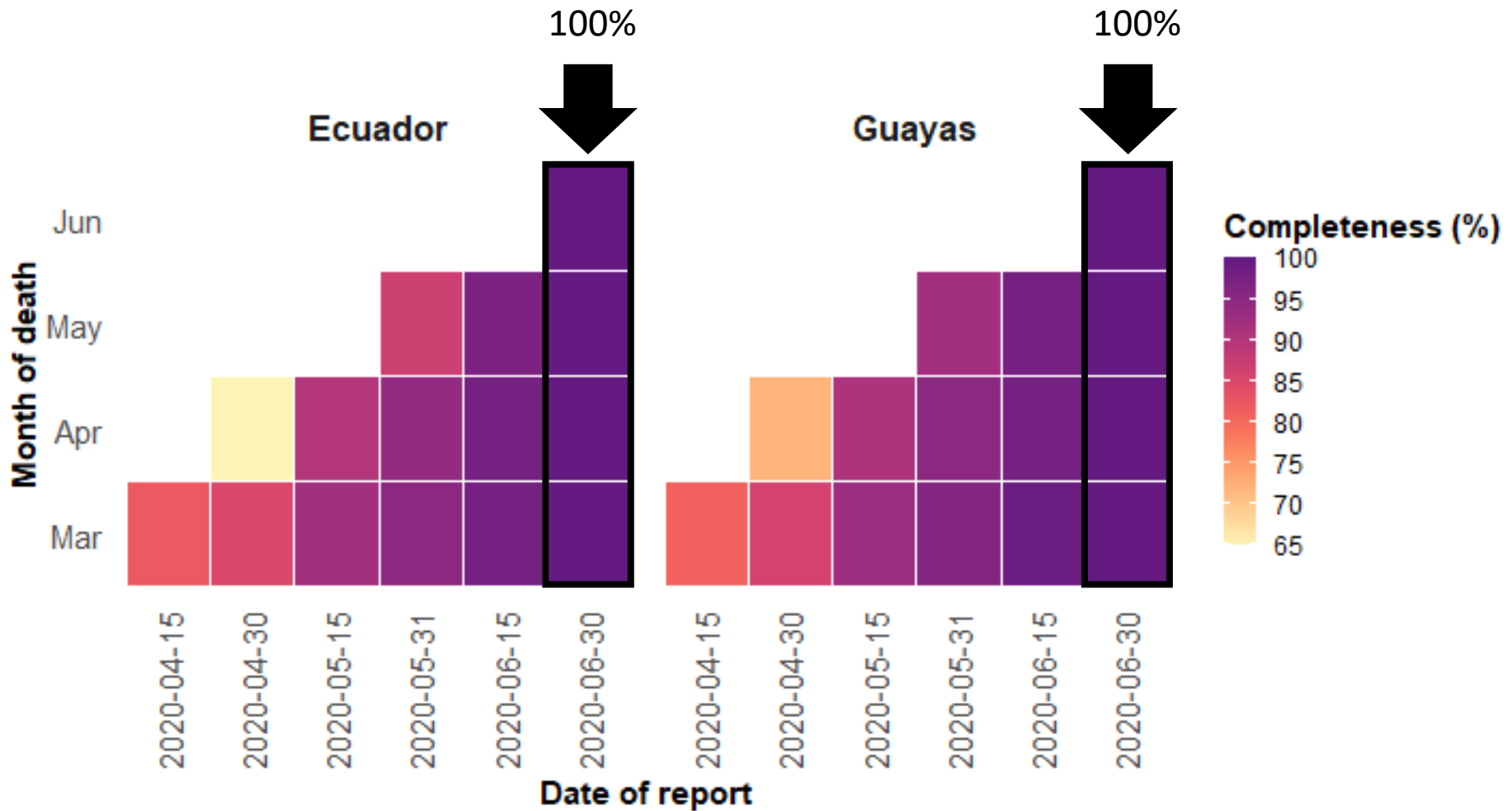
## **Obstacles overcome by Lima et al. when quantifying COVID-19-related excess mortality in Latin America**

1. COVID-19 related deaths definition and confirmation, and their changes through the pandemic evolution.
2. The under-registration coming from limited number of COVID-19 tests per capita and focalized testing strategy (e.g., only after symptoms).
3. Coverage in COVID-19 death counts linked to the place of death (e.g. only accounting by health care facilities data).
4. Spatial differences in the coverage of the Civil Registration and the Vital Statistical Systems in each country.

## Challenges when quantifying COVID-19-related excess mortality in Latin America at subnational levels

Challenges	Considerations
Variability in registration time lag among subnational areas	Timing of data collection

## All-cause cumulated death counts in Ecuador and Guayas from March to June by date of report





## Challenges when quantifying COVID-19-related excess mortality in Latin America at subnational levels

Challenges	Considerations
<p>Variability in registration time lag among subnational areas</p>	<p>Timing of data collection</p>
<p>Difference between place of residence of the deceased and place of occurrence</p>	<p>Usual proportion of this difference in the largest cities / small areas Migration</p>