

COVID-19 Inequalities in Brazil: Health, Education, and Social Assistance Policies

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1 INTRODUCTION

COVID-19 is the major pandemic of the twenty-first century. Besides its dramatic consequences on the health of individuals and populations, the pandemic had a major impact on healthcare systems from a broad perspective (Farrar & Ahuja, 2022), as well as on the workforce from critical

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sectors, such as education, health, and other frontline services, including transportation and logistics. This chapter reflects on the COVID-19 health emergency and inequalities in Brazil. The first part contextualizes the country's response to the pandemic. The following three sections describe disparities in health, education, and social assistance. The conclusion reflects on the consequences of these findings. Although we focus on three areas (health, education, and social assistance), these are not the single or even the most affected sectors impacted by the pandemic. We believe the major consequences have yet to be fully evaluated and should be understood as a massive, entangled effect on the social fabric, accompanied by altered values in key indicators of inequality such as the Gini index. For example, we should remember that as of 2015, Brazil had a Gini Index of 51.9. In contrast, the corresponding 2020 figure was 48.9. Nevertheless, focusing on specific sectors is essential to foster in-depth analysis and inform public policies.

2 CONTEXTUALIZING COVID-19 IN BRAZIL

In a large country such as Brazil, a pandemic curve is likely to present multiple peaks and troughs at different places and times (Bastos, 2020), making a coordinated response a formidable challenge. From June to September 2020, Brazil had the second-highest number of COVID-19 cases worldwide. In mid-September 2020, India and the United States outpaced Brazil in the number of COVID-19 cases. Thus, both globally and within Latin America and the Caribbean region, Brazil was one of the countries most heavily affected by COVID-19. Moreover, several variants of coronavirus, including the more contagious P1 variant, have been first identified in Brazil.

Brazil's response to the virus has been acknowledged as controversial by the world community (Fonseca, Nattrass, Arantes, et al., 2021). President Jair Bolsonaro, a far-right, populist president, was a former army captain who has expressed opposition to abortion, gun control, samesex marriage, and affirmative action. Bolsonaro's response to COVID-19 reflects his prioritization of narrow capitalist interests, and he was keen not to "stop" the national economy. At the outset of the pandemic, the Ministry of Health (MoH) acted promptly in cooperation with several subnational governments. However, the president and his supporters adopted a denialist, anti-science approach (Fonseca, Nattrass, Lazaro, et al., 2021), which made policy coordination even more difficult. The pandemic struck the country during an economic crisis (Deweck et al., 2018). Responding to COVID-19 demanded increased social expenditures despite ongoing austerity policies, high unemployment rates, and a high degree of socioeconomic inequality. The COVID-19 emergency resulted in the federal government investing over \$127 billion in fighting the virus between 2020 and 2022. Such investment funded much-needed social programs, and it contrasted sharply with the austerity policies promulgated by the Ministry of Finance and the president.

Nearly half of Brazil's population either lives in poverty, surviving on less than \$5.50 per day, or is vulnerable to falling into poverty. Therefore, Brazil's population was particularly susceptible to the negative socioeconomic consequences of the COVID-19 pandemic (World Bank, 2020a). Particularly at risk were those living in *favelas* (urban slums) without necessary sanitation facilities, which makes compliance with hygiene standards and social distancing more challenging. Social policies to protect the poor, informal workers, and the unemployed were a necessary precondition for effectively implementing emergency measures, particularly non-pharmaceutical interventions (Greer, Jarman et al., 2021).

Brazil has one of the largest public healthcare systems in the world. It covers 75% of the population, is funded through general taxes, and offers universal access at no cost at the point of delivery. To understand healthcare inequalities during the COVID-19 pandemic, it is necessary to understand the allocation of authority and responsibility within the Brazilian healthcare system. The public healthcare system is highly decentralized. In total, 27 states and more than 5,000 municipalities are responsible for providing healthcare. As a means of coordinating healthcare provisions, there are 438 health regions (a network of municipalities ranging from 1 to 46 jurisdictions) that are responsible, among other things, for hospital assistance. The MoH has a constitutional mandate to coordinate Brazil's health policy, particularly during public health crises. However, President Bolsonaro's denialist position regarding COVID-19 placed an unprecedented degree of pressure on the MoH to avoid support for social-distancing measures and advocate for the use of experimental (and controversial) treatments, such as chloroquine. The MoH did not issue any national lockdowns, social-distancing mandates, or stay-at-home orders. Given the president's approach to the pandemic, it was difficult for the MoH to coordinate a response with those state governments that were willing to follow World Health Organization's (WHO) pandemic guidelines (Fonseca, Nattrass, Arantes, et al., 2021).

Similar to the healthcare system, education is very decentralized in Brazil, but with far less coordination at the central level. Although the Ministry of Education sets policy goals and designs its framework, subnational governments are responsible for overseeing education within their jurisdictions, especially regarding early childhood, primary, and secondary education (OECD, 2015). The federal government is responsible for tertiary education. In 2020, the National Council of Education promulgated two crucial guidelines at the outset of the pandemic. It first issued norms regulating exceptions to the usual academic year, such as reducing the minimum number of days students must be in school (Provisional Decree 934/2020, then converted into Law 14.040/2020). Later, it provided regulations concerning the implementation of distance learning for higher education (Ministerial Decree 544/2020). However, the decision to open or close schools remained the prerogative of state and municipal governments overseeing pandemic control. Therefore, there was significant variation in education policy across the country.

Finally, Brazil has one of the most successful conditional cash transfer programs globally. This program is known as the Family Allowance Program (*Bolsa Familia*) (Rasella et al., 2013; Shei et al., 2014). During the pandemic, the government promoted adjustments to the Family Allowance Program and created a new social program to provide salary relief to vulnerable populations; this initiative was known as the Emergency Allowance (*Auxilio Emergencial*). The Family Allowance and the Emergency Allowance were the two most important social programs implemented in Brazil during the pandemic, and they have been judged to have been exemplary counter-pandemic measures (World Bank, 2020b). Paradoxically, Brazil instituted one of the most generous social assistance packages in the Latin American region despite its unhealthy fiscal situation.

Another important initiative, the Unified System of Social Assistance (*Sistema Único de Assistência Social*, SUAS) guarantees regular and automatic funding to subnational governments, defines each government's responsibilities, and provides intergovernmental arrangements, which result in service standardization, expansion, and a greater access to them, and municipal state capacity strengthening. Both, the Family Allowance Program and SUAS, were institutionalized during President Luis Inácio Lula da Silva's government (2003–2010) (Bichir et al., 2020; Lima-Silva

et al., 2020; Segatto et al., 2022). Although Brazil had promoted necessary calibration and social program adjustments during the COVID-19 pandemic, these were mostly temporary. Such adjustments included rules to avoid termination of benefits, advance payments, and modernization of services through digital technologies. We focus here on the Emergency Allowance given its resources and impact on poverty and inequality during the pandemic.

3 Health

Several studies have analyzed health inequalities in Brazil during the COVID-19 pandemic using large-scale healthcare data sets. Castro et al. (2021) analyzed the pattern of the spread of COVID-19 cases and deaths in Brazil, considering spatial and temporal scales from epidemiological week 9 (February 23-29, 2020) to week 41 (October 4-10, 2020). This represented what some analysts called the "first wave" of the pandemic (Iftimie et al., 2020), during which no vaccines were available and nonpharmacological measures were crucial to mitigating the spread of the virus. The authors identified highly variable infection and mortality rates across Brazilian municipalities. In nine states, including Amazonas and Rio de Janeiro, the rise of deaths was faster than that of cases over several weeks. Both states experienced a shortage of ICU beds, but Amazonas had smaller availability (approx. 11 ICU beds per 100,000 patients versus 23 in Rio de Janeiro), and ICU beds were concentrated in the capital city of Manaus. This demonstrates Brazil's historical problem of unequal access to tertiary care (Travassos et al., 2006), an issue that remains a key challenge for the health system. During the COVID-19 pandemic, this problem was exacerbated by the uncoordinated response at the federal level.

In addition, there is sound evidence that existing socioeconomic inequalities, rather than age or burden of chronic non-communicable diseases, had the greatest effect on the initial course of the pandemic and deaths from COVID-19, with a disproportionate adverse burden affecting socioeconomically vulnerable regions, states, and municipalities (Rocha et al., 2021). Both Rocha et al. (2021) and Castro et al. (2021) found that although COVID-19 was first recorded in the wealthy regions of São Paulo and Rio de Janeiro, nevertheless, death rates increased quickly in states with marked socioeconomic vulnerabilities, particularly in the North and Northeast regions. These are precisely the regions that score

the lowest on the social disparities index (SDI) for COVID-19, a novel measurement developed by the Centre for Data and Knowledge Integration for Health (CIDACS/Fiocruz). The research is funded by the Bill and Melinda Gates Foundation, and the index is meant to assess inequalities relevant to the COVID-19 pandemic, such as unequal access to health care (Ichihara et al., 2022). More than 97% of the municipalities in the north and northeast regions displayed high or very high SDI scores throughout the three moments of the pandemic, including the initial stage and the two critical peaks.

When studying health-related inequalities in Brazil, it is imperative to consider racial disparities. More than 300 years of black slavery followed by a complete absence of a comprehensive integration or at least the provision of basic education imposed a historical handicap on Afro-Brazilians and their descendants (Telles, 2006).

Several studies that used different data sets to study various epidemiological weeks have called attention to how the pandemic had disproportionately affected black individuals. For instance, although the incidence rates of COVID-19 were higher among the white population, the black population in all regions of the country showed higher fatality rates and an increased risk of death compared to whites, regardless of the region (Martins-Filho et al., 2021). A similar finding was reported by Marinho et al. (2022), who identified that excess mortality among black and brown people was remarkably higher compared to the white population. Finally, between February and August 2020, among hospitalized adults with COVID-19, black and brown patients showed higher in-hospital mortality, less frequently used hospital resources, and potentially suffered more severe conditions than white patients (Peres et al., 2021). It is worth noting that racial inequalities in Brazil are strongly associated with socioeconomic indicators, such as income and education (Lima & Prates, 2019).

Finally, vaccination against COVID-19 has also been a challenge. Historically, Brazil has been very successful at providing vaccinations despite the country's large size and divisions (Domingues et al., 2012). The National Immunization Program, which is funded completely by public resources, provides vaccines to the entire population. The logistics are impressive. In 2017, the National Immunization Program distributed 300 million vaccine doses (Interfarma, 2017). Although Brazil possesses the capacity to mass vaccinate the entire population, COVID-19 immunization has differed considerably among states. By September 2022,

media articles had begun calling attention to the fact that in Sao Paulo and Piaui, nearly 90% of the population had received two doses of the vaccine, while in Roraima and Amapá, less than 55% had received two doses of the vaccine (G1, 2022). There are few large-scale studies on the inequities of vaccination access in Brazil; however, a study on the first eight months of vaccinations found that socioeconomic disparities (measured by the human development index) negatively impacted the first dose vaccination rate in Brazilian municipalities (Bastos et al., 2022). However, access to primary healthcare coverage mitigated these disparities, suggesting that primary healthcare coverage ensured more equitable access to vaccines in vulnerable municipalities.

4 EDUCATION

The social distance measures adopted by state and municipal governments in Brazil led to the closure of schools, suspending face-to-face classes, across the country in March 2020. Following these decisions, state and municipal governments adopted different policies to ensure the continuity of classes through the pandemic. However, within a context of lack of national coordination in education policy in place since 2019, when Bolsonaro's government started, the federal government did not lead any national regulation to respond to the closure of schools and did not adopt any actions to decrease inequalities in this policy field (Abrucio et al., 2020). This resulted in a significant variation and, particularly, fragilities in education policy responses at the subnational level (Barberia et al., 2020; Segatto et al., 2022).

Subnational governments adopted strategies of remote learning over time. If in May 2020, 26% of students did not have access to any remote activity, in May 2021, 98% had access to remote activities (Itaú Social et al., 2022). In some cases, governments adopted innovative responses such as São Paulo's Media Center that broadcast content online and on TV. São Paulo's education department also adopted strategies to decrease inequalities in access: the online content could be accessed by students without using up their mobile data, and SIM cards were distributed to vulnerable students to expand their studying hours (Segatto et al., 2022).

However, this was not the case for most states and municipalities that did not adopt remote learning strategies due to fragilities in their fiscal and administrative capacities and to the lack of students' access to meaningful connectivity (e.g., access to stable high-speed Internet, and suitable devices that would allow them to participate in video calls and live-streaming activities). This was mentioned by 86% of school managers as a challenge to the continuity of remote classes, particularly in rural, municipal, and state schools (CGI.br, 2021). To overcome these barriers, subnational governments printed activities and pedagogical materials and contacted families through online social networks such as WhatsApp and Facebook (Barberia et al., 2020; Bichir et al., 2020; CGI.br, 2021; Itaú Social, Fundação Lemann & Inter-American Development Bank, 2022; Undime, 2021).

According to the 2020 ICT in Education survey, 93% of schools (public and private) scheduled a day and time for parents and legal guardians to pick up printed activities and pedagogical materials at school, and 91% created groups in applications or social networks to communicate with students and parents and legal guardians. While only 65% conducted distance learning classes with students through videoconference platforms, and only 58% used virtual platforms and educational resources (CGI.br, 2021). Neri and Osório (2020) also highlight that the most vulnerable students had lower school attendance levels, assignments turned in, and time dedicated to them.

It is essential to mention that, with the closure of schools, students also suffered the suspension of free meals and were exposed to different risks, including violence, sexual abuse, discrimination, bullying, and online exposure (CGI.br, 2021). Regarding meals, the federal government did not adapt its project grant or distribute pandemic guidelines, resulting in fragmented policies, such as food distribution and cash transfer, and unclear eligibility criteria. In the case of the risks, a few subnational governments re-opened some schools for those students. This also benefited students with any disability who could have more support in the schools (Segatto et al., 2022).

In August 2021, governments authorized the re-opening of schools. However, in most cases, this only happened at the beginning of 2022. Subnational governments have been adopting different strategies to overcome the increasing dropout and truancy rates and the gaps in learning, which were revealed by the national exam that assesses student proficiency conducted in 2021 (INEP, 2022).

5 Social Assistance

Social policies to protect the poor, informal workers, and the unemployed are crucial to balance the short-term consequences and the longerterm impacts that disease control measures have during public health crises (Greer et al., 2021). Responding to the inequalities, the pandemic exacerbated-critical in an unequal country such as Brazil-the federal government created the Emergency Allowance to support low-income families and individuals who had lost their income during the pandemic, including workers who lost their jobs and informal workers. The Program was announced in mid-March 2020 after strong pressure from members of Congress on the Ministry of Economy. Although the executive government announced a R\$ 200 allowance (US\$37) per month, after a debate in Congress, it was increased to R\$ 600 (US\$ 110) per month (Piovesan & Siqueira, 2020). Initially, the Emergency Allowance was approved for five months, but in September 2020, it was renewed for four more months. Again, there was a dispute between the Minister of Economy and Congress on the duration and amount to be paid to beneficiaries. At the end of 2022, Bolsonaro's government replaced the Family Allowance Program with the Brazil Allowance Program (Auxílio Brasil).

Given its volume of resources, coverage, generosity, and potential impact on income and poverty, the World Bank defined the Emergency Allowance as one of the "soundest social protection responses across the globe to COVID-19" (World Bank, 2021a, p. 9). It is still early to understand the impact of the Emergency Allowance on poverty alleviation and inequality. However, a recent evaluation provides an initial understanding. Lazzari et al. (2022) used a novel database from household surveys to analyze the effectiveness of emergency policies implemented during the initial seven months of the pandemic. The authors observed an increase in poverty among employers and formal workers but a decrease among vulnerable groups, which can be explained by the Emergency Allowance. Without the Program, such vulnerable groups would have experienced a significant reduction in labor earnings and increased unemployment or inactivity. Considering individuals below the poverty line (R\$ 261 / US\$ 49.43 per month), Brazil had 10.97% before the pandemic, decreasing to 4.63% in September 2020 as an effect of the Emergency Allowance (Neri, 2021). However, during the first three quarters of 2021, the number of individuals living below the poverty line increased to 16.1% as financial support was suspended. This figure was higher than in the pre-pandemic

period, meaning that in the early months of 2021, an additional 25 million individuals lived in poverty. The new Brazil Allowance Program alleviated this scenario, but it is still worrisome.

In addition to federal financial support, subnational governments created cash transfer programs without coordinating with the federal program or other state and municipal programs. Other strategies included vouchers, food stipends, food parcels, and meal distribution, but they were restricted to short-term emergencies. For instance, the government of Santa Catarina waived electricity bills, and the government of Mato Grosso provided food parcels (*cesta basica*) to poor families. One of the consequences of this uncoordinated mix of national, state, and local policies was that people living in different states were entitled to different social benefits. It is difficult to assess the impact of these programs because Brazil has 27 states and more than 5,000 municipalities with no single information system to register policies implemented in these jurisdictions. This makes understanding the effects of the Emergency Allowance even more complicated. Future comparative, qualitative studies might help to understand the impact of these subnational policies.

A major problem with the Emergency Allowance was that its implementation bypassed SUAS's structure. Individuals who received the Emergency Allowance did not need to enroll in CadÚnico, an instrument by which municipal social assistants register and monitor these beneficiaries, developing a closer relationship with them. To facilitate the inclusion of new families, the federal government developed an online app called "ExtraCad." This system was necessary, given the uncertainty about SUAS's capacity to operate during the pandemic as most of its services require face-to-face interactions and because of other impediments due to social distancing (World Bank, 2021b). However, the new system distorted the Program. Although the Emergency Allowance targets families, not individuals, the number of households with one individual increased by 100%. This means that more than one person in the same household received the benefit as there was no change in the demographics or fertility rate to explain such an increase (Fernandes & Watanabe, 2022). The distortion can be attributed to the government's inadequate communication about the program and its faulty design and monitoring strategy. Without CadUnico registration data, subnational governments were restricted in their capacity to tackle inequalities (Lima-Silva et al., 2020; Segatto et al., 2022).

Brazil's generous social policies were uncoordinated with public health interventions. Several studies have identified that social policy initiatives alone are insufficient in mitigating the social consequences of the pandemic (Greer, Jarman et al., 2021; Greer, King et al., 2021). They need to be accompanied by and coordinated with public health measures, including regulations on testing, social distancing, and mask-wearing.

6 CONCLUSION

This chapter illustrates how the COVID-19 pandemic exacerbated inequalities in Brazil. Studies in health and education inequalities suggested great variation in the impact of the pandemic among different jurisdictions and socioeconomic groups. Brazil's strongest response was in social assistance policy, which relied on a conditional cash transfer structure to expand benefits to vulnerable populations. Yet, its design and monitoring systems were inadequate, which had consequences for many families receiving benefits. The inadequate registration of households affected subnational governments because they rely on the Emergency Allowance database (now Brazil Allowance Program) to formulate policy.

Social inequalities have multifactorial causes, and it is not our aim to point to its determinants. Previous studies suggest that Brazil's pandemic response was controversial at best. The federal government adopted a denialist approach to the pandemic with uncoordinated and poorly designed policies (Fonseca, Nattrass, Arantes, et al., 2021; Segatto et al., 2022). This affected the extent to which health and social policies could curb (or compensate) the devastating effects of COVID-19.

Any crises that affect health and education, especially in low- and middle-income countries, have a pronounced impact on the domestic economy and the fabric of society. Brazil's economy is challenged by low productivity and a shortage of highly qualified professionals. It is, therefore, vulnerable to further dislocation of a curve that is already skewed toward a less balanced distribution (World Bank, 2016). A chronically underfunded and understaffed school system, where the digital divide remains a permanent challenge (Cardozo Sarli & Elora Fernandes, 2021), tends to be on the brink of chaos when schools closed due to the pandemic and no reliable alternative was offered to the disenfranchised segments of society. Instead of inclusion, the current social and digital divide tends to increase to unacceptable levels.

Notes

- 1. World Bank database available at https://data.worldbank.org/indicator/SI. POV.GINI?locations=BR (accessed October 16, 2022).
- 2. Being the latter frequently secondary to structural deficiencies of the health information systems.
- 3. Exchange rate R\$ 5.20. "Monitoramento dos Gastos da União com Combate à COVID-19" https://www.tesourotransparente.gov.br/visualizacao/painel-de-monitoramentos-dos-gastos-com-covid-19 (accessed September 22, 2022).
- 4. Private health insurance covers 25% of the population, mostly through employment benefits packages. People with private health insurance are also entitled to use the public healthcare system, which they usually do to cover high-cost drugs and treatments they are not entitled to under their private contracts.
- Key normative acts of the Ministry of Citizenship during the pandemic can be accessed here: https://www.gov.br/cidadania/pt-br/acoes-e-progra mas/Covid-19/MC_Cartilha_Coronavirus.pdf (accessed October 5, 2020).
- 6. The ICT in Education survey is conducted by the Regional Center for Studies on the Development of the Information Society and the Brazilian Network Information Center since 2010. It investigates access to, use and appropriation of information and communication technologies in the educational community, especially by students and teachers, in regular education schools.
- 7. In addition, municipal social assistance services refer individuals to other services (e.g., job searching, alcohol and child abuse prevention, community relations, and policies, especially health care and education) through *Cad* Único.

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