

The Need for All-Cause Mortality Data to Aid Our Understanding of the COVID-19 Pandemic in Latin America

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 See also Martinez-Folgar et al., p. 1839.

Latin America has been severely hit by the COVID-19 pandemic. The pandemic's impact has caused a health crisis in the region of a magnitude hitherto unseen in recent history, threatening to negate decades of work that had brought sizable improvements in decreasing mortality rates. Early evidence highlighted sharp increases in mortality from COVID-19 in 2020 in several countries, including Brazil, Chile, Colombia, Costa Rica, Ecuador, Honduras, Mexico, and Peru.¹ Many of these countries were in fact epicenters of the pandemic at some point. However, the lack of timely, accessible, comparable testing strategies and accurate data on COVID-19 mortality and infections makes the true toll of the pandemic difficult to assess in a timely manner. One approach to overcoming these limitations is by analyzing all-cause mortality.

All-cause mortality data offer the possibility of estimating excess deaths in a population. Defined as the difference between the observed deaths and the number of deaths that would have

occurred in the absence of the pandemic, "excess deaths" is a key metric to estimate and track the burden of the pandemic in contexts with poor testing strategies and lack of COVID-19 mortality data. In addition, excess deaths, as an indicator, allow the quantification of the indirect effects of the pandemic beyond COVID-19 deaths. For example, mortality from accidents can decline because of lockdowns, whereas mortality from chronic degenerative diseases, such as diabetes and cancer, can increase because of the lack of treatment caused by fear of COVID-19 and overstretched health care systems.

Data on all-cause deaths are widely available in most countries in Latin America through national statistics offices, but they are often reported with a considerable lag, which makes it impossible to plan interventions in the short term. To put this into perspective, mortality statistics for a given year are made available more than six months into the next year in many countries; in Venezuela it is very difficult to have

access to existing data²; and in other countries, such as Bolivia and Haiti, vital statistics are not reported.³ The COVID-19 pandemic has highlighted the importance of mortality data and the need to report them as soon as possible to inform public health policies and interventions. At the very minimum, data must be made available that is stratified by demographic characteristics such as age and sex and ideally by week or month and place of occurrence to estimate changes in mortality during the pandemic. Even though vital registration systems in many Latin American countries are not perfect and data come with systematic errors, such as incomplete coverage and age misreporting,^{3,4} data are essential for tracking the evolution and effects of the pandemic on mortality.

In the current issue of *AJPH*, Martinez-Folgar et al. (p. 1839) use all-cause mortality data from Guatemala's National Registry of Persons and population estimates and life tables from the United Nations to estimate excess mortality and related years of life lost in Guatemala in 2020. Drawing on my own experience as a Latin American demographer, I find this effort to assess the devastating impacts of the pandemic imperative. The authors report that in 2020 there were approximately 8000 excess deaths (approximately 10% relative excess). At its peak in 2020, the mortality rate was 73% higher than expected in July. Mortality was higher among men than women, and excess deaths were concentrated among individuals older than 60 years. Because Martinez-Folgar et al. do not attempt to correct for systematic biases in death counts, their reported mortality rates may be higher after correcting for completeness and systematic biases

because of misreporting age at death.⁴ Reporting whether excess deaths occurred at home, hospitals, or elsewhere is a salient point of the study. Martínez-Folgar et al. found that excess deaths predominantly happened at home. This result highlights the lack of access to health care infrastructure and medical treatment, which is not uncommon in many Latin American countries.⁵

Health inequalities exist in Latin America. It is reflected in cross-country comparisons of life expectancy⁶ but also persistent at the subnational level, with unequal access to medical services and disparities in mortality. Emerging evidence shows that increases in mortality vary substantially across regions in Brazil, Chile, Ecuador, and Peru.⁷ Similarly, a strong association between socioeconomic status and increased excess mortality has been found in Santiago, Chile's capital,⁸ whereas indigenous people and low socioeconomic status individuals showed the highest mortality risk in Colombia in 2020.⁹ Increased mortality in 2020 has affected life expectancy estimates too. In Brazil and Chile, life expectancy at birth for males dropped by 1.6 years and 1.3 years, respectively, whereas female life expectancy at birth dropped almost one full year in both countries.^{10,11} It is likely that many other countries in the region experienced substantial drops in life expectancy at birth in 2020,¹ and I hypothesize that people with socioeconomic disadvantages have suffered the most from the consequences of the pandemic in Latin American countries.

A question that remains is whether health inequalities have widened during the pandemic and whether the scars left by this health crisis will last in the long term. With a third wave of COVID-19 cases in sight and slow vaccination rollout in low- to middle-income

countries, the prospects are not positive for 2021. In a context of high levels of inequalities combined with low access to health care, increased prevalence of comorbidities, and lack of timely interventions,¹² Latin America generally and Guatemala in particular need further efforts and funding to quantify and address the detrimental consequences of the pandemic. Action is needed in terms of timely access to data on all-cause mortality and other information relevant to inform public health policies and interventions, to mitigate the immediate impact of this health crisis but also to minimize the long-term health effects and potential widening inequalities that may come about from overstretched health care infrastructures and disrupted social and economic systems. *AJPH*

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CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

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