

A dose of hope: What the world can learn from Cuba's vaccination campaign



Cuba's Abdala vaccine has proven to be an effective and inexpensive tool against the covid pandemic (Source: [DownToEarth](#))

Just over two years ago, on [May 10, 2021](#), Cuba began its vaccination campaign against Covid-19 - with its own vaccines, something only a small number of countries can claim, including no other Latin American country. In the meantime, the pandemic has long since been replaced by other headlines. Time for a look back. Where do Cuba's vaccines stand today, and what lessons can be learned for other countries from Cuba's response to the pandemic?

Finding its own way thanks to available biotech Know-how

Cuba in spring 2021: The country is in lockdown (again). After cautious opening steps in the winter of 2020, the delta variant arrives on the island and drives the incidence up within a very short time. The population had previously little contact with the virus. While measures such as mandatory masks in public spaces and mobility restrictions were effective against the original variant, with the arrival of Delta the "lockdown wall" began to crumble. This was also because many measures were becoming increasingly difficult to enforce due to the increasingly tense economic situation.

Cuba's hopes at the time had two names: "Soberana 02" and "Abdala," two of the most promising vaccine candidates of a total of five that were in development as of summer 2020. "We realized we didn't have the money to buy vaccines, so we had to develop our own. And in the shortest possible time," said Rolando Pérez Rodríguez, head of science and innovation at state pharmaceutical company BioCubaFarma. The story goes that President Díaz-Canel went before the leading vaccine developers at various institutes in an emergency meeting with a single question: "Are you really sure you are capable of developing a vaccine

against this virus?" When they answered in the affirmative, the decision was made: Cuba will develop Covid-19 vaccine on its own.

This was based on existing knowledge of protein-based vaccine production, a technology dating back to the 1980s, when Cuba was building its biotechnology industry at Fidel Castro's initiative. The basis for the Soberana vaccine family was a tetanus vaccine, while a hepatitis B vaccine served as the template for Abdala.



Nearly 90 percent of the Cuban population is fully vaccinated against Covid-19 (source: [Cubadebate](#)).

The completion of clinical trials (in which Abdala was [shown to have a high efficacy of 92 percent](#), while Soberana reached 62 percent against symptomatic infections) and the emergency approval for Abdala granted in June 2021 could not wait any longer: by then the Delta wave had brought the Cuban health care system not only to the brink of collapse, but beyond it. Bed and ventilation capacities reached their limits in the summer of 2021, and in some cases schools and universities had to be converted into hospital camps. The U.S. sanctions, which were repeatedly tightened at the time, were doing their part: "For more than a year, these sanctions have been a real obstacle to the procurement of mechanical ventilators, face masks, diagnostic kits, reagents, vaccination syringes and other necessary materials to fight COVID-19," described the NGO Oxfam in May 2021. One of the demands of the protests on July 11 of the same year, quite different from those in parts of Europe at the same time, was "¡Queremos vacuna!" - "We want vaccine!". At the time, the vaccination campaign had reached only 27 percent of the population, while the overload of the health care system continued to worsen daily.

In November of that year, Cubans overtook Germany in vaccination coverage, and by Jan. 1, 2022, the vaccination rate was 86 percent, increasing slightly to 89 percent today. One key to quickly pulling the rug out from under the pandemic was early and comprehensive vaccination of children and adolescents. Here, Cuba leads the world. It was a measure that allowed schools and universities to open quickly.

Even after the official end of the pandemic emergency by the WHO in May, reporting in Cuba continues. After remaining in the <1 per million range for months, the 7-day incidence recently rose slightly to levels around three. Meanwhile, the second booster campaign for at-risk groups is underway, and covid-related excess mortality is expected to approach zero.

"Inherited market"

So was Cuba's vaccination campaign a complete success? Not quite. The lack of WHO approval threw a wrench in the Cubans' plans to make a low-cost Corona vaccine available to the world and recoup the cost of developing it. Approval for Abdala, even after submission of data to the WHO, remains pending. One problem is the extremely high hurdles and bureaucratic requirements, which are not limited to the vaccines as such, but extend to certification of fire safety systems in the laboratory. Other manufacturers such as the Chinese "Sinopharm" have withdrawn their applications. In an interview with the German Public News Emission "[Tagesschau](#)", Bert Hoffmann, an expert on Cuba and its vaccination program, spoke of an "inherited market" and criteria that were "knitted according to first-world standards," with which pharmaceutical companies can keep smaller competitors at bay.

Meanwhile, the issue of WHO certification is no longer a priority in Cuba either. After publication of the results of the clinical studies in the renowned journal "[The Lancet](#)" and approval by the Mexican, Argentinean and Brazilian authorities, Cuba is at least open to sales in Latin America. The Pan-American Health Organization praised Cuba's efforts, and with [certification](#) by the prestigious Mexican drug regulator "Cofepris," there was a de facto green light for sales on the continent. Countries such as Vietnam, Syria and Iran were and are also interested in the Cuban vaccines, while African countries are hampered from purchasing them under the Covax initiative due to the lack of WHO approval. As the Washington Post writes in a [recent article](#) titled "Next pandemic, let Cuba vaccinate the world," the development of the Cuban Corona vaccines cost a total of only \$50 million, a fraction of what Biontech and Moderna needed in funds. A dose of Abdala costs only six U.S. dollars, less than a third of the amount charged for a shot of Biontech. In addition, Cuba's vaccines require only moderate refrigeration, which is an advantage, especially in developing countries.

Still, acquiring Corona vaccines is a financial challenge for countries in Asia and Africa, and the Balkans have also long been left alone on this issue by the EU. Cuba has proven to the world that effective vaccines do not have to be expensive. From the beginning, the island was willing to share them with the world at a low cost, which could have saved many lives. The economic burden of the vaccination campaign would also have been much less with inexpensive vaccines, especially for poorer countries. With future pandemics in mind, the world would be well advised to join the Washington Post's appeal: Let Cuba vaccinate the world, or at least give them a fair chance to do so. ([Cubaheute](#))