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SPECIAL ISSUE



Latin American healthcare systems in times of pandemic

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Abstract

The COVID- 19 pandemic is a critical test for the already overburdened and mostly underfunded public healthcare systems of Latin America. In a region that suffers from severe inequalities, public healthcare systems are the only source of medical care for a large sector of the population who work in the informal economy or are unemployed. State-run hospitals and clinics are already overstressed by continuous demand for treatment of vector-borne diseases and community-acquired infections as well as high rates of non-communicable diseases. Ideological misconceptions and denial among Latin America's political leaders prevented timely preparations for the pandemic and added to chronic governance problems. As ethical expertise in Latin America focuses on research ethics, few hospitals in the region have functioning clinical ethics committees or clinical ethics policy, forcing healthcare personnel to make excruciating treatment decisions in an environment dominated by material scarcity and public distrust. This essay examines the emergence of COVID-19 in Latin America and the serious challenge that it poses for Latin America's public healthcare systems.

KEYWORDS

resource allocation, health care, Latin American public healthcare systems, inequalities, COVID-19

1 | INTRODUCTION

The COVID-19 pandemic is testing the response capacity of Latin American public healthcare systems like nothing before.

With much of its population living in poverty, Latin America regularly faces widespread health problems due to overcrowding, limited sanitation, food insecurity and poor nutrition, and unpredictable environmental conditions that affect the poor. Underfunded state-run hospitals are, in most cases, the only source of medical care available to this population.

In March 2020, as summer turned to autumn in the Southern Hemisphere, many Latin American countries were already overburdened by the seasonal spike in vector-borne diseases such as dengue, chikungunya and yellow fever, in addition to the year-round demand caused by tuberculosis (TB) and non-communicable diseases such as diabetes, hypertension, chronic obstructive pulmonary disease and cancers. Both infectious and non-infectious diseases affect a

disproportionately large number of poor people who must rely on their country's public healthcare system to receive care. The appearance of COVID-19 in this environment portends disaster.

2 | SITUATION IN LATIN AMERICA

The first reported death from COVID-19 in Latin America occurred in Argentina on March 8, 2020. The deceased was a 64-year-old male who had recently returned to Buenos Aires from Italy.¹ As of March 22, 2020, Argentina had reported 224 confirmed cases and 4 deaths. On that the same date, Chile reported that 632 individuals had tested positive for COVID-19, Brazil had 1539 registered cases

¹BBC Mundo, (March 17,2020), Coronavirus: Argentina registra la primera muerte por el Covid-19 en América Latina. Retrieved 1 April, 2020, from https://www.bbc.com/ mundo/noticias-america-latina-51787545.

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and 25 cumulative deaths, Bolivia 24 cases, Colombia 231 cases, Ecuador 789 cases with 14 cumulative deaths, Mexico 251 cases, Peru 363 cases and 5 deaths, Venezuela 70 confirmed cases and no deaths reported, and Uruguay 135 cases. In Central America, Costa Rica reported 134 cases, Guatemala 19 cases, El Salvador 3 cases, Nicaragua 2 cases, and Panama 245 cases of COVID-19.² While these numbers also reflect the variable availability of testing, underreporting cannot be ruled out, especially in countries where public healthcare systems are particularly weak. Even with these numbers, Latin America's infected population is increasing exponentially, coinciding with global trends.

Containment strategies such as isolation, mandatory home quarantine for travelers returning from abroad, travel restrictions, closing borders, prohibition of public gatherings, and encouragement of social distancing are being implemented increasingly in some Latin American countries, although these strategies are not uniform.

As of the writing of this article, most Latin American countries have suspended or are planning to suspend classes at schools and universities, and are closing their borders and preventing the arrival of travelers from Europe, Asia and, in some cases, the United States. Cuba, whose economy relies heavily on tourism, is still receiving flights from Europe and has expressed confidence in its ability to detect and isolate suspicious cases.³

Misconceptions and conspiracy theories from both ends of the ideological spectrum are also widespread, as reflected in the way that the Brazilian and Mexican administrations initially responded to the COVID-19 pandemic alerts.

On the right, Brazil's federal government and the administration of President Jair Bolsonaro have refused to adopt measures at the national level, leaving the states, municipalities and the senate to establish such containment strategies as suspension of classes and prohibition of public events in some Brazilian states.⁴ Despite recommendations against public gatherings provided by the Brazilian Minister of Health, on March 15, President Bolsonaro called for countrywide street demonstrations against the Congress and the Supreme Federal Tribunal, which he perceives to be his principal political opponents.⁵

On the left, Mexico's President Manuel Lopez Obrador, who has publicly expressed his concerns that COVID-19 alerts could be an opposition strategy to destabilize his administration, used a press conference to advise his followers against social distancing

Tracker. Retrieved March 23, 2020, from https://www.kff.org/global-health-policy/fact-sheet/coronavirus-tracker.

measures, proclaiming "There are those who say that because of coronavirus you should not hug. But you must hug, nothing will happen.⁶

According to Human Rights Watch, an international nongovernmental organization, the Mexican President "...has shown outrageous unwillingness to provide accurate and evidence-based information about the risks of a virus that has already killed thousands of people worldwide."⁷

Similarly, when the first cases of COVID-19 began to be reported in Nicaragua, President Daniel Noriega called for a "demonstration of love", inviting people to get together and hug in the streets. The Nicaraguan Ministry of Health has not yet imposed any restrictions on travel from affected areas or any mitigation measures.⁸

Misjudgment and overconfidence also blurred situational awareness for preparation and mitigation in Latin America while the COVID-19 infection was expanding in Asia. When asked on February 7 about the seriousness of COVID-19 infection internationally, the Argentinean Minister of Health, Dr. Gines Gonzalez Garcia, minimized the possibility that the virus could reach Argentina explaining that "...The situation in Argentina is better than that of other countries because first, we are very far away; second, there are no direct flights, and third, we are in summer, so "the virus is less effective."⁹

Confronted with the exponential multiplication of cases on March 9, the minister responded that he had not expected the virus to have arrived so fast.¹⁰

3 | LATIN AMERICAN PUBLIC HEALTH INFRASTRUCTURE AND RESPONSE CAPABILITIES

The need to respond promptly to viral outbreaks is not unknown to Latin America. Mexico suffered the region's most recent pandemic threat in 2009: the H1N1 Influenza virus. Mexican public health authorities responded in a timely manner and their decisions were supported by most of the political sector. Containment measures

²KFF Global Health Policy. (March 23, 2020). COVID-19 Coronavirus

³Lavandera, M.L. (March 3,2020). Hasta el Momento no es Necesario Cerrar las Fronteras Cubanas. Juventud Rebelde. Retrieved March 17,2020, from http://www. juventudrebelde.cu/cuba/2020-03-13/hasta-el-momento-no-es-necesario-cerrar-lasfronteras-cubanas.

⁴La Diaria. (March 16,2020). Las medidas ante el Coronavirus adoptadas en América Latina. Retrieved March 17,2020, from https://ladiaria.com.uy/articulo/2020/3/ las-medidas-ante-el-coronavirus-adoptadas-en-america-latina/.

⁵Folha de Sao Paulo. (March 16,2020). Bolsonaro ignora crise do coronavírus, estimula e participa de ato pró-governo e contra Congresso e STF. Retrieved March 17,2020, from httpshttp://www1.folha.uol.com.br/poder/2020/03/bolsonaro-deixa-isolamento-do-coronavirus-e-de-carro-participa-de-ato-pro-governo-na-esplanada.shtml.

⁶Infobae. (March 12,2020). Hay que abrazarse, no pasa nada. Como ha Reaccionado el Gobierno de Lopez Obrador ante el Coronavirus. Retrieved March 17,2020, from https:// www.infobae.com/america/mexico/2020/03/12/abracense-no-pasa-nada-asi-enfre nta-el-gobierno-de-lopez-obrador-la-pandemia-del-coronavirus/.

⁷Human Rights Watch. (March 26,2020). Mexico: Mexicans Need Accurate COVID-19 Information López Obrador Misinforms Public on the Health Risks of the Pandemic. Retrieved march 26,2020, from https://www.hrw.org/news/2020/03/26/ mexico-mexicans-need-accurate-covid-19-information.

⁸La Prensa. (March 13 2020). Amor en tiempos de Covid-19 Régimen Orteguista convoca a manifestación mientras el resto de los países prohíben las manifestaciones masivas. Retrieved March 26 2020, from https://www.laprensa.com.ni/2020/03/13/ nacionales/2650737-amor-en-tiempos-de-covid-19-regimen-orteguista-convo ca-a-manifestacion-mientras-el-resto-de-paises-prohiben-las-concentraciones-masivas.

⁹Ambitoweb. (March 17,2020). Coronavirus: Gobierno realizó una reunión interministerial para analizar la prevención. Retrieved March 17,2020, from https://www. ambito.com/politica/coronavirus/coronavirus-gobierno-realizo-una-reunion-interminis terial-analizar-la-prevencion-n5081651.

¹⁰Infobae. (March 3 2020). Ginés González García: "Yo no creía que el coronavirus iba a llegar tan rápido, nos sorprendió". Retrieved 1 April, 2020, from https://www.infob ae.com/sociedad/2020/03/10/gines-gonzalez-garcia-yo-no-creia-que-el-coronavirusiba-a-llegar-tan-rapido-nos-sorprendio/.

were well coordinated and, importantly, the Mexican people trusted their political leaders and accepted not only the many temporary restrictions imposed on their movements and activities, but also the preventive measures that affected their daily habits. At the end of the H1N1 outbreak in August 2009, 187 deaths and 1000 hospital admissions had been reported,¹¹ numbers far lower than they might have been.

The situation is totally different today, not only because COVID-19's transmissibility, morbidity and mortality are much higher than those of H1N1,¹² but also because, as echoed throughout the Mexican media, the country's healthcare system is unprepared to deal with an abrupt increase in demand due to the pandemic.

The Mexican Social Security Institute (Instituto Mexicano de Seguro Social, IMSS) is responsible for providing medical services to all Mexican workers and their immediate family members. Although IMSS operates a crucial national network of hospitals, it was only on March 17, almost 3 months after the COVID-19 alarm sounded in China, that IMSS officials ordered an inventory of ventilators available in its facilities.¹³ Meanwhile, Mexican President Lopez Obrador reaffirmed his position against taking any mitigation measures.¹⁴

Most of Latin American countries' healthcare systems have limited ability to respond to the pandemic due to the already overwhelming demand generated by the persistent challenge of TB, especially in Peru, Mexico and Brazil,¹⁵ and the ongoing health emergency of vector-borne diseases such as hemorrhagic dengue and yellow fever across the continent.

According to the most recent data from the Pan American Health Organization (PAHO), during the first seven months of 2019, 2 million people contracted dengue across Latin America, 723 of whom died. "The ten countries currently most affected by dengue, in terms of new cases per 100,000 inhabitants, are Nicaragua, Brazil, Honduras, Belize, Colombia, El Salvador, Paraguay, Guatemala, Mexico and Venezuela."¹⁶ The magnitude of dengue's spread is reflected in the fact that cases are multiplying even in Buenos Aires City, a place where, because of its urban characteristics, such an epidemic was totally unthinkable not long ago.

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Yellow fever has been reported across South America, from Brazil to Panama,¹⁷ and its ongoing transmission is also straining the capability of Latin American health systems.

Venezuela is an extreme example of a healthcare system totally in tatters, even before the COVID-19 crisis.

The capacity of the Venezuelan healthcare system has been degraded by the emigration of healthcare personnel due to inadequate salaries and deteriorating working conditions, as well as shortages of medicine and equipment and deficient ancillary services. Healthcare personnel now practice a precarious medicine, unable to count on even basic diagnostic and therapeutic tools. Venezuelan hospitals are affected by a lack of medicines and in some cases, even the absence of electricity and running water.¹⁸ It is also likely that the information provided by Venezuelan health authorities is not accurate. As of March 22, only 70 COVID-19 cases had been reported officially and new cases of COVID-19 are not being registered, but the Venezuelan media is warning that Venezuela has the world's steepest contagion curve.¹⁹

The COVID-19 pandemic will surely only exacerbate the crisis already present in Venezuela, ravaging the remains of the almost nonexistent Venezuelan healthcare system, with deadly consequences for the Venezuelan people.

Elsewhere across Latin America, even in the region's more stable nations, both the Gross Domestic Product (GDP) and central government healthcare expenditure are significantly lower than in developed countries. In 2018, according to the United Nations Economic Commission for Latin America (CEPAL), 16 Latin American countries dedicated less than 4% of their GDP to healthcare; Chile was the only exception at 4.5%.²⁰ The consequences of this chronic lack of investment in public healthcare systems are reflected in the difficulties that vast sectors of the population have in receiving adequate medical care under normal conditions.

The COVID-19 pandemic will only exacerbate these inequalities by threatening the infrastructure and capacity of state-owned healthcare systems, generating needs of a magnitude that neither healthcare professionals nor policy makers will be able to meet.

Prior to the pandemic, the few instances in which discussion of policies on the allocation of healthcare resources and the rationing of certain procedures has become public have generated deep distrust of policy makers' motives across the vast sectors of

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¹¹Córdova-Villalobos, J.A., Sarti, E., Arzoz-Padrés, J., et al. (2009). The influenza A (H1N1) epidemic in Mexico. Lessons learned. *Health Res Policy Sys* 7, 21 https://doi.org/10.1186/1478-4505-7-21.

¹²Baldo, V., Bertoncello, C., Cocchio, S., et al. (2016). The new pandemic influenza A/ (H1N1)pdm09 virus: is it really "new"?. *Journal of preventive medicine and hygiene*, 57(1), E19–E22.

¹³De Mola, C. (March 20, 2020). Apenas antes de ayer el IMSS preguntó a sus hospitales si tenían respiradores para COVID 19. El Universal. Retrieved March 20, 2020, from https://www.eluniversal.com.mx/opinion/carlos-loret-de-mola/apenas-antier-el-imsspregunto-sus-hospitales-si-tenian-respiradores.

¹⁴Gonzalez, M. March 19, 2020). México no aplicara medidas drásticas contra el COVID 19 y estas son las razones de AMLO. Retrieved March 20,2020 from https://cnnespanol. cnn.com/video/amlo-amuleto-conferencia-contagio-presidente-coronavirus-covid-persp ectivas-mexico-cnne-vo/.

¹⁵Woodman, M., Haeusler, I. L., Grandjean, L. (2019). Tuberculosis Genetic Epidemiology: A Latin American Perspective. *Genes*, 10(1), 53. https://doi.org/10.3390/genes 10010053.

¹⁶Pan American Health Organization, World Health Organization, PAHO-WHO. (August 15, 2019). PAHO warns of the complex situation of dengue in Latin America and the Caribbean. Retrieved March 17,2020 from https://www.paho.org/hq/index.php?optio n=com_content&view=article&id=15365:paho-warns-of-the-complex-situation-ofdengue-in-latin-america-and-the-caribbean&Itemid=135&Iang=en.

¹⁷Center for Disease Control, CDC. (May 5, 2018). Areas with Risk of Yellow Fever Virus Transmission in South America. Retrieved March 17,2020 from: https://www.cdc.gov/ yellowfever/maps/south_america.html.

¹⁸Shepherd, A. Crisis in Venezuela.. BMJ(2019); 364 https://doi.org/10.1136/bmj.I1277.

¹⁹Soto, N. (March 17,2020). Venezuela Has the Fastest Contagion Curve in the World. Caracas Chronicles. Retrieved March 17,2020 from: https://www.caracaschronicl es.com/2020/03/17/venezuela-has-the-fastest-contagion-curve-in-the-world/.

²⁰CEPALI. (2018). Portal de Inversion Social en América Latina y el Caribe América Latina (17 países): Gasto en Salud del Gobierno Central, 2018^a (En porcentajes del PIB). Retrieved 27 March 2020, from https://observatoriosocial.cepal.org/inversion/es/ grafico/america-latina-17-paises-gasto-salud-gobierno-central-2018a-porcentajes-pib.

society accustomed to politicians' exploitation of governmental power structures to obtain benefits that are generally inaccessible to the majority.

The asymmetry between the governed and the ruling class may be explained, in part, by Latin America's largely dysfunctional past, a past shaped by colonialism, military coups, partisan violence, corruption, foreign intervention and disregard for the rule of law. The political use of the COVID-19 pandemic by some Latin American leaders is creating additional tensions that contribute to the erosion of a basic sense of community and principles of solidarity necessary for public support of mitigation strategies. The politicization of the pandemic may also undermine the public trust essential to future suppression initiatives.

Thus, in Argentina, President Alberto Fernandez highlighted that it was "those privileged who traveled to Europe" who brought COVID-19 to Argentina.²¹ By deliberately signaling that it was Argentina's middle and upper classes who were responsible for an illness whose victims now come primarily from among the most disadvantaged, Fernandez is further deepening the existing gap between his supporters and opponents. If the situation worsens as expected, this declaration may generate unforeseen consequences in the already broken Argentinean social network, as Fernandez has implied that a broad sector of Argentinean society is not worthy of solidarity.

Healthcare professionals across Latin America will likely be drawn into this seeming conflict between the haves and have nots, as at some point soon clinical providers will be forced to make difficult and unavoidable choices for allocating already scarce healthcare resources, including hospital beds, ventilators, and medication among the ill and dying who will flood hospitals and clinics. In most developed countries institutional clinical ethics committees have been working with physicians, nurses, and hospital administrators to create policies and protocols that define clinical benchmarks for starting, withholding and stopping healthcare treatment, establishing the proportionality of interventions in light of the general scarcity of resources in the context of the COVID-19 pandemic.

Although clinical ethics committees and consultation systems are well established in Europe, Canada, and the United States, few hospitals in Latin America have such structures since most of the bioethics initiatives in the region are mostly oriented to research ethics. Few individuals have formal ethics education in clinical ethics²², therefore overburdened health officials and caregivers will often be left with the responsibility for making excruciating choices LITEWKA AND HEITMAN

on emergency policies and triage without prior discussion of how to prioritize their allocation of time and resources.

4 | CONCLUSION

The COVID-19 pandemic will unquestionably disrupt the life of the global community, probably for a very long time.

The full scope of the pandemic's worldwide economic, social and political consequences is difficult to foresee at this time. Perhaps the only thing certain is that societies with more healthcare resources will be able to recover more quickly from the loss of life and economic instability. Even before this crisis erupted, most Latin American countries were facing severe problems related to governance, economics and the capacity of their healthcare systems to meet the most basic needs of the huge pockets of their population who depend on public systems for their healthcare.

If the COVID-19 pandemic behaves in Latin American as has been forecasted by the UK Imperial College Response Team, which predicts that hospitals will be overwhelmed and many people will die²³ in even the well-funded and efficient healthcare systems of high-income countries, it is to be assumed that the outcomes in Latin American countries will be dire.

The healthcare sector will undoubtedly be the most affected by the consequences of a global crisis of unpredictable scale. It is to be hoped that, beyond the ideological differences and structural problems that have affected Latin America for decades, its ruling classes can rise to the occasion and find common ground to rebuild what is left, once the COVID-19 pandemic becomes only a bad memory for those who live through it.

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²¹Mendoza Post Política. (March 24, 2020). Fernández contra los "privilegiados" que trajeron el coronavirus del exterior. Retrieved March 24,2020 from https://www.mendo zapost.com/nota/146545-fernandez-contra-los-privilegiados-que-trajeron-el-coron avirus-del-exterior/.

²²Saenz C, Heitman E, Luna F, Litewka S, Goodman, Macklin R. (2014). Twelve years of Fogarty-funded bioethics training in Latin America and the Caribbean: achievements and challenges. J Empir Res Hum Res Ethics. 9(2):80-91. Available from: https://www.ncbi. nlm.nih.gov/pmc/articles/PMC5523831/.

²³Ferguson, N., et al. (March 16, 2020). Imperial College COVID 19 Response Team Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. Retrieved March 17,2020 from https://www.imperial.ac.uk/media/ imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID 19-NPI-modelling-16-03-2020.pdf.

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