**Supplementary materials**

**Supplementary material 1. Status of the pandemic in Latin American countries (incidence, mortality and vaccination coverage).**

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|  | Brazil | Argentina | Colombia | México | Peru | Chile | Bolivia | Ecuador | Uruguay | Paraguay | Venezuela |
| Capital | Brasilia | Buenos Aires | Bogota | Mexico City | Lima | Santiago | La Paz | Quito | Montevideo | Asuncion | Caracas |
| Population 2021 | 213.993.441 | 45.605.823 | 51.265.841 | 130.262.220 | 33.359.415 | 19.212.362 | 11.832.936 | 17.888.474 | 3.485.152 | 7.219.641 | 28.704.947 |
| % Urban population 2020 | 87.30 | 92.20 | 81.70 | 81.00 | 78.30 | 87.80 | 70.50 | 64.40 | 95.60 | 62.50 | 88.30 |
| Life expectancy 2019 | 75.88 | 76.67 | 77.29 | 75.05 | 76.74 | 80.18 | 71.51 | 77.01 | 77.91 | 74.25 | 72.06 |
| GINI 2019 | 0.53 | 0.43 | 0.51 | 0.45 | 0.42 | 0.44 | 0.42 | 0.46 | 0.40 | 0.46 | 0.51 |
| Human Development Index 2019 | 0.77 | 0.85 | 0.77 | 0.78 | 0.78 | 0.85 | 0.72 | 0.76 | 0.82 | 0.73 | 0.71 |
| % Deaths by non-transmittable diseases 2019 | 74.73 | 76.69 | 75.64 | 80.41 | 72.58 | 85.12 | 72.67 | 76.20 | 85.51 | 74.93 | 65.05 |
| Accumulated cases COVID 19 | 30.252.618 | 9.060.923 | 6.089.662 | 5.727.668 | 3.355.739 | 3.531.529 | 903.908 | 866.884 | 895.775 | 648.446 | 522.042 |
| Total deaths | 661.960 | 128.344 | 139.749 | 323.944 | 212.630 | 57.270 | 21.903 | 35.528 | 7197 | 18.734 | 5701 |
| Total doses of vaccines administered per 100 inhabitants | 191.85 X 100 | 215.9 X 100 | 160.56 X 100 | 150.54 | 212.21 | 269.02 | 114.79 | 192.02 | 233,46 | 119.83 | 133.15 |
| Persons with complete vaccination schedule per 100 inhabitants | 74.94 X 100 | 82.13 X 100 | 68.99 X 100 | 61.97 | 80.29 | 91.16 | 50.36 | 78.46 | 82,18 | 47.02 | 50.24 |
| GHS Global Health Safety Index. | 51.2% | 54.4 % | 53.2% | 57% | 54.9 % | 56.2% | 29.9% | 50.8% | 40.3% | 40.3% | 20.9% |
| Universal Health Coverage | 65% | 61% | 74% | 61% | 76% | 74% | 52% | 64% | 69% | 63% | 61% |
| Healthcare accessibility and quality index. | 64% | 68% | 68% | 66% | 64% | 78% | 49% | 62% | 71% | 57% | 68% |
| Beds per capita | 2.09/ 2017 | 4.99/ 2017 | 1.71 /2017 | 0,98/ 2018 | 1.59/ 2017 | 2.06/ 2017 | 1.29/ 2017 | pending | pending | pending | 0.87/ 2017 |

**Supplementary material 2. Search strategies**

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| Database | Search strategies (search terms) |
| Pubmed | ("Pandemics"[Mesh] OR "COVID-19"[Mesh] OR "COVID-19 Pandemic" OR "COVID-19 Pandemics" OR "SARS-CoV-2 infection") AND ("Preparedness" OR "Emergency preparedness" OR "Pandemic preparedness plan" OR "Response" OR "Response measures" OR "Response emergency plans" OR "Policy"[Mesh] OR "Public Policy"[Mesh] OR "Social Protection" OR "Government Programs"[Mesh] OR "Legislation as Topic"[Mesh] OR "Health Legislation") AND ("Latin America"[Mesh] OR "South America"[Mesh] OR "Argentina"[Mesh] OR "Bolivia"[Mesh] OR "Chile"[Mesh] OR "Colombia"[Mesh] OR "Ecuador"[Mesh] OR "Paraguay"[Mesh] OR "Peru"[Mesh] OR "Uruguay"[Mesh] OR "Brazil"[Mesh] OR "Mexico"[Mesh]) |
| Web of Science | ("Pandemics" OR "COVID-19" OR "COVID-19 Pandemic" OR "COVID-19 Pandemics" OR "SARS-CoV-2 infection") AND (“Preparedness” OR “Emergency preparedness” OR “ Pandemic preparedeness plan” OR “Response” OR “Response measures” OR “Response emergency plans” OR "Policy” OR "Public Policy" OR “Social Protection” OR "Government Programs" OR "Legislation as Topic" OR “Health Legislation”) AND ("Latin America" OR "South America" OR "Argentina" OR "Bolivia" OR "Chile" OR "Colombia" OR "Ecuador" OR "Paraguay" OR "Peru" OR "Uruguay" OR "Venezuela" OR "Mexico") |
| LILACS | (Pandemia) OR (COVID-19) AND (Preparación) OR (Respuesta) OR (Programas de gobierno) OR (Política pública) OR (Legislación en salud) AND (Argentina) OR (Bolivia) OR (Brasil) OR (Colombia) OR (Chile) OR (Ecuador) OR (Perú) OR (Paraguay) OR (Uruguay) OR (Venezuela) OR (México)  |
| Epistemónikos | (title:((title:(Colombia) OR abstract:(Colombia)) AND (title:((title:(Colombia) OR abstract:(Colombia)) OR (title:(Argentina) OR abstract:(Argentina)) OR (title:(Bolivia) OR abstract:(Bolivia)) OR (title:(Chile) OR abstract:(Chile)) OR (title:(Ecuador) OR abstract:(Ecuador)) OR (title:(Brasil) OR abstract:(Brasil)) OR (title:(Paraguay) OR abstract:(Paraguay)) OR (title:(Peru) OR abstract:(Peru)) OR (title:(Uruguay) OR abstract:(Uruguay)) OR (title:(Venezuela) OR abstract:(Venezuela)) OR (title:(México) OR abstract:(México)) OR abstract:((title:(Colombia) OR abstract:(Colombia)) OR (title:(Argentina) OR abstract:(Argentina)) OR (title:(Bolivia) OR abstract:(Bolivia)) OR (title:(Chile) OR abstract:(Chile)) OR (title:(Ecuador) OR abstract:(Ecuador)) OR (title:(Brasil) OR abstract:(Brasil)) OR (title:(Paraguay) OR abstract:(Paraguay)) OR (title:(Peru) OR abstract:(Peru)) OR (title:(Uruguay) OR abstract:(Uruguay)) OR (title:(Venezuela) OR abstract:(Venezuela)) OR (title:(México) OR abstract:(México)) OR (title:(Suriname) OR abstract:(Suriname)))) AND (title:((title:(Emergency preparedness) OR abstract:(Emergency preparedness)) OR (title:(Preparedness) OR abstract:(Preparedness)) OR (title:(Response) OR abstract:(Response)) OR (title:(Social Protection) OR abstract:(Social Protection)) OR (title:(Government Programs) OR abstract:(Government Programs)) OR (title:(Health Legislation) OR abstract:(Health Legislation)) OR (title:(Public Policy) OR abstract:(Public Policy)) OR (title:(Social Protection) OR abstract:(Social Protection))) OR abstract:((title:(Emergency preparedness) OR abstract:(Emergency preparedness)) OR (title:(Preparedness) OR abstract:(Preparedness)) OR (title:(Response) OR abstract:(Response)) OR (title:(Social Protection) OR abstract:(Social Protection)) OR (title:(Government Programs) OR abstract:(Government Programs)) OR (title:(Health Legislation) OR abstract:(Health Legislation)) OR (title:(Public Policy) OR abstract:(Public Policy)) OR (title:(Social Protection) OR abstract:(Social Protection (title:(Pandemic preparedness plan) OR abstract:(Pandemic preparedness plan)))) AND (title:((title:(pandemics) OR abstract:(pandemics)) OR (title:(COVID-19) OR abstract:(COVID-19))) OR abstract:((title:(pandemics) OR abstract:(pandemics)) OR (title:(COVID-19) OR abstract:(COVID-19))) |

**Supplementary material 3. Paper included in the review.**

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| Year and Author | Country | Pillar | Objective  | Results |
| 2020Canals et al (1)  | Chile | Coordination/Laboratory | To report on the surveillance of the COVID-19 pandemic in Chile and analyze the response to public health interventions implemented from March 3 to June 30, 2020. | There was an accelerated response to the emergency with partially successful containment measures, however, the late implementation with mitigation actions favored the spread of the epidemic which caused a failure in the proper management of the outbreak. |
| 2020Romo et al (2)  | Argentina | Coordination/Laboratory | To describe the epidemiological situation and earliest response to the COVID-19 pandemic in Argentina. | Argentina was one of the nations that acted quickly to limit infections as soon as possible. Although the nation acted and tried to use all its resources, its health system remained fragile and deterred authorities from being fully prepared for a pandemic. |
| 2020Hernández et al (3)  | Colombia | Surveillance | Evaluate the performance of the Colombian public health surveillance system during the first 50 days of the COVID-19 pandemic. | The first days of COVID-19 surveillance in Colombian territory were the most difficult and the quality of the data was not optimal. An expected behavior given that public health surveillance activities were just beginning to be refined. |
| 2020Grebe et al (4)  | Chile | Coordination/Laboratory | Analyze the Chilean public health response to mitigate the spread of COVID-19. | A dynamic quarantine strategy works partially, stabilizing DTRs between 4% and 11%. Therefore, it does not achieve relative control of the pandemic at the national level. |
| 2020Croda et al (5)  | Brazil | Coordination | Describe the initial preparedness and response measures implemented in Brazil in the face of the COVID-19 pandemic. | Brazil began its preparedness and response plans early, activating the EHOC-nCoV operations center on January 10, 2020, before COVID-19 cases had been reported in Latin America. |
| 2020Carrasquilla (6)  | Colombia | CoordinationSurveillanceLaboratoryCase management | Describe early control measures and preparation of diagnostic tests and ICU. | Colombia executed an early response to the pandemic by starting to prepare hospitals for strengthening their ICU capacity, as well as preparing for testing and developing laboratory capacities to implement PCR tests. |
| 2020Otoya-Tono et al (7)  | Colombia | Coordination | Describe the clinical status of the virus, its epidemiological behavior in Colombia and the public measures that have been adopted in Colombia and other Latin American countries in the face of the COVID-19 pandemic. | In Colombia, containment measures were adopted, at the expense of a high social and economic impact for the country. |
| 2020 García-Huidobro et al (8)  | Chile | Case management | Inform the accelerated implementation of system-wide telemedicine in response to the COVID-19 emergency. | Telemedicine produced high satisfaction among patients and providers. Although this clinical care modality was rapidly implemented in response to the COVID-19 pandemic, there was great heterogeneity in its implementation among medical specialties. |
| 2020 Slomp et al (9)  | Brazil | Surveillance | Problematize the municipal possibilities of facing the COVID-19 pandemic, based on the technical-scientific cooperation between a municipality and a university in the north of the state of Rio de Janeiro, starting in April 2020. | Thanks to cooperation, the pandemic was faced with monitoring, health management, epidemiological information, technologies to implement situation rooms with real-time data and telemonitoring for users with home isolation. |
| 2020 Paredes et al (10)  | Brazil | Coordination | Present the case of the COR, showing how this Brazilian city is using its urban control center to monitor and assist authorities with real-time data intelligence to respond to COVID-19. | The COR gained experience in managing urban emergencies, involving stakeholders and the population, and above all knowing how to extract meaning from data effectively. |
| 2020 Gonzalez et al (11)  | Peru | Coordination/ Surveillance | Evaluate the theoretical-mathematical SIR model. | It was found that the basic propagation number (R0) fell from 6.0 to 3.2 having been reduced by 54% due to the suppression strategy; and two months later it falls to 1.7. However, it remains high and evidence that the level of infected continues to expand with its adverse social and economic effects. |
| 2020 Garcia et al (12)  | Multinational | Coordination | Discuss the initial responses of eight selected Latin American countries, including similarities and differences in fiscal, economic, and public health measures. | Latin American countries implemented a series of measures in response to the pandemic, state of emergency, control of entry points, quarantine among others. |
| 2020 Santos et al (13)  | Brazil | Coordination | Characterize the social distancing measures implemented by the Brazilian Federal States. | All Brazilian UFs implemented social distancing measures comprehensively, early and in a short period of time. However, the impact of these measures is still unclear. |
| 2021 Alves et al (14)  | Multinational | Coordination | identify variations in population mobility in South America during the pandemic (February 15 to October 27, 2020). | Telemedicine produced high satisfaction among patients and providers. Although this clinical care modality was rapidly implemented in response to the COVID-19 pandemic, there was great heterogeneity in its implementation among medical specialties. |
| 2021 Cáceres et al (15)  | Peru | Coordination | Better understand how institutional responses and capacities shaped the impacts of the pandemic, taking the Arequipa region as a case study. | The multiple challenges specific to rural areas, combined with limited and problematic support from national and regional governments, led to differentiated responses in rural communities. |
| 2021 Rees et al (16)  | Peru | Surveillance | Analyze how Peru’s health workforce policy and planning is addressing health system pressures from the COVID-19 pandemic | The strategies included: the temporary hiring of additional health personnel, the payment of extraordinary bonuses to staff, the approval of Remote Health Work, the development of a platform for the National Hiring of Human Resources in Health for COVID-19 |
| 2021 Milet and Bravo (17)  | Peru | CoordinationCase Management | Address Peru’s degree of institutional preparedness to face the effects of the COVID-19 pandemic. | According to the analysis, it is concluded that Peru was not in the best conditions to respond to the COVID-19 health emergency, in addition to facing an internal political crisis that aggravated the country's response capacity. |
| 2021 Kameda et al (18)  | Brazil | Laboratory | Discuss efforts to expand the supply of COVID-19 testing in the Unified Health System, as well as the main challenges to such initiatives. | The lack of a consistent national strategy to fight COVID-19 only exacerbated the supply problems of diagnostic components. The capacity to expand testing has not been sufficient to control the advance of the epidemic in the country. |
| 2021 Donida et al (19)  | Brazil | Surveillance | To report on the digital health strategies applied in Brazil and the first results obtained during the fight against COVID-19. | Digital strategies were implemented that enabled case management, notification and contact tracing. These systems supported surveillance for COVID-19. |
| 2021 Silva et al (20)  | Brazil | Case Management | Analyze the geospatial distribution of health resources (intensive care units and hospital beds, ventilators and hospitals and access to facilities with intensive care units (ICU) | Brazil has significant regional disparities in infrastructure and professional resources that affect health outcomes during the COVID-19 pandemic, geographic inequalities, lack of hospital resources, oxygen crisis, collapse of the health and funeral system. |
| 2021 Torres et al (21)  | Ecuador | Laboratory | Systematically assess COVID-19 diagnostic capacities in Ecuador. | The national average time to complete a case was 3 days; 12.1% of samples took ≥10 days to complete; The national average daily backlog was 29.1 tests per 100,000 people. Only 8 of the 24 provinces had authorized COVID-19 processing laboratories. |
| 2021 Silberman et al (22)  | Argentina | Case Management | Describe the approach to human staff policy in the COVID-19 emergency in Argentina. | The workforce increased by 15,200 professionals. Programs were developed with more than twenty national universities and more than 5,000 students, and the National Plan for the Care of Health Workers was created, which reached more than 70 hospitals and more than 15,000 workers.  |
| 2021 Fleury et al (23)  | Brazil | Coordination | Describe the response of the Brazilian scientific community to meet the urgent needs of the single public health system [SUS], with the aim of guaranteeing universal access. | Most of the proposals focused on the development and innovation of personal protective equipment, medical devices, diagnostic tests, drugs and vaccines, which the scientific community quickly identified as research priorities. |
| 2021 Szylovec et al (24)  | Brazil | Coordination | Examine Brazil’s response to COVID-19 by investigating the country's actions and reflecting on the results during January and March 2020. | In response to the pandemic, measures were taken that included a range of actions, from promotion and prevention to pandemic surveillance and coordination of health resources and personnel. |
| 2021 Campo et al (25)  | Brazil | Coordination | Describe the role of early public funding of research on the COVID-19 pandemic in Brazil. | In the first four months since the first case in Wuhan, China (December 31, 2019), about US$ 38.3 million was allocated to public funding for scientific projects. |
| 2021 Nair et al (26)  | Brazil | Case Management | Describe federal government interventions in crisis management and the consequences for health professionals. | The absence of a federal policy to coordinate actions aimed at the governance of health personnel to face the pandemic in Brazil was confirmed. |
| 2021 Olivier et al (27)  | Colombia | Coordination | Understand how mobility patterns and the spread of SARS-CoV-2 are connected during the first wave. in four different countries: the West Coast of the USA, Colombia, Sweden and France. | In Colombia, the quarantine had a strong impact on mobility between units, which led to an overall reduction of 78% between March 27 and April 2 and long-distance mobilities (more than 50 km) were reduced by 93%. |