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Love in the time of COVID-19: negligence in the Nicaraguan response

The response of the Nicaraguan government to the coronavirus disease 2019 (COVID-19) pandemic has been perhaps the most erratic of any country in the world to date. Directly contradicting mitigation strategies recommended by WHO, President Daniel Ortega has refused to encourage any physical distancing measures. Vice President Rosario Murillo (Daniel Ortega's wife) instead called on thousands of sympathisers to congregate in street marches under the slogan "love in the time of COVID-19". By downplaying the danger of the pandemic and increasing the risk of community transmission in the second-poorest country in the western hemisphere,1 the Nicaraquan government is violating the human rights of its citizens.

Nicaragua is the only country in central America that has yet to declare a state of emergency in response to the outbreak. Although the country has recommended self-quarantine for travellers coming from particular countries, the government has not restricted travel, closed borders or, most importantly, suspended schooling or public events.

A leaked document from the Nicaraguan Health Ministry has underscored the probable consequences of this haphazard response. Public health officials have privately predicted that up to 32500 Nicaraguans could test positive for COVID-19, 8125 of whom could have severe symptoms and 1016 of whom might require intensive care beds.2 Nicaraqua has only 160 ventilators available, 80% of which are currently in use.3 If the government's senior leadership continues to ignore calls for strong mitigation efforts, the fragile public health infrastructure could collapse under the pressure of widespread infection.

Meanwhile, other central American countries have responded proactively to the pandemic. El Salvador instituted a nationwide 30-day quarantine, along with strict travel restrictions.4 Neighbouring Costa Rica and Honduras have also closed borders. Indeed, nearly every country in Latin America-including poorly-resourced and crisis-ridden governments, such as those of Venezuela, Honduras, and Guatemala—has taken action to mitigate the spread of the disease. The Salvadoran president Nayib Bukele criticised the absence of social distancing measures in Nicaragua, suggesting that the country's negligence could pose a risk to the region and undermine the plans of neighbouring countries to confront the pandemic.5

The health infrastructure and medical community in Nicaragua, already beset by difficulties inflicted by a capricious political regime, are ill-equipped to withstand a massive influx of severely ill patients to hospitals. At 0.9 hospital beds per 1000 people, Nicaragua lags behind the Latin American average of 2.2 beds per 1000 people.6 Further, Nicaragua is the poorest country in central America, with a third of Nicaraguans living in poverty and nearly 10% living in extreme poverty.1 Other countries with more resources than Nicaragua are struggling to contain infections and deaths from the virus.

This situation underscores the need for resource-limited countries to focus on early prevention and containment efforts as their main strength in the fight against COVID-19. Given the Nicaraguan government's careless response and the country's fragile health infrastructure, it is crucial that WHO, PAHO, and leaders of the global health community take immediate action to help prevent the loss of thousands of lives.

We declare no competing interests.

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- Central Intelligence Agency. Central America: Nicaragua. The World Factbook. 2020. https:// www.cia.gov/library/publications/the-worldfactbook/geos/print_nu.html (accessed March 23, 2020).
- 2 Ministerio de Salud (Nicaragua). Protocolo de preparación y respuesta ante el riesgo de introducción de virus coronavirus (COVID-19): Febrero 2020. 2020. https://confidencial.com. ni/wp-content/uploads/2020/03/Protocolo_ Coronoavirus.pdf (accessed March 23, 2020).
- Aburto WM. Hospitales tienen menos de 160 ventiladores para pacientes de covid-19. 2020. https://confidencial.com.ni/hospitales-sinventiladores-suficientes-pacientes-criticospor-covid-19/ (March 23, 2020).
- 4 Horwitz L, Nagovitch P, Sonneland HK, Zissis C. Where is the Coronavirus in Latin America? Americas Society Council of the Americas. 2020. https://www.as-coa.org/articles/where-coronavirus-latin-america#elsalvador#elsalvador (accessed March 23, 2020).
- Q24N. El Salvador president concerned about neglect of the Daniel Ortega government of coronavirus. Q Costa Rica News. 2020. https://qcostarica.com/el-salvador-presidentconcerned-about-neglect-of-the-danielortega-government-of-coronavirus/ (accessed March 23, 2020).
- 5 WHO. Global Health Observatory data repository: Hospital bed density, data by country. World Health Organization. 2020. https://apps.who.int/gho/data/view.main. HSO7v (accessed March 23, 2020).



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