Ameryka Łacińska, 2 (112) 2021 ISSN 1506-8900; e-ISSN 2081-1152 CC-BY-SA

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COVID-19 imprints in Latin America

COVID-19 w Ameryce Łacińskiej

Artykuł nadesłany: 30 lipca 2021 Wersja ostateczna: 6 listopada 2021 DOI: 10.7311/20811152.2021.112.01

Abstract: The article reviews the reaction of selected Latin American countries to the pandemic of Covid-19. The authors examine the situation in which the countries where touched by the pandemic and the initial reactions toward the unusual situation in which the world has been found at the beginning of 2020. The authors analyse the data that are fundamental for the analysis of the situation of selected countries in the period of pandemic. In the article readers can find the analysis of the health sector condition when it was hit by the pandemic. It also goes further to check if the reactions of particular countries brought positivie or negative efects. In the end, the authors analize the politics of vaccination in particular countries of Latin America and are debating if it could be called a vaccine geopolitics.

Keywords: Latin America, Covid-19, pandemia in Latin America, health care system, vaccination against Covid-19.

Streszczenie: W artykule analizie poddane zostały procedury wprowadzane w wybranych krajach Ameryki Łacińskiej mające przeciwdziałać pandemii Covid-19. Autorzy prezentują sytuację w krajach dotkniętych pandemią oraz pierwsze reakcje na niecodzienną sytuację, w jakiej znalazł się świat na początku 2020 roku. Autorzy analizują dane, które są fundamentalne dla prześledzenia rozwoju pandemii w wybranych krajach regionu, a przede wszystkim dla przedstawienia stanu sektora opieki zdrowotnej. Artykuł kończy się rozważaniami nad pozytywnymi i negatywnymi efektami wprowadzanych obostrzeń oraz nad polityką szczepień (geopolityką szczepionkową) w poszczególnych krajach Ameryki Łacińskiej.

Slowa kluczowe: Ameryka Łacińska, Covid-19, pandemia w Ameryce Łacińskiej, system ochrony zdrowia, szczepienia przeciwko Covid-19.

When the first COVID-19 news headlines arrived from China, only a few could have imagined the outcome of a global pandemic that changed humankind in such a significant way. However, the emergence of this virus –scientifically known as SARS-CoV-2– was not a surprise. In the last decades, the world has experienced several coronavirus-family outbursts that have crossed from animals into humans. Like the other coronavirus-family outbreaks caused by SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome), COVID-19 generates a respiratory disease that, depending on comorbidities and age, can be extremely severe (Perlman, 2020: 760). Although the novel coronavirus outbreak could be related to Wuhan's seafood market, it seems that it was not the only allocation of the virus: it came into the market, as well as out of there (She, Jiang y Ye, 2020).

From December 31, 2019, until January 3, 2020, over 40 Chinese patients presented alleged contagious pneumonia acknowledged by both World Health Organization (WHO) and China's health authorities. The 2019-nCoV spread was extremely quick; by January 20, 2020, almost 300 confirmed cases were reported in four countries in the Asian region, including China (278 cases) (Jun She et al., 2020). However, as the world later learned, COVID-19 asymptomatic patience can also spread the virus. SARS and Ebola exemplify that the chains of transmission and subsequent contact are complicated to trace, even more with asymptomatic patients, since there is a lack of surveillance and tracing contact (Munster, Koopmans, 2020: 693).

In the first weeks of 2020, the spreading of the new coronavirus was speedy. By January 28, there were over 4,500 cases reported and 100 deaths in fifteen countries on three continents: Australia, Europe, and North America. Soon, the person-to-person transmission was reported as well as maternofetal transmission. What has been observed in the first weeks of 2020 was a systematic spread of the virus – now called SARS-CoV-2 that causes the disease COVID-19. Like pandemic influenza in 1918, COVID-19 is associated with respiratory spread, an undetermined percentage of infected people with presymptomatic or asymptomatic cases transmitting the infection to others.

It exploded in urban centers almost everywhere at once, making a dramatic entrance after a long, stealthy approach. In effect, the situation evolved from recognizing the early stages of COVID-19 emergence in the form of growing and geographically expanding case totals into a global pandemic that constitutes one of the absolute priorities on a worldwide scale (Morens, Daszak y Taubenberger,

2020: 1293). The struggle with this challenge is not more manageable because of the lack of global cooperation. There can be observed various approaches to the methods of combating the pandemic but also toward the very danger that the SARS-CoV-2 forms. One can mention here countries that have undertaken stringent measures like China, South Korea, Taiwan, Argentina, or several European countries and those whose authorities do not perceive strict standards as required, to mention the most radical approaches presented by Brazil, the United States, or the United Kingdom (at least at the early stage of a pandemic). As human-to-human infections became obvious, it was quite commonly accepted that isolating patients is crucial. Also, tracing and quarantine contacts as early as possible was recommended because asymptomatic infection appeared soon. Most importantly, the extent of interhuman transmission needs to be determined there (She, Jiang y Ye, 2020).

The rapid spread caused by human-to-human transmission in a few weeks changed the situation from the local problem of Wuhan city and the province Hubei into to global pandemic. After maintaining strict measures by the Chinese government, China slowly took control over the spreading of the virus. However, soon it became Europe, where the situation became the most serious, and Italy, Spain, and the United Kingdom were the countries touched in the most challenging way. According to the data published by the WHO, the first confirmed case of the SARS-CoV-2 appeared in Latin America on February 27, 2020, in Brazil, as can be seen in Table 1. Three days later, there were five confirmed cases in Brazil, Ecuador, and Mexico.

One month later, on April 1, 2020, all Latin American countries already reported confirmed cases of Covid-19. Graph 1 presents how the number of confirmed cases grew from March 1 until mid-July 2020. According to the WHO data published in Situation Reports, on May 26, Brazil became the second most infected country globally, outrunning the Russian Federation with more than 363 thousand confirmed cases. A few days earlier, on May 13, the Americas became the most infected region globally, surpassing Europe with 1 781 564 confirmed cases. These data show the dynamic of spreading COVID-19 globally, focusing on Latin America (Table 1, Graphic1). The conclusion of the analysis of the data can tell a few important things. First, the Americas, including Latin America, the Caribbean, the United States, and Canada, quickly became the most infected globally. Considering the social situation of Latin American and Caribbean countries, it should not be a surprise.

Despite the improvement in poverty reduction, when the COVID-19 pandemic hit Latin America, 25% of the total population was in a precarious poverty

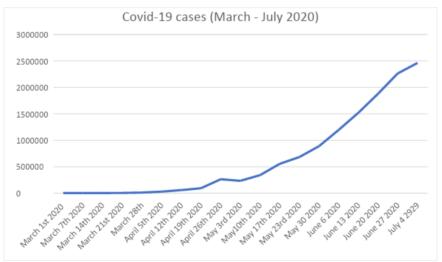
situation (Blofield, Giambruno, Galindo, and Filgueira; 2020, 27). In part, since 2014, Latin American economies have been disrupted by price volatility, particularly China's economic slowdown, which shocked the global supply and demand for products from China (Martí I Puig y Alcántara; 2021, 14-15). Likewise, Latin American political systems have not been consolidated so far, much less in democratic terms, so it began to trace an erosion on the part of citizens, which after manifesting itself by the inability and lethargy of the three branches of government.

TABLE 1, CONFIRMED CASES OF COVID-19 ACCORDING TO WHO-DEFINED REGIONS

Region	Febr. 1, 2020	March 1, 2020	April 1, 2020	May 1, 2020	June 1, 2020	July 1, 2020
Western Pacific	11 894	143 609	106 422	148 838	183 198	217 146
Southeast Asia	22	47	5 175	57 088	272 512	808 906
Americas	11	86	188 751	1 291 917	2 817 232	5 218 590
Europe	22	1 457	464 212	1 461 404	2 159 791	2 728 059
East Mediterrane an	4	842	54 281	188 585	520 137	1 077 426
Africa		2	4 073	26 663	104 242	306 794
GLOBAL	11 953	146 043	822 914	3 175 207	6 057 853	10 357 662

Source: own elaboration based on the WHO, 2020.

GRAPHIC 1. COVID-19 CASES IN LATIN AMERICA AND THE CARIBBEAN COUNTRIES FROM MARCH 1, 2020, TO JULY 4, 2020 (WEEK BY WEEK DATA)



Source: own elaboration based on the WHO, 2020.

Country	March·1, 2020 □	20¤	April 1, 2020¤	.2020¤	May·1, 2020□	2020¤	June-1,-2020¤	2020¤	July-1,-2020¤	020¤
a	TCC¤	ΤDα	TCC¤	ΤDα	TCC	TD¤	TCC¤	ΤDα	TCC¤	IDα
Argentina	¤	p	2996	24¤	4·304¤	215¤	16·214¤	530¤	62-268¤	1.283¤
Bolivia	р	p	107¤	92	1.110¤	26s	9.592¤	310¤	32·125¤	1.071¤
Brazila	2¤	¤	4·579¤	159¤	78·162¤	5.466¤	498·440¤	28.834¤	1.368.195¤	58·314¤
Chilea	п	n	2.738¤	12¤	16.023¤	227¤	¤889·66	1.054¤	279·393¤	5.688¤
Colombia	¤	n	798¤	14¤	6.211¤	278¤	28·236¤	890¤	95·043¤	3.223¤
Costa-Rica¤	p	p	314¤	2a	713¤	9	1.047¤	100	3.269¤	15¤
Cuban	п	p	186¤	<u>6</u> a	1.501¤	34¤	2.045¤	83¤	2.341¤	86¤
Ecuador	2¤	p	2.240¤	75¤	24.934¤	¤006	39.098¤	3.353¤	56·342¤	4⋅527¤
El-Salvador¤	п	n	30¤	DØ	395¤	¤6	2.517¤	46¤	6-438¤	174¤
Guatemala	¤	p	36¤	n	585¤	16¤	4·739¤	102¤	17-409¤	746¤
Guyana¤	p	p	12¤	2a	78¤	8g	152¤	12¤	235¤	12¤
Honduras¤	р	n	139¤	2a	771¤	71¤	5.094¤	201¤	18.818¤	485¤
Mexico¤	1a	¤	1.094¤	28¤	17·799¤	1.732¤	87-512¤	9·779¤	220.657¤	27·121¤
Nicaragua	¤	¤	4¤	p	14¤	4¤	885¤	35¤	2.014¤	74¤
Panama¤	¤	p	¤686	24¤	6·378¤	178¤	13·018¤	330¤	32-785¤	620¤
Raraguay	p	p	e5¤	3¤	249¤	pa6	2986a	1110	2.221¤	17¤
Peru¤	п	n	1.065¤	24α	33.931¤	943¤	155·671¤	4·371¤	282⋅365¤	9.504¤
Surinam¤	п	n	z.8	DO DO	10¤	Ια	14¤	n	515¤	13¤
Uruguay	<u>n</u>	p	320¤	n	630¤	15¤	821¤	22¤	939¤	27¤
Xenezuela¤	¤	p	129¤	32	331¤	100	1.459	14¤	5-530¤	48¤

Huge social inequalities, more than 160 million people living in poverty, a weak health care system, low expenditures on the health care system without any doubts are the factors that create social conditions for spreading COVID-19 and any other pandemic. Not without the meaning is that some of the countries adopted an extremely liberal approach toward the problem. Two world leaders of confirmed cases in mid-2020 are the United States and Brazil. Mexico and Peru also have very high numbers of infected people.

One of the most important ways to measure the burden of COVID-19 is mortality. However, it is not easy to present this factor due to different ways of reporting the case fatality ratio: the number of deaths divided by the number of confirmed cases. In this situation, the discrepancies can be caused by differences in the number of people tested, the age of the population (mortality can be higher in older folks), or characteristics of healthcare systems in certain countries.

Table 2 presents the total number of deaths in Latin American countries between March 1 and July 1, 2020. The situation in Brazil and Mexico in mid-2020 seems to be particularly serious, as the total deaths have reached on July 1, 2020, almost 60 thousand and more than 27 thousand, respectively. In the case of Mexico, it is imperative as the case fatality ratio reached a very high level of 11.6%. Furthermore, it coincides w0ith the hate rate of deaths per 100 000 inhabitants, which in the case of Mexico is 29.78. The higher rate in Latin America has just Peru (39.44), Chile (38.92), Brazil (36.61), and Ecuador (30.48) (John Hopkins University & Medicine, 2020).

The data used in the analysis are the official data published by the WHO. But, of course, they can be different from the real numbers. This can be the consequence of, for example, the scale of doing tests in particular countries and the fact that there is a significant percent of asymptomatic people that are not doing tests, so they do not figure in the official statistics. Meanwhile, it is assumed that a high testing rate is significant in struggling with the pandemic. Tests allow identifying infected persons. It enables the isolation of those who are infected and the tracing and quarantining of their contacts. It also helps in better understanding the pandemic and the risks it poses for different populations. Meanwhile, Latin American countries are among those that have the lowest rates of testing.

According to the date for July 13, 2020, in Mexico total number of COVID-19 tests per 1000 inhabitants is 4.83, in Ecuador 7.89, in Bolivia 8.71, in Peru 8.8, in Argentina 10.5, in Uruguay 22.62 and Chile 68.54. Therefore, it can be compared to Portugal with 127.45 tests per 1000 inhabitants, the United Kingdom 105.89, Germany 76.1, or the United States with 121.7 per 1000 inhabitants (Our World in Data, 2020).

A meaningful way to understand if countries are testing enough is to look at the share of tests returning a positive result, the so-called positive rate. The analysis of the data shows excellent disproportions among countries. Those with very high or high positive rates are unlikely to be tested widely enough to find all cases. The WHO has suggested a positive rate of around 3-12 percent as a general benchmark of adequate testing. So, countries like South Korea, Taiwan, Germany, or Finland have a shallow positive rate – less than 1 percent. But there are also countries with a positive rate at an extremely high level, such as Mexico 62.2 percent, Bolivia 61.9 percent, and Argentina 36.3 percent. It means that in these countries, each case of COVID-19 is found for every few tests conducted (Our World in Data, 2020).

As countries varied in the case of testing policy, it was evident that there would be even more significant differences in their general approach to the SARS-CoV-2 pandemic. As the COVID-19 spread first in China and shortly after, on a global scale, most countries adopted various means to limit the possibility of growing numbers of infected individuals. The tendency toward limitations in moving people was forced by the experiences of Italy and its northern province of Lombardy that shortly became the epicenter of the SARS-CoV-2 spreading.

Among the first decisions, various measures can be found: borders closing, social distancing prohibiting gatherings, and finally, a total lockdown. Some countries have been evolving their policy to the situation and the level of the pandemic of COVID-19 on their territories. A separate case is the example of Sweden, which has adopted a light approach, with no strict prohibition but with a broad information action and emphasis on voluntary cooperation. The aim here is not to look for the best option or judge which attitude was more proper. Instead, we would like to present the significant discrepancies among countries to limit the pandemic range.

In this section, special attention will be paid to the health sector. First, the analysis of the health measures undertaken by countries of the Latin American region is conducted. The first country that maintained any health action was el Salvador. The enlarged healthy cabinet was activated on January 24, 2020, to perform daily meetings and monitoring of the situation and adopt necessary measures.

However, in March, a response toward a growing number of COVID-19 confirmed cases introduced increased health measures. We will present in detail the measures introduced by selected governments: Argentina, Brazil, Chile, Peru, and Mexico. The selection was based on the high number of confirmed cases of COVID-19 in these countries and varied approaches adopted by their authorities. To present responses of selected Latin American countries toward the spreading of

the COVID-19 pandemic, we use the data published by the COVID-19 Observatory for Latin American and the Caribbean. In its report, there are named eight types of measures that governments could realize: health emergency, mandatory coverage, mandatory quarantine for foreigners, confirmed or suspected cases, policing on testing (universal, reduced to specific groups, etc.,), hospitals (mechanical ventilators, additional ICU beds, protection equipment, temporary hospitals, etc.,), and others.

According to the report, until mid-June 2020, Argentina maintained six actions in health. At the beginning of March, it was decided that only suspected cases (with COVID-19's symptoms) should be tested. Initially, only cases directly or indirectly related to foreign travel were tested. At first, Instituto Malbrán (located in Buenos Aires City) was the only certified laboratory to confirm the test in Argentina. But considering the advance of the pandemic, other provinces in the country has started on March 24, 2020, to develop the COVID-19 testing: Buenos Aires (18 testing centers), Santa Fe, Córdoba, Chaco, Tierra del Fuego, after an excellent decentralization process coordinated by the National Ministry of Health. As a result, testing of all suspected cases is free in Argentina. On March 12, President of Argentina, Alberto Fernández, after consultations with ministers and expert committee, announced a decree according to which public emergency in the matter was declared for one year considering the pandemic COVID-19 claimed by the WHO. It included, among others, mandatory preventive isolation. According to the decree, mandatory quarantine meant that people must remain isolated for 14 days in certain situations.

This included the following cases: those who have the status of "suspected cases," those who have medical confirmation of having contracted COVID-19, the close contacts of the persons included in the previous two sections, those who arrived in the country has passed through "affected areas"; those who have come in the country in the last 14 days and are non-residents of the country won't be able to stay at the territory of the country; non-residents foreigners will not be permitted to enter into the region.

On March 20, President declared social, preventive mandatory isolation. The measure adopted provides for the restriction of movement through routes and public spaces, exceptions to critical government staff, health workers, security workers, red cross volunteers, and international organism's critical staff. They are exempt from compliance with "social, preventive and compulsory isolation." Of the movement ban, people affected by the activities and services declared essential in the emergency, and their movements must be limited to strict compliance with those services. The social, preventive mandatory isolation was extended until June 7, 2020 (ECLAC, 2020a).

Brazil is the country with the highest number of actions undertaken to struggle with the pandemic. Despite this, it is also the country with the highest cases of COVID-19 in the region and mid-2020 the second in the world. At the beginning of March, the Health Ministry declared the formation of the Public Health Emergency Operations Center (COE-nCOV) as a national mechanism for coordinated emergency response management at the national level. In the following months, both Ministry of Economy and the President declared financial resources to struggling the pandemic. According to the decision of the Ministry of Health, isolation can only be recommended by doctors and epidemiological surveillance agents or competent bodies. It establishes that quarantine will be determined via formal and duly motivated administrative act and shall be edited by the Secretary of Health of the State, the Municipality, the Federal District, or Minister of State for Health if the health emergency lasts. On March 20, the Health Ministry has recommended home isolation of the people with respiratory symptoms and people residing at the same address, even if they are asymptomatic, for a maximum period of fourteen days.

It also has recommended social distancing measures for people over 60 years old. However, President of Brazil, Jair Bolsonaro, who openly doubts the severe character of the COVID-19 pandemic, simultaneously declared solutions that aimed to soften all preventive measures arguing that they are too costly for the Brazilian economy and the very COVID-19 disease is not a severe illness. In effect, on March 20, he decreed what essential public services and activities are. There are 35 items, including health assistance, social assistance, security, national defense, telecoms, water services, waste, etc. Furthermore, president Jair Bolsonaro systematically broadened the range of activities classified as essential public services in the following weeks.

However, it was partially questioned by Federal Judge Marcio Santoro Rocha, who excluded from the catalog of essential public services religious activities, lottery, and several others. The testing policy in Brazil also is not a radical one. The orientation of the Minister of Health is to administer the fast test only to patients showing symptoms for 7 and 10 days, such as fever and cough. Regarding the functioning of hospitals in pandemic conditions, Brazil maintains more than 40 various actions, from financial support for hospitals in particular states through medical equipment buying to multiple facilities in purchasing and importing medical equipment and medicines (ECLAC, 2020a).

The first positive case of COVID-19 in Chile was registered on March 4, 2020. In consequence, on March 19, President Sebastian Pinera declared The State of Catastrophe for 90 days. Furthermore, it was extended on June 15 for an additional

90 days. This measure aims to anticipate and prepare for future stages of the pandemic: give greater security to hospitals and all health care sites, better protect the logistics chain and transfer of medical supplies, facilitate the care and transfer of patients and medical personnel, and the evacuation of people, safeguard compliance with quarantines and social isolation measures, guarantee the production and distribution chain to ensure the regular supply of the population. In addition, Chileans or foreigners residing in Chile must enter a mandatory 14-day quarantine when they enter the country, regardless of their origin. Furthermore, since March 30, there have been testing people with few or no symptoms conducted. Previously there was a maximum price for the COVID-19 tests established at the beginning of April.

Private hospitals, universities, the Armed Forces, and foundations are incorporated into the healthcare network of the public health system (ECLAC, 2020a). Chilean authorities did not introduce a general lockdown. Instead, it adopted a "dynamic lockdown" strategy. It means the implementation of small-scale lockdowns in critical municipalities. These dynamic lockdowns are verified every week based on specific criteria such as the number of new cases in a territory, the propagation velocity, the number of cases per km2, the proportion of the vulnerable population, and factors related to social determinants health.

By March 26, a lockdown in the Metropolitan Area covering more than one million citizens was implemented and followed by several cities in the following weeks (Martinez-Gutierrez, 2020). The authority responsible for introducing this measure was the Ministry of Health. On April 28, for example, the quarantine was lifted for Temuco and Osorno, maintaining the sanitary cord; in Chillan and Chillan Viejo, the sanitary cord is lifted; meanwhile, it was established for the communes of Anglo and Victoria in Araucania region, part of the communes of La Pintana, San Ramon, all the communes of Independencia and Estacion Central in the Metropolitan region.

In Peru, the situation is also dire, with high numbers of confirmed cases and deaths. However, the authorities undertook just a few actions in health. On March 11, the Supreme Decree was announced, declaring a national health emergency for 90 days and establishing measures for prevention and control of COVID-19, which includes: goods and services requirements plan, ports, airports, and land posts, labor centers, and international sanitary management. Furthermore, foreigners and Peruvians who enter the national territory from countries with an epidemiological history (Italy, Spain, France, China) must be subject to 14 days of home isolation. In case of presenting symptoms of respiratory infection, the person should contact the health authority. President has later announced the extension of mandatory quarantine to April 12 (ECLAC, 2020a).

On Friday, June 26, Peruvian President Martín Vizcarra signed a supreme decree extending Peru's national state of emergency through Friday, July 31. On Wednesday, July ¹, quarantine measures were lifted for most of the country. The all-day curfew on Sundays was eliminated. In addition, the mandatory nightly curfew hours have been reduced, and now it is 10:00 PM to 4:00 AM.

Like Argentina, in Mexico, until mid-June 2020, there were also issued six actions regarding the pandemic. However, it has continued to take less severe lockdown measures than other Latin American countries and has not imposed federal restrictions.

As the country has been introducing a diverse set of measures that would prevent spreading the SARS-CoV-2, it quickly became evident that the pandemic constitutes a massive challenge for national health care systems. However, as the research appeared, the COVID-19 disease has an entirely different course. A Chinese Center for Disease Control and Prevention paper found that just over 80 percent of all COVID-19 cases had been mild in mid-February. However, still, 13.8% and 4.7% were classified as severe and critical, respectively. Thus, it turns quickly that one thing is to limit the spreading of the virus. Still, an equally important challenge became the necessity of ensuring the desired number of critical care beds in hospitals. Intensive care units will come under massive pressure if the case count continues to climb at its current pace (McCarthy, 2020).

Meanwhile, it should not be a big surprise that Latin American countries do not have the best-developed health care systems. According to the Global Health Security System (GHS), Latin American countries are not among the States included in the group called the most prepared. Brazil, Argentina, Chile, Mexico, Ecuador, and Peru are in the first "50" of the GHS Index and placed in the more prepared group. Although, still, countries like Guatemala, Belize, Guyana, Haiti, or Venezuela are in the group of less prepared countries (John Hopkins Bloomberg School of Public Health & Nuclear Threat Initiative, 2020). It is confirmed by comparing the index of hospital beds per 1000 inhabitants and the ICU (Intensive Care Unit) beds of Latin American countries and those from other world regions.

Regarding the first measure, the situation seems to be serious. Taking the above selected Latin American countries, the number of hospital beds for 1000 inhabitants presents as follows: Argentina 5 (2014), Brazil 2.2 (2014), Chile 2.2 (2013), Mexico 1.5 (2015), and Peru 1.6 (2014). Now it can be compared with some OECD (Organisation for Economic Co-operation and Development) countries: Germany 8.3 (2013), Spain 3.0 (2013), Italy 3.4 (2012), Japan 13.4 (2012), South Korea 11.5 (2015) (World Bank, 2020).

It seems that only Argentina has the number of hospital beds per 1000 inhabitants comparable with those of the OECD countries (despite Mexico and Chile that are also members of the OECD). And it is still below the recommendations of the WHO that recommend a minimum of 8 to 10 beds per 1000 inhabitants. Unfortunately, ICU beds are not always available, so it can be challenging to compare directly. However, it can give one's better perception of the health care systems of selected Latin American countries. According to the data from the end of June 2020, the best situation is in Argentina, where there were 25.8 ICU beds per 100 000 inhabitants. Since the beginning of the pandemic, serious growth has been noted. Chile follows it. However, the data for the latter is much lower than in Argentina, and it was 10.6. The other countries analyzed here are Mexico – 6.6 and Peru – 4.1 (Delfino, 2020).

As in all these countries, the situation with the ICU beds comes close to critical. Brazil is, in fact, on the edge of collapse. Already in March 2020, Brazilian media informed that 95% of 16 thousand ICU beds were occupied. Meanwhile, in mid-2020, Brazil is the second country globally with the highest number of infected persons. As Brazil has 21 ICU beds per 100 000 inhabitants, which is twice as much as in Italy, the problem is in the distribution (Table 3). A vast majority of the ICU beds in Brazil are concentrated in big cities (mostly the capital of states). Meanwhile, the province suffers a significant lack of ICU beds (Jofré, 2020).

TABLE 3. NUMBER OF ICU BEDS AND ICU BEDS PER 100 000 INHABITANTS IN SELECTED LATIN AMERICAN COUNTRIES AT THE END OF JUNE 2020

Country	Number of ICU beds	ICU beds per 100 000 inhabitants
Argentina	11 500	25.8
Brazil ¹	16 000	21
Chile	1 865	10.6
Mexico	8 300	6.6
Peru	1 331	4.1

¹ The data for Brazil is for March 2020 (Jofré, 2020).

Source: own elaboration based on Programa Lupa data in Delfino, 2020.

Comparing it with the data for selected countries in the other regions, the situation in Latin America is complex. It can be one of the factors of a high number of victims of the COVID-19 disease. Despite Argentina and Brazil, it can be said that the rest of the countries has a significant deficiency of ICU beds. However, it cannot be meant that there is no problem with the ICU beds also in these two countries. As

mentioned above, in Brazil –where the index of the ICU beds per 100 000 inhabitants is high– its unequal distribution constitutes a significant problem.

Meanwhile, in Argentina, even before the eruption of the pandemic, about 90% of the ICU beds were already occupied. Therefore, a positive factor can be perceived that, in general, the governments are conscious of the shortages and almost immediately undertook efforts to increase the number of ICU beds. For example, the government of Chile informed that at the beginning of April, there were 1 374 ICU beds. However, already at the end of May, there were 2 169, and the goal for the future of June is to have 4 850 ICU beds available. Also, in Argentina, the government tried to increase the number of available ICU beds.

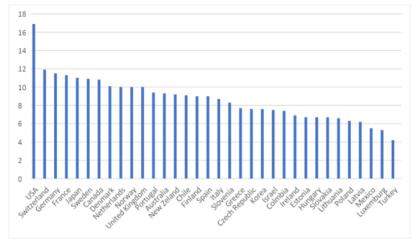
As at the beginning of the pandemic in March 2020, there were 10 331 ICU beds; at the end of June, it is estimated that their number increased to 11 500 (Jofré, 2020). Also, Latin American governments are undertaking efforts to improve the most desired equipment in terms of medical equipment. For example, already at the end of March 2020, the Chilean Ministry of Health distributed several dozens of newly imported ventilators. A month later, the government received the next shipment of more than 70 mechanical ventilators (ECLAC, 2020a).

The capacity of health care systems in various Latin American countries is much below the requirements that constitute the pandemic of SARS-CoV-2 in the region. However, it is not the only problem that their societies confront. Therefore, it is necessary to consider the accessibility of these imperfect and porous systems. First, it is required to look at the expenditures for health systems in selected Latin American countries. As it can be found in the document published in 2017 by the Latin American Association of Private Health System (Asociación Latinoamericana de Sistemas Privados de Salud, ALAMI), the most significant part of its general budget is dedicated to the health system in Brazil – 9.7%.

It is followed by Uruguay – 8.6%, Chile – 7.8%, Colombia 7.6%, Mexico, 6.3%, Peru – 5.5% and Argentina – 4.4% (ALAMI, 2016: 16). Again, compared with the OECD countries, a visible lower percentage of GDP is dedicated to health systems in Latin American countries. Those who are members of the OECD, like Chile Colombia, are in the medium. Meanwhile, Mexico is among the OECD member countries with the lowest percentage of their expenditures for health systems counted as a percentage of their GDP. According to the data for the year 2018, Switzerland, France, Germany, and Japan dedicated more than 11% of their GDP to the health system. The OECD countries with the lowest level –5.5% and less– were Turkey, Mexico, and Luxemburg (Graphic 2).

Although, more important than the percentage of the GDP dedicated to the health system is the percentage in which the system is financed from private resources. Analyzing these data shows a significant portion in Latin American countries that can be seen in Table 4. For example, it is more than 50% in Brazil and Chile, and Mexico is closed to 50%.

Graphic 2. Share of GDP dedicated for the health system in OECD countries in $2018\,$



Source: own elaboration based on the OECD, 2020.

TABLE 4. PRIVATE AND OUT-OF-POCKET EXPENDITURES FOR THE HEALTH SYSTEM IN SELECTED LATIN AMERICAN COUNTRIES

Country	Private expenditures as a % of total spending for health ¹	Out of pocket expend- itures per capita ²	Out-of-pocket expendi- tures as % of current health expenditures ³
Argentina	45	198.94	15.02
Brazil	54	255.01	27.46
Chile	51	463.44	33.53
Mexico	48	204.22	41.28
Peru	39	93.75	28.19

Notes:

Source: own elaboration based on World Bank, 2020 and ALAMI, 2016.

Equally important is the category named by the World Bank as out-of-pocket expenditures. In Mexico, it constitutes almost 42% of current health expenditures; meanwhile, it is 33.5% in Chile. According to the World Bank data,

¹ Data for 2014

² Data for 2017

³ Data for 2017

it is 427 USD and 747.3 USD per capita, respectively. Now, the question is, who can afford it? One must consider at least two elements. The first one is the fact that Latin America is an unequal region in the world. The Gini coefficient – which is used to measure and compare inequalities between countries and regions – for Latin America in 2018 was 0.465, and it dropped since 2002 when it was 0.538. The second thing is the level of poverty. In 2018 30.1% of people in Latin America lived in poverty and 10.7% in extreme poverty, which gives 185 and 66 million persons (ECLAC & UN, 2019: 17-21). Now, it can be concluded that for around 1/3 of Latin American society, it is challenging to find the resources to afford the health care system.

Furthermore, although most States declare universal health care systems, it is not. The first barrier is the above-mentioned financial obstacle. According to the Pan-American Health Organization, about 30% of people in Latin American do not have proper access to health care systems because of their economic situation. It is like the percentage of people that live in poverty in the region. The other form can be the quality and number of medical services included in universal healthcare systems. In this case, there are considerable disparities, and those in poverty cannot afford some medical services as they are excluded from universal healthcare and are paid. The other factor is geographical. There are broad regions with minimal access to medical treatment due to geography and the localization of medical centers (UN, 2018).

The example of Brazil and the concentration of ICU beds in big cities; meanwhile, the pandemic is also spreading across the province. It is hazardous in the SARS-CoV-2 pandemic as insufficient health care can only support the spreading of the coronavirus. It is already explained how healthcare systems' infrastructure and capabilities can obstruct universal access to medical treatment in Latin American countries. The healthcare system is underfinanced and fragmented. This constitutes significant limitations and barriers to universal access.

Furthermore, the authorities still do not rich the Pan American Health Organization (PAHO) to ensure 6% of their GDP financing the health system. According to the report published by ECLAC (Economic Commission for Latin America and the Caribbean) and the PAHO, nearly 95 million people incur catastrophic health expenditures. Almost 12 million become poorer because of these expenditures (ECLAC & PAHO, 2020).

As one of the consequences of the pandemic is an unprecedented economic crisis, it is hard to expect that governments in Latin American countries will be willing and will be able to increase their expenditures for the health care system. Instead, one should expect that the quality of medical care in the region

will deteriorate. On the other hand, it is also possible that access to medical services will be straightened as people's economic situation worsens. According to the ECLAC report published in mid-July 2020, both external and domestic shocks have intensified. As a result, the region will experience a -9.1% fall in GDP in 2020, with drops of -9.4% in South America -8.4% in Central America and Mexico. The significant growth of unemployment will accompany the unmatched fall of the GDP.

According to the exact estimation, at the end of 2020, the unemployment in the region will reach 13.5% what will give more than 44 million persons without a job. It would be nearly 18 million more than in 2019. That will have a direct impact on the income of households and their ability to meet basic needs. Because of this negative economic breakdown, ECLAC estimates that the number of people living in poverty will increase in 2020 by 45.5 million, which is almost 231 million (compared with 185.5 million in 2019) (ECLAC, 2020b). Meanwhile, income level has a severe impact on access barriers to medical services. As the authors of the ECLAC and PAHO report argue, those who live in poverty and extreme poverty are the most "affected by financial, geographical and availability issues, as well as the acceptability of care. In the higher-income population, access barriers mostly related to dissatisfaction with the health system, individual decisions on self-care, dissatisfaction with wait time, or because patients assume that they do not need to seek care" (ECLAC, & Pan American Health Organization, 2020).

As one of the region's characteristics are significant social and economic inequalities, it is natural that the medical services are not equally accessible for the inhabitants. PAHO clearly states that the Latin American population does not have access to medical services and cannot benefit from the universal healthcare system. Moreover, a significant percentage of the poor part of societies work in the informal economy. That means – among others – that they must work outside their home. They cannot work in online mode.

In many cases, they are forced to use public transportation to get to their place of work as they live at the peripheries of the cities. And in their barrios, usually, there are problems with potable water and a proper sanitation system. Moreover, as they cannot afford high-quality medical services, many of them suffer preexisting diseases that during the COVID-19 pandemic significantly increase the risk of death.

More than fifteen months have passed since Covid-19 walloped Latin America's health system as these lines are written. Yet, through time, citizens have also learned that -beyond the economic, political, and health emergencies-, there is indeed an essential geopolitical rearrangement of interests, trying to

influence the region through an immunization race performed basically by China, Russia, and the United States (Vilasanjuan, 2021).

In recent years, China and Russia have grown in power and influence worldwide, cautiously and stealthily developed for decades. Nowadays, the pandemic -which has disrupted social, cultural, economic, political, and health dynamics in countries around the globe- seems to be a powerful mechanism that could facilitate their authority in Mexico and the rest of Latin America through the availability of the CanSino and Sputnik V vaccines. It is essential to mention that during this process, the United States held its federal electoral process, so this political vacuum led by Donald Trump (2017 - 2021) was taken advantage of by both Vladimir Putin and Xi Jinping (Lozano, 2021).

However, as Lozano suggests, Mexico, Latin America, and the Caribbean hardly experienced a Cold War. This is due because of two main arguments. The first reason is that Mexico, like the rest of the Latin-American countries, by October 2020 funded a high percentage of the doses required to vaccinate its population. Indeed, Mexico provided 180 million dollars in advance to guarantee the purchase of Covid-19 vaccines under the process led by the World Health Organization. With some exceptions, China and Russia donated vaccines in 2021 for the population of the region. Nevertheless, it was not an apparent effort but somewhat symbolic. For example, in early 2021, Russia offered to send 32 million Sputnik V vaccines to Mexico; nonetheless, as of June of the same year, roughly 10% of the intended amount had been received (Gobierno de México, 2021).

The second reason why there was not a Cold War as some specialists think, is that, once Joe Biden was installed as President of the United States after winning the federal election, he began a steadfast and sustained strategy to embrace and reinforce the U.S. political influence over Mexico, Latin America, and the Caribbean.

Indeed, Vice President Kamala Harris traveled to Guatemala and Mexico in June 2021. Immediately after her visit, the U.S. supplied 1.5 million vaccines to the northern border of Mexico alone, in addition to scheduling the distribution of 80 million vaccines into the region, with 25 million doses expected to arrive by the end of June (El Informador, 2021). As a result, the population of Baja California -the Mexican state bordering California that registers as one of the world's most crossed border daily- were vaccinated (except for children) by the end of June, a situation that is candidly inconceivable in any of the other imaginary scenarios. In summary, there is no Cold War nowadays since there is an absent influence of the Russian and Chinese policy in the Latin American region. On the contrary, the United States -for better or worse- once again validated the Monroe

Doctrine throughout multilevel negotiations on local and bilateral approaches.

Of course, the vaccines driven by the United States to the region were never free, but rather such strategy incurred in mandatory commitments of diverse local political backgrounds that may or not be pointless for national allies. For example, the compulsory exchange was written in the plan in the Mexican scenario: complete vaccination of Mexican society in trade for migratory contention, fight against corruption and insecurity, and labor improvements. However, the Mexican interest is grounded around maximum effort on border firearm seizures, international agents operating in national territory, and financing to civilian coup organizations that weaken the Mexican State. These lurid issues were not even touched upon by mistake. However, President Biden published -in a sort of double agenda- on June 10, 2021, on his official Twitter account two critical messages: "COVID-19 vaccines are free. Get vaccinated, folks", and

Today, I'm announcing that the United States will donate half a billion new Pfizer vaccines to 92 low – and lower middle – income countries. These Pfizer vaccines will save millions of lives around the world and be produced through the power of American manufacturing.¹

The imposition of peripheral agendas contributes to the fact that Latin America's social, economic, and political problems are not solved at the root; which, of course, sooner or later affects the northern neighbors, who publicly claims to be interested in collaborating with the resolution of the problem; however, the strategies employed questionable yield results by various social actors including U.S. Senators (AP, 2015).

The most extraordinary case that arose from international pressure during the COVID-19 pandemic was the Central American country of El Salvador. President Nayib Bukele (2019 -) had several disagreements with the head of the OAS. He finally broke collaboration ties because -according to Bukele- the international organization was doing everything possible to impose on the Anti-Corruption Commission a Salvadoran ex-official whose corruption-related acts had been detected.

At the same time, China and the United States were discreetly exerting pressure on the nation through various mechanisms, which made the Central American country with its dollarized economy vulnerable. Any U.S. pressure on El Salvador would have severe consequences for a country already distressed by gang violence (e.g., Mara Salvatrucha), the massive exodus of its population to

¹ Cfr. POTUS Official Account, in https://twitter.com/POTUS/status/1403045458277249024 (June 20, 2021)

the North, and poverty in 3 out of every 10 Salvadoran households. (Banco Mundial, 2021).

In a historic event, President Nayib Bukele sent Congress a bill to establish the Bitcoin cryptocurrency as a means of financial exchange in El Salvador, approved on June 10, 2021. That is to say, the same day that President Biden spread via Twitter the diffusion of the U.S. geopolitical strategy in Latin America via vaccination campaign, President Bukele celebrated the Senate approval of the cryptocurrency as a legal and official financial mechanism. However, as if this was not encouraging for all those outside the banking system, the next day, the President specified that El Salvador would provide geothermal energy, characterized by being a clean and renewable source of energy, intended for cryptocurrency mining companies.

Covid-19, in addition to profoundly affecting economies and generating fatalities due to hospital mismanagement, perhaps, more importantly, dramatically accelerated the use of technology in all latitudes around the world. The use of high technology was not democratic, so it automatically discriminated against the vulnerable population; however, technology and artificial intelligence came to stay in the classroom, at work, at home, and even in the national banking system, as in the case of El Salvador. The pressure exerted by Russia, China, and the United States through the scattering of vaccines around the world to impose and recolonize through their political agenda is reminiscent of the Spanish conquistadors who in the 1500s came to what is today Latin America to plunder gold and silver from the natives, in exchange for mirrors and other sayings.

In conclusion, the Latin American region and the whole globe were unprepared for such a catastrophe as the pandemic of Covid-19. However, certain factors make Latin America more vulnerable to the pandemic. Huge economic inequalities, the dimension of poverty, informal labor sector, health care system weakness, and inaccessibility, all these factors result in a situation in which the death toll from Covid-19 in Latin America and the Caribbean passed 1 million at the end of May 2021. As there is no universal response toward the Covid-19 pandemic, one can also observe quite different politics and measures aimed to protect the citizens in the region. As the analysis mentioned above presents, none of them are sufficient.

The Covid-19 outcomes were significantly different between developed and developing countries. Also, it can be observed that the pandemic effects go further than the health care system. It also touches on geopolitics and inter-State relations. In a first phase, the most important pharmaceutical companies made an effort to find a vaccine - single-minded in adults, never the youth- to contain the

unknown virus; however, in the second phase, despite the efforts made by the countries -through the WHO- to counteract the unbalanced purchase of some countries as opposed to others, in the end, the pharmaceutical companies agreed to discriminate distribution, naturally distressing the developing countries to benefit the United States, England, Israel, China, and Russia. Through pharmaceuticals, the United States, China, and Russia have made their bids - in some cases unsuccessfully - to shape geopolitics in the Latin American region.

These geopolitical and historical processes have not concluded since, in the first instance, there are no vaccines for children and youth in general, a matter that continues to generate fear among the population. On the other hand, at the time of writing these lines, there was no official reaction from the international central banking system nor the United States regarding the Bitcoin cryptocurrency that El Salvador made official for its use, to depend on the U.S. dollar. We currently confirm that Mexico remains without positioning the controlled sale and seizure of firearms on the bilateral agenda in the United States before reaching Mexico's northern border. Suppose this significant problem - a Mexican priority - was resolved, or at least significantly reduced. In that case, Mexico could pacify and improve its security and justice system by combating corruption and strengthening the U.S. in many areas.

Bibliography

- AP (2015) Senadores EEUU cuestionan eficacia de Iniciativa Mérida, Chicago Tribune, in https://www.chicagotribune.com/hoy/ct-hoy-8500955-senadores-eeuu-cuestionan-eficacia-de-iniciativa-merida-story.html
- Asociación Latinoamericana de Sistemas Privados de Salud (ALAMI) (2016) Estadísticas del Mercado de Salud en América Latina, 190 p. http://alami.org/institucional/assets/informe-latinoinsurance.pdf
- Banco Mundial (2021) Multidimensional poverty headcount ratio, household (% of total households) El Salvador, in https://datos.bancomundial.org/indicator/SI.POV.MDIM.HH?locations=SV
- Blofield, Merike, Cecilia Giambruno, Luis Miguel Galindo, y Fernando Filgueira (2020) América Latina ante la crisis del COVID-19. Vulnerabilidad socioeconómnica y respuesta social. Chile, Naciones Unidas en https://repositorio.ce-pal.org/bitstream/handle/11362/46484/S2000718_es.pdf?sequence=1&isAllowed=y
- Delfino, Emilia (2020) "Argentina lidera un ránking de camas críticas pero sigue la amenaza de colapso", *Perfil*, June 27th, https://www.perfil.com/noticias/actualidad/argentina-lidera-un-ranking-de-camas-criticas-pero-sigue-la-amenaza-de-colapso.phtml?rd=1

- Economic Commission for Latin America and the Caribbean (ECLAC) (2020a) "Measures and actions at the national level," *COVID-19 Observatory in Latin American and the Caribbean*, https://www.cepal.org/en/topics/covid-19
- ECLAC (2020b) "Addressing the growing impact of COVID-19 with a view on reactivation with equality: new projections", *Special Report COVID-19*, no. 5, July 15, https://repositorio.cepal.org/bitstream/handle/11362/45784/1/S2000470_en.pdf
- ECLAC & Pan American Health Organization (PAHO) (2020) "Health and the economy: a convergence needed to address COVID-19 and retake the path of sustainable development in Latin American and the Caribbean", in *COVID-19 Report*, July 30, https://repositorio.cepal.org/bitstream/handle/11362/45841/4/S2000461_en.pdf
- ECLAC & United Nations (2019) *Social Panorama of Latin America*, United Nations: Santiago, 254 p. https://www.cepal.org/en/publications/44989-social-panorama-latin-america-2019
- El Informador (2021) Estados Unidos donará 80 millones de vacunas contra Covid-19, in https://www.informador.mx/internacional/Estados-Unidos-donara-80-millones-devacunas-contra-el-COVID-19-20210604-0001.html
- Gobierno de México (2021) Recibe México noveno embarque de vacunas envasadas Sputnik V, in https://www.gob.mx/salud/prensa/recibe-mexico-noveno-embarque-de-vacunas-envasadas-sputnik-v
- Jofré, Valentina (2020) "Camas comienzan a escasear en América Latina", in La Tercera, May 27th, https://www.latercera.com/mundo/noticia/camas-comienzan-a-escasear-en-america-latina/7MTVL6QDJRGRJFJU5FM2SSGQCE/
- John Hopkins Bloomberg School of Public Health & Nuclear Threat Initiative (2020) Global Health Security Index 2019, https://www.ghsindex.org/wp-content/up-loads/2020/04/2019-Global-Health-Security-Index.pdf
- John Hopkins University & Medicine (2020) "Mortality analyses", in *Coronavirus Resource Center*, https://coronavirus.jhu.edu/data/mortality
- Lozano, Genaro (2021) Vaccine diplomacy: a new Cold War, in https://www.americasquarterly.org/article/vaccine-diplomacy-a-new-cold-war/
- McCarthy, Niall (2020) "The Countries with the Most Critical Care Beds Per Capita", in *Statista*, March 12, https://www.statista.com/chart/21105/number-of-critical-care-beds-per-100000-inhabitants/
- Martí I Puig, Salvador y Manuel Alcántara Sáez (2021) América Latina y Covid-19: democracias fatigadas en tiempos de pandemia. México, Revista Mexicana de Sociología 83, Número especial, pp. 11-37.
- Martínez-Gutiérrez, María Soledad (2020) "Chile's Response to the Coronavirus Pandemic", in *Cambridge Core blog*, https://www.cambridge.org/core/blog/2020/04/11/chiles-response-to-the-coronavirus-pandemic/

- Morens, David M., Daszak, Peter; Taubenberger, Jeffery K. (2020) "Escaping Pandora's Box–A Novel Coronavirus", in *The New England Journal of Medicine*, April 2, pp. 1293-1295. https://www.nejm.org/doi/pdf/10.1056/NEJMp2002106?articleTools=true
- Munster, Vincent J., Koopmans, Marion; van Doremalen, Neeltje; van Riel, Debby; de Wit, Emmie (2020) "A Novel Coronavirus Emerging in China–Key Questions for Impact Assessments", in *The New England Journal of Medicine*, February 20, 2020, pp. 692-694, https://www.nejm.org/doi/full/10.1056/nejmp2000929
- Organisation for Economic Co-operation and Development (OECD) (2020), "Health Expenditure and Financing", in *OECD Stats*, https://stats.oecd.org/Index.aspx?Theme-TreeId=9
- Our World in Data (2020) "Coronavirus (COVID-19) Testing", in *Statistics and Research*, https://ourworldindata.org/coronavirus-testing
- Perlman, Stanley (2020) "Another Decade, Another Coronavirus", in: The New England Journal of Medicine, February 20, pp. 760-762. https://www.neim.org/doi/pdf/10.1056/NEJMe2001126?articleTools=true
- She, Jun; Jiang, Jinjun; Ye, Ling; Hu, Lijuan; Bai, Chunxue and Song, Yuanlin (2020) "2019 Novel coronavirus pneumonia in Wuhan, China: emerging attack and management strategies", in *Clinical and Translational Medicine*, February 20, https://clintrans-med.springeropen.com/articles/10.1186/s40169-020-00271-z
- United Nations (UN) (2018) "La desigualdad, el gran enemigo de la salud en América Latina", in *UN News*, April 6th, https://news.un.org/es/story/2018/04/1430582
- Vilasanjuan, Rafael (2021) Covid-19: the geopolitics of the vaccine, a weapon for global security, in <a href="http://www.realinstitutoelcano.org/wps/portal/rielcano_en/contenido?WCM_GLOBAL_CONTEXT=/elcano/elcano_in/zonas_in/ari32-2021-vilasanjuan-covid-19-the-geopolitics-of-the-vaccine-a-weapon-for-global-security
- World Bank (2020) "Hospital beds (per 1,000 people)", in *data*, https://data.worldbank.org/indicator/SH.MED.BEDS.ZS
- World Health Organization (2020) "Situation Reports", in *Coronavirus disease (COVID-19)*, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

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