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Perspective Piece

The COVID-19 Pandemic in Peru: What Went Wrong?

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Abstract. Despite the early adoption of a national lockdown and other restrictions, Peru has been severely impacted by the COVID-19 pandemic. Having reached a milestone of more than 1,200 deaths per one million inhabitants by February 2021, important messages can be learned from how the pandemic was handled. Possible explanations for poor outcomes are a fragmented and already overwhelmed public health sector, lack of infrastructure and specialized personnel to tackle the pandemic, and deficient leadership from health authorities.

In the past 30 years, Peru has experienced several outbreaks of public health concern. Yearly dengue outbreaks have been reported since 1990. The following year, cholera caused approximately 500,000 cases; although Peru was the most affected country in Latin America, the case fatality was low (< 1%).[1] Thereafter, AH1N1 influenza (2009), chikungunya (2014), and Zika (2016) have affected the country.[2] Despite being one of the fastest growing economies in Latin America, these outbreaks were not drivers of a major public health reform in Peru, which has been severely impacted by the COVID-19 pandemic. Important messages can be learned from our current experience with the pandemic.

The first confirmed COVID-19 case was reported on March 6, 2020, and a week later, a strict lockdown was imposed by the government. Although Peru was the first country in Latin America to implement such a severe measure, further spread throughout the country was inevitable. A rapid increase of reported deaths reached a temporary plateau by June; however, a slow, albeit progressive ease of restrictions has been associated with a rise in mortality in the midst of a second wave, reaching a milestone of more than 1,200 deaths per one million inhabitants (Figure 1). What went wrong?

First, the healthcare system had been working at its limit for decades and was not prepared to handle any additional burden. Peru has one of the lowest investment rates in healthcare compared with other countries in the region; expressed as a percentage of the GDP, it was 4% during 1995 and has increased to 5.5% in 2017.[3] As a result, only some hospitals and primary care facilities were built to compensate for the population growth. Peru also has a low number of intensive care unit (ICU) beds (5/100,000 inhabitants) compared with Colombia (7/100,000) and Argentina (26/100,000), of which 80% of these beds are clustered in Lima.[4] Moreover, the healthcare system is fragmented into a public system that covers approximately 60% of the population, whereas the rest are cared with the social security (health insurance for workers), the armed forces, and the private sector, with all of them operating independently. Lack of oxygen, hospitalization, and ICU beds continue to be shortcomings; more importantly, there is a scarcity of trained health professionals to work in ICUs.

Second, the very limited molecular testing capacity was handled with the use of rapid antibody tests. This may have confirmed cases presenting late after symptom onset or past infection but were not useful to cut transmission by facilitating the isolation of cases when they are infectious. The use of serological tests for screening, even among asymptomatic persons, persists up until today. Few laboratories in Peru were prepared to conduct molecular tests, for which expansion of testing at the national level should be replaced by a robust symptom-based case detection method with a strategic use of molecular tests and contact tracing. In addition, disassociated health information systems with inconsistencies between regional and central counts often provide incomplete and, untimely, description of the pandemic. One of the most reliable sources of information has been provided by the national mortality system, which has sadly reported an excess mortality of 94,000 compared with 2019.[5] Nonetheless, some of the excess can be attributed to the indirect effects of the pandemic and the limited attention to non–COVID-19 conditions in the healthcare setting.

Next, there was a clear lack of leadership from the regional authorities and those in the health sector, which appointed three different ministries of health during the first four months of the pandemic. Many regional governments operated independently, providing different recommendations to their constituents or even rejecting the imposed focalized lockdown. Sadly, corruption continues to be widespread, with an abundance of ongoing legal processes to regional authorities and healthcare administrators, concerning inflated prices in contracts and purchase orders.

Moreover, one big mistake of the authorities has been the release of the treatment guidelines based on expert opinion and anecdotes to the media. In a country where most medicines are obtained over the counter, hydroxychloroquine, azithromycin and, ivermectin were openly recommended and soon became unavailable at the pharmacies as a result of the mass purchase by a public desperate for ambulatory treatment. The use of ivermectin as preventive therapy has unfortunately become a known practice among the population despite efforts from the medical community to inform otherwise. Of course, the supposed miraculous effect of drugs with unproven efficacy only delayed proper treatment and rocketed their retail price eventually, affecting those who relied on said medications.

Last, economic support from the government to the population during the lockdown, including nearly one million

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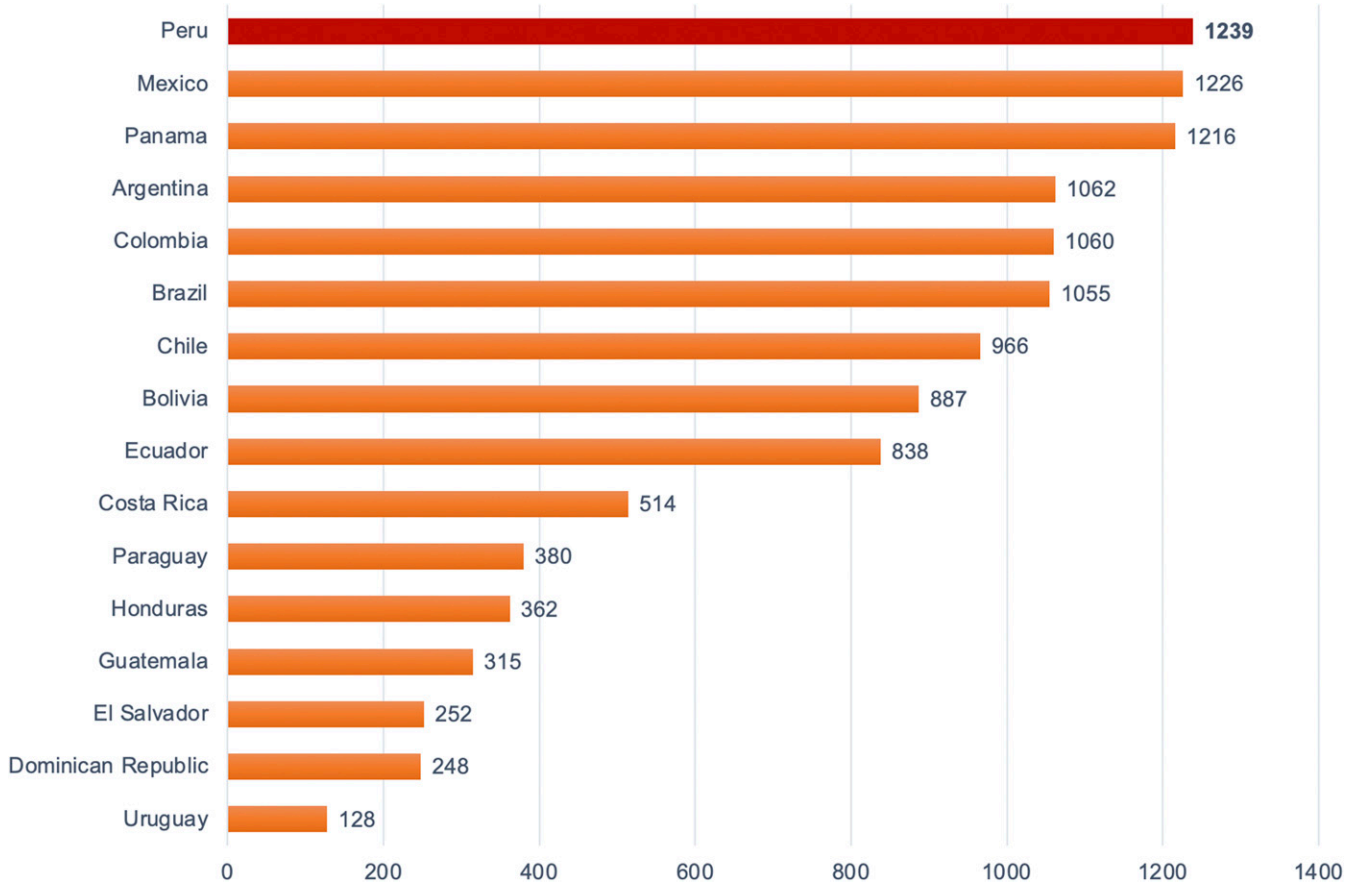

FIGURE 1. COVID-19 deaths per million: Latin America and the Caribbean. Adapted from Prof. Steve H. Hanke, the Johns Hopkins University. Source: worldometers.info (updated as of February 2, 2021). This figure appears in color at www.ajtmh.org.

Venezuelan immigrants, has been insufficient. The government decided to deliver funds to the population that lives in extreme poverty; however, there was a faulty implementation, and, in many cases, the funds did not reach the intended population on time. The economic impact forced many people to ignore lockdown restrictions and prematurely return to public markets and streets, fueling the pandemic. In addition, the hardship faced led to approximately 30,000 immigrants to return to Venezuela by road. Immigrants were particularly struck as 80% had no formal jobs and only 9% had free access to the healthcare system.[6] Whereas the previous epidemics could not revert the huge exodus driven by poverty and terrorism caused in the 1980s–1990s where millions of Peruvians left their homeland in the countryside to live in big cities, the economic blow of the lockdown forced at least 167,000 people to leave Lima and set out to the countryside,[7] with poorer hospital and diagnostic capacities even less prepared to handle this influx. The migration was disorganized and contributed to the spread of the virus within the country.

What does the future hold for the country? The pandemic has revealed the decades-long lack of investment in sanitation and public health. Currently, a second wave seems to be taking a similar shape to the one experienced last year. With no effective antivirals available, a never-ending struggle between lockdown measures and economic improvement, and mass vaccination predicted by mid-2022, we are going to continue reporting more cases, several of which will not be able to receive proper care. Is a healthcare reform on the horizon? Ignoring what we are facing is something we cannot allow.

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