Sick, Desperate and Turning to Chlorine 'Cure'

By María Silvia Trigo, Anatoly Kurmanaev and José María León Cabrera

TARIJA, Bolivia — In Cochabamba, high in the Bolivian Andes, people line up daily outside pharmacies on the central plaza, eager to buy the scarce elixir they hope will ward off Covid-19: chlorine dioxide, a kind of bleach used to disinfect swimming pools and floors.

Experts say drinking it is pointless at best and hazardous at worst. But in Bolivia, where people have been hospitalized after ingesting chlorine dioxide, regional authorities are testing it on prison inmates, the national Senate last week approved its use and a top lawmaker has threatened to expel the World Health Organization for opposing its medical use.

Julio César Baldivieso, a local soccer hero and former national team captain, told a local television station that because Cochabamba's hospitals "don't have tests, they don't have materials, they don't have protective equipment," he and his family had turned to chlorine dioxide to treat their coronavirus symptoms.

Bolivians have a lot of company in resorting to unproven and even dangerous treatments to prevent or treat infection. In every part of the world, hard science has had to compete for attention with pet theories, rumors and traditional beliefs during this pandemic, as in the past.

President Jair Bolsonaro of Brazil showing a box of hydroxychloroquine to supporters outside of the Alvorada Palace in Brazil, in a frame from a video posted on his official facebook page on July 19.

But interest in dubious medicines has been especially high recently in Latin America, where the virus is raging uncontrolled and many political leaders on the right and left are promoting them, whether out of genuine faith or a desire to offer hope and deflect blame.

In a region where few people can afford quality medical care, alternative treatments are widely touted on social media and exploited by profiteers.

"The people feel desperate when confronted with Covid-19," said Santiago Ron, an Ecuadorean biology professor, who has clashed with proponents of supposed treatments, including lawmakers. "They are very vulnerable to pseudoscientific promises."

Coronavirus has infected more than three million people and killed about 160,000 in Latin America, according to official figures, making the region one of the worst-hit by the pandemic. And experts and statistical analyses indicate that the real toll is far higher, concealed by limited testing and medical resources, and by some governments' resistance to publicly acknowledging the scope of the crisis.

Health workers caring for a coronavirus patient at a tent hospital in Santa Cruz, Bolivia, this month. Enrique Canedo/Agence France-Presse — Getty Images

Covid-19 has battered already-fragile health care systems, and lockdown measures have devastated economies without bringing the virus under control.

Scientists are testing a wide range of unproven treatments, but the odds of any one of them being helpful are considered low, and some of them are known to be potentially harmful. In many cases, there is no solid evidence yet as to whether they work against the coronavirus.

One such drug generating intense interest is ivermectin, which is used to treat intestinal worms. Two Brazilian cabinet ministers announced on Monday that they had tested positive for the coronavirus, and one of them said that he was treating it with ivermectin, among other drugs.

The government of Peru bought ivermectin to fight the pandemic, and has continued to promote it, even after the W.H.O. said it should not be used for coronavirus. That has fueled the explosion of an illegal market for the veterinary version of ivermectin, forcing the Peruvian government — and the U.S. Food and Drug Administration — to warn citizens against using drugs intended for farm animals.

Even so, in the small town of Nauta, in the Peruvian Amazon, the local government and religious groups went so far as to give veterinary ivermectin to adults and children as young as 4, according to local media and a human rights group.

Health care workers on a door-to-door testing drive in Villa El Rosal near La Paz, Bolivia, this month. Juan Karita/Associated Press

The United States also has witnessed its top government official promoting unfounded treatments. President Trump has mused about treating the virus with powerful lights or disinfectant injections. He has repeatedly touted the anti-malaria drug hydroxychloroquine, calling it a "game changer" in the pandemic, despite scientific research to the contrary, and has said he took it for two weeks.

But in the United States, hydroxychloroquine does not have nearly the official imprimatur that it does in parts of Latin America.

In Brazil, with the world's second-highest coronavirus caseload and death toll after the United States, President Jair Bolsonaro has relentlessly promoted the drug — even after he, himself, developed Covid-19, despite taking the drug for months. He has ordered the military to mass-produce it, and after his diagnosis he waved a package of it before cheering supporters.

Governments in El Salvador, Peru and Paraguay have bought hydroxychloroquine to treat the coronavirus.

Studies have found that the drug did not lessen the chance of infection, reduce the severity of Covid-19 or speed recovery. But it is potentially dangerous, particularly for people with abnormal heart rhythms.

In Venezuela, President Nicolás Maduro's government, which is struggling to provide even running water and soap to crumbling hospitals, has boasted of obtaining from its ally Cuba tens of thousands of doses of a drug, interferon alfa-2b, used against viruses and cancers, to fight the pandemic. Government clinics now require patients with coronavirus symptoms to take the drug.

But there has been no definitive evidence yet that this particular drug, one of many in the interferon class, works against the coronavirus, and in the United States, the National Institutes of Health does not currently recommend its use in patients with Covid-19.

Following Bolivia's example, Ecuador's Congress recently discussed whether to allow chlorine dioxide as a coronavirus treatment, and 10 local Roman Catholic bishops have called for its use.

The chemical has long been marketed without official approval, including in the United States, as a cure for ailments from AIDS to autism. The U.S. Food and Drug Administration has repeatedly said it has no medical value and can have potentially lethal effects, including "severe vomiting, severe diarrhea, lifethreatening low blood pressure caused by dehydration and acute liver failure."

At least 10 Bolivians have been hospitalized with chlorine dioxide poisoning in recent weeks, according to the Health Ministry.

But on Wednesday, Efraín Chambi, the majority leader of the national Senate, said his party would ask the W.H.O. to leave the country if it continues to warn people not to take chlorine dioxide.

"They are not doing any favors to the Bolivian people," he said. "We believe they are on the side of large multinational" companies.

After successfully containing the disease for months, Bolivia, one of Latin America's poorest countries, succumbed to an aggressive outbreak this month that has overwhelmed hospitals. This week, the police collected hundreds of bodies of suspected Covid-19 victims from streets and homes in the cities of Santa Cruz and La Paz, and on Thursday, the government postponed national elections from September to October, citing health concerns.

The virus swiftly swept through the highest echelons of power, infecting the interim president, Jeanine Añez, and half of her cabinet, fueling a sense of helplessness. Politicians and popular public figures began promoting chlorine dioxide as an alternative treatment.

The opposition-controlled Senate last week passed a bill that would allow local governments to supply the solution free for medical use, despite protests from the Health Ministry. Ms. Añez has remained silent on the controversy, as her election bid loses support.

In Cochabamba, in the center of the country, where a pint bottle of chlorine dioxide solution sells for \$8 — when it can be found — residents blocked the road to the municipal waste treatment plant until local authorities promised to provide it free.

Mr. Baldivieso, 48, the soccer coach, said he and his entire family began drinking the chemical after first experiencing coronavirus symptoms. He said he had to wait 15 days for a test result, which came back positive.

"What if we just did nothing all that time?" he said.

In the Bolivian capital, Sucre, local health officials last week began testing chlorine dioxide on 200 local prison inmates and guards, some with coronavirus symptoms. The prison chief, Ludwin Miranda, said that all the participants had signed consent forms.

In San José de Chiquitos, an eastern Bolivian town of 30,000, the mayor distributed chlorine dioxide to local medical centers to treat the virus.

"The application of chlorine dioxide has produced perfect results in the recuperation of critical patients," the mayor, Germaín Caballero, told a local television station last week. "We have managed to control the pandemic."

Medical experts say chlorine dioxide is, at best, a placebo — and, as with any placebo, people might credit it for their recoveries.

Those who advocate chlorine dioxide "create a false sense of security," Virgilio Prieto, director of epidemiology at Bolivia's Health Ministry, said in an interview. "By promoting its indiscriminate and irresponsible use, they are putting the population at risk."

María Silvia Trigo reported from Tarija, Bolivia; Anatoly Kurmanaev from Caracas, Venezuela, and José María León Cabrera from Quito, Ecuador. Reporting was contributed by Mitra Taj in Lima, Peru; Isayen Herrera in Caracas; Manuela Andreoni in Nova Friburgo, Brazil; Norman Chinchilla in Cochabamba, Bolivia, and Jenny Carolina González in Bogotá, Colombia.