

US Sanctions on Cuba Further Imperil Global Vaccine Equity

The results are in and deeply troubling: in the absence of rapid, comprehensive vaccination rollouts, SARS-CoV-2 runs amok, mutates into more contagious variants and, for the unvaccinated, kills at a breakneck pace. Witness the Delta variant that research suggests is more than twice as contagious as the original strain that ripped the world asunder in 2020. While vaccinated people can contract and transmit Delta, the probability of developing serious illness is significantly reduced. [1] This is good news for populations in high- and upper-middle income countries—where 80% of the global vaccine stock has been “hoarded,” in the words of WHO Director-General Dr Tedros Adhanom Ghebreyesus.[2]

The news is not at all good, however, for the unvaccinated: contracting Delta means a one-way ticket to the hospital, all too often followed by the morgue. Recent data from the Centers for Disease Control and Prevention (CDC) reveal that nearly all recent COVID-19 hospitalizations and deaths in the United States are among the unvaccinated.[3] Death is even more certain for the 99% of people in low- and middle-income countries (LMICs) with still no access to vaccines.[4] Meanwhile, the world’s richest nations continue to gobble up the critically insufficient supplies, not nearly offset by tardy, token donations to the most vulnerable countries.

Across Africa, despite national COVID-19 strategies in place (see Dzinamarira this issue on response in Rwanda, South Africa and Zimbabwe), a mere 1% of people have been fully vaccinated and the case fatality rate is 18% above the global average. WHO estimates deaths there from coronavirus, accelerated by the Delta variant, surged by 80% in July.[4,5]

In Latin America and the Caribbean, 16.6% of people have been fully vaccinated. Nevertheless, vaccination rates are widely uneven (more than 65% fully vaccinated in Chile, but only 1% in Honduras and Guatemala). And this is the region hardest hit by the pandemic thus far: with just 8.4% of the world’s population, it accounts for 32.5% of COVID-19–related deaths.[6,7] As the region struggles to find answers, health systems threaten collapse, essential primary health care services have been interrupted and routine childhood immunizations disrupted. Not surprisingly, infection rates are rising in areas of Mexico, Guatemala, Paraguay, Colombia and elsewhere.[8]

Poverty, including extreme poverty, unequal and slow vaccine distribution, plus fragmented, segmented and underfunded health systems compound the complex situation, according to Alicia Bárcena, Executive Secretary of the UN Economic Commission for Latin America and the Caribbean (ECLAC). The picture is bleak: not enough critical-care beds, personnel, technology, medicines or money. Relying on imports for oxygen, PPE, COVID-19 tests and of course, vaccines, has drained national coffers while millions get sick and thousands die.

The way out of this grim scenario, say Bárcena and other regional experts, is through investing in primary health care systems and a “concerted regional health strategy...for reducing external dependence.”[7,9] This has prompted ECLAC’s Comprehensive Plan for Health Self-Sufficiency, adopted by the

Community for Latin American and Caribbean States (CELAC) at their recent meeting. The Plan calls for regional vaccine procurement, a clinical trials platform, accelerated vaccine development, harmonization of regulatory authorities, access to intellectual property and an inventory of regional capacities.

Cuba, with a universal health system anchored by community-based primary care and supported by an adroit, experienced biotechnology sector, embraced the approach expressed by Bárcena and colleagues once COVID-19 was detected in the country in March, 2020. “Reducing external dependence” indeed: the first Cuban SARS-CoV-2 vaccine candidate that began clinical trials is named Soberana (Sovereign). And as the pandemic progressed, Cuba became the first in Latin America and the Caribbean to develop a proven COVID-19 vaccine.

But for Cuba, self-reliance is not a matter of choice or strategy. It’s a matter of survival.

It’s a matter of survival As one of his last salvos, US President Trump dealt another blow to Cuba by placing it on the list of State Sponsors of Terrorism, providing no evidence for the move. That brought to 243 the tally of additional economic, commercial and financial sanctions heaped on the island by his administration.[10] Now, contradicting his own campaign promises, President Biden has adopted Trump’s punitive gambit as policy: every one of the 243 sanctions is still in place—amidst the greatest global health crisis of our times.

The labyrinth of tightened restrictions includes blacklisting a host of state-run companies, Cuban financial institutions responsible for family remittances and even some 400 hotels on the island, the latter move targeting tourism, a major hard-currency earner for Cuban public and private businesses alike. The health sector has been especially hard hit, the US policy reportedly costing it \$198.3 million between April and December, 2020.[11] Higher-priced intermediaries and farther shipping distances become the rule when US government licenses are required for export to Cuba—from anywhere in the world—of any item with as little as 10% US components. Just four banks in the world will now transfer funds to Cuban entities.

As early as April, 2020, a shipment of ventilators to Cuba was blocked when the European manufacturing companies (IMT MEDICAL AG and ACUTRONIC) were acquired the US company Vyaire Medical Inc.[12] Similarly, US policy has hindered international aid donations of face masks, PCR tests, gloves and syringes, all fundamental for controlling COVID-19.

And what is worse now, Cuban vaccine developers cite the US sanctions as hindering and even blocking purchase of dozens of equipment, supplies and ingredients for clinical trials and production—reagents, filtration tanks, potassium chloride solution, purification systems and more.[11]

Such continued punishment-as-policy is reprehensible. It is inhumane. It is also, in the context of COVID-19, lethal. The

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permitting unfettered export and re-export of any and all pandemic-response items such as medicines and medical devices. The countries: Iran, Syria and Venezuela.[13] But not Cuba.

Support for Cuba's 11 million people during the pandemic was reduced to a July State Department Fact Sheet apparently encouraging humanitarian donations,[14] when in reality it includes nothing new, much less an easing of restrictions for exports. Calls by President Biden for vaccine equity, human rights, regional stability and integration, and easing Cubans' suffering all ring hollow while his White House champions punishment during a pandemic.

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The fact is that, despite US sanctions, Cuban scientists have taken five vaccine candidates through advanced clinical trials. The first, Abdala, received Emergency Use Authorization (EUA) from the country's national regulatory authority on July 9 after phase 3 clinical trials showed 92% efficacy; another with comparable efficacy is expected to receive EUA soon.

As of this writing, nearly 11 million doses have been administered, and more than 25% of the population has been fully vaccinated.[15] Clinical trials are also ongoing for use of the vaccines in youngsters and convalescent patients; for a nasally-administered vaccine; and for a number of COVID-19 treatments and much-needed medical equipment, such as ventilators. (See our exclusive with Olga Lidia Jacobo, Director of Cuba's National Regulatory Authority, this issue).

US policy intended to hobble the Cuban government actually takes aim at the world's poorer countries

Given the track record of Cuban biotechnology and the export potential for the new vaccines, it becomes clear that a US policy intended to hobble the Cuban government actually takes aim at the world's


poorer countries, which could stand to benefit from Cuban science to address the dearth of life-saving vaccines for their populations. Several countries in Latin America, Asia and Africa have already expressed interest.

The world still needs production and equitable distribution of several billion more vaccine doses to ramp up immunity and prevent new variants from taking hold, and no one is protected unless that immunity can be achieved more evenly on a global scale. Yet, at least two main manufacturers are already boosting sticker prices: this August, Pfizer and Moderna raised prices to the European Union, despite \$41 billion in net profits already accrued.[16]

Year two of the pandemic, emboldened by Delta and other variants of concern, offers us a second wakeup call. As

businesses, schools and governments rush to do what they tiptoed around before—whether mask up or vaccinate—so, too, the world more squarely faces facts. We are all challenged to work together or perish, to substitute nationalism with internationalism, sanctions with collaboration.

In a sobering open letter to President Biden (in our new documents section, **Keynotes**, this issue), top Cuban scientists and vaccine developers put it this way: “during the pandemic, science reiterates that (politics aside) we are all in this together...the essential question, not only for Cuba and the US, but also for human civilization, is whether nations can respect each other enough to exist side-by-side and cooperate.”[17]

Compiling this issue of **MEDICC Review** has been a Herculean effort, as Cuba and many in Latin America are in the throes of the worst COVID-19 wave to date. We are grateful to reviewers, authors, issue coordinators, translators and our whole team. 

The Editors

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