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## CORONAVIRUS

# Covid-19 is causing the collapse of Brazil's national health service

Brazil is one of the few countries in the Americas that has free universal healthcare. But years of neglect and the pandemic have left the system on the verge of collapse, writes **Rodrigo de Oliveira Andrade**.

Rodrigo de Oliveira Andrade *freelance journalist*

As the number of covid-19 cases in Brazil soars, so do concerns that the country's celebrated public healthcare system will be overwhelmed after four years of severe budget cuts.

"Covid-19 has reached Brazil at a moment when it is seriously weakened," Marco Akerman, an epidemiologist at the University of São Paulo, told *The BMJ*.

Today nearly 160 million people—around 75% of Brazil's population—depend solely on the Unified Health System (known as SUS) for healthcare. Launched in 1988 as part of a wide-ranging constitutional reform after two decades of military dictatorship, SUS has been cited as an example of a successful healthcare system in Latin America, offering a variety of services free of charge.<sup>1</sup>

Where previously only workers with formal employment and no debts to social security were entitled to publicly funded medical care, SUS made healthcare a right guaranteed to all Brazilian citizens.

The service also plays an essential role in distributing medicines, which helped Brazil to become one of the first middle income countries to offer free access to HIV/AIDS medication in 1996.<sup>2</sup>

All that is now under threat. SUS has suffered chronic underfunding since the day it was launched,<sup>3</sup> but the situation worsened in 2015 when the public health expenditure per capita started to decline in real terms. As a consequence of worsening political and economic crises, 2.9 million people lost private healthcare plan coverage, while violent deaths and outbreaks of infectious disease increased. This put more pressure on SUS's capacity to meet the increasing demand for health services.

The lack of resources intensified when, in December 2016, then President Michel Temer approved a constitutional amendment limiting the health budget over the next 20 years—with a projected decline of R\$415 billion (£61 billion, \$80 billion) by 2036.

Today, with gaps in organisation, staff, and public funding, the system has been unable to cope with the sudden load of the rapidly spreading coronavirus, with two million recorded cases of covid-19, more than 80 000 deaths, and a government response that is lacking coordination.

### Primary care wasted

One of SUS's most important innovations was the scaling up of a community based approach to

providing primary healthcare for people living in rural and remote regions. The Family Health Programme (now called the Family Health Strategy, or FHS) operates through health teams made up of a doctor, a nurse, a nurse assistant, and community health agents. "Brazil has 263 756 health agents, each one responsible for nearly 150 households in a geographically delineated area—usually the same area where the agent lives," says Jessem Orellana, an epidemiologist at the Oswaldo Cruz Foundation, in Amazonas.

The agents visit each home at least once a month, checking, for instance, whether patients have been taking their medications, or that prescriptions have been filled out. "They also look for risk factors such as smoking and symptoms of common chronic diseases such as hypertension and diabetes," Orellana explains. They may also ask if or why residents have missed appointments and look out for changes in a household that may be potential warning signs of violence, neglect, or drug use.

FHS coverage gradually expanded after its implementation in 1994, growing from 45.3% of the population in 2006 to 64% in 2016. But coverage levels have recently declined. The Brazilian Ministry of Health estimates that three million people lost coverage from November 2018 to May 2019.<sup>4</sup>

This is especially concerning during the pandemic. FHS has a long history of dealing with diseases like dengue fever and Zika virus, and researchers say it could have helped contain the spread of covid-19.

"Brazil had time to gear up to fight coronavirus, but it hasn't been able to create a protocol capable of integrating its primary healthcare network against the pandemic," Marcia Castro, a statistician and demographer at Harvard University, told *The BMJ*. FHS teams could have been used to conduct the contact tracing needed to find individuals who had contact with infected people.

Failure to do this is less down to willpower or even money, and more to do with a lack of government coordination. "The federal government released an amount of R\$44.2 billion early in the pandemic to cope with covid-19, but only 28.3% has actually been spent so far," says Castro.

Brazil is on its third health minister in four months. President Jair Bolsonaro fired one minister over clashes on covid-19 policy. The second resigned following disagreements about social isolation

measures. The current incumbent, Eduardo Pazuello, is an interim health minister and a former military commander with no previous health experience.<sup>5</sup>

“This political instability poses many challenges to Brazil’s healthcare system, especially when it comes to coordinating strategies between federal, state, and municipal levels,” Eliseu Waldman, a physician at the University of São Paulo, told *The BMJ*.

Bolsonaro continues to pit the economy against public health outcomes. He has politicised scientific and public health evidence and repeatedly clashes with state governors and healthcare professionals over quarantine measures, while promoting unproved treatments such as the anti-malarial drug hydroxychloroquine.

### Staffing crisis

SUS is also facing the pandemic with a shortage of medical staff, despite Brazil having nursing levels equivalent to many richer countries. The country has 101 nurses per 10 000 inhabitants, compared with 9.1 in low income countries and 107.7 in high income economies.

The problems lie in distribution and working conditions. In other nations of the Organisation for Economic Co-operation and Development, the average number of doctors is 3.3 per 1000 inhabitants, but in Brazil the rate is 2.1 and drops to less than one in some states in the poorer regions of the north and north east.

One factor is the weakening of recruitment programmes such as the infamous *More Doctors* initiative, launched in 2013 to increase the number of doctors in Brazil’s remote areas.<sup>6</sup>

The initiative brought in 18 000 professionals, of which 8332 came from Cuba. This led to conflict with Brazilian doctors, who complained that Cuban professionals were not required to prove their education to practise medicine in Brazil. Protests by Brazil’s medical associations even reached the Supreme Federal Court.

As a result, Cuba ended the partnership and withdrew its doctors,<sup>7</sup> leading to the shortfall within the programme’s service structure today, especially in small municipalities. The government has made calls to fill the vacancies, but many remain open.

“*More Doctors* expanded primary healthcare in Brazil by distributing thousands of doctors across the country, which could have been mobilised to aid controlling covid-19 spread,” Castro said.

### Social and racial inequalities

Meanwhile, covid-19 is exacerbating social and racial inequalities, as poor and marginalised communities have limited access to public health services. “These people are the most exposed to the virus,” said Valerio Marra, a researcher at the Federal University of Espírito Santo.

Marra and colleagues have studied how the pandemic is disproportionately affecting black and *pardo* (mixed ethnicity) populations in Brazil. By comparing data from 11 321 patients hospitalised with covid-19, they found that black and *pardo* patients had significantly higher mortality risk compared with white Brazilians.<sup>8</sup> This, they say, is likely related to the high prevalence of comorbidities among *pardo* and black people, including overweight and obesity, which are risk factors for severity of symptoms of covid-19.

It may also be the result of high inequality between white, black, and *pardo* people in accessing health services, especially beds in intensive care units (ICUs).

The risk of death by covid-19 tends to be higher among people admitted to hospitals in Brazil’s poorest states in the north and north east—regardless of their ethnicity—when compared with those admitted to hospitals in Brazil’s wealthiest regions.

Cities in northern Brazil are already struggling in the pandemic, with the worst outbreaks occurring in Fortaleza, Natal, and Manaus. In the capital of Amazonas state, excavators have been used to carve out mass graves in which the dead were being stacked in three-high piles.<sup>9</sup>

Marra says that white people have greater access to private health services, which offer more ICU beds, while black and *pardo* people usually resort to the public system, whose structure has not been able to deal with the rapid increase in the number of covid-19 cases.

Coronavirus was imported by the Brazilian elite vacationing in Europe, and affected the richest citizens earlier in the year at a moment when the health system wasn’t strained. “Now, it’s ravaging the poorest, who depend on the public, overloaded, and unfunded health system,” said Orellana.

Still, researchers agree that the situation would be much worse had Brazil not had SUS. Some say the pandemic is now highlighting the importance of free public healthcare. “I hope it unleashes a renewed public respect for the national health system in a way to pressure the government into funding it properly,” Akerman says.

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- 1 Atun R, de Andrade LO, Almeida G, et al. Health-system reform and universal health coverage in Latin America. *Lancet* 2015;385:1230-47. PubMed doi: 10.1016/S0140-6736(14)61646-9
- 2 The Commonwealth Fund. International Health Care System Profiles. 2020. <https://www.commonwealthfund.org/international-health-policy-center/system-profiles>
- 3 Massuda A, Hone T, Leles FAG, de Castro MC, Atun R. The Brazilian health system at crossroads: progress, crisis and resilience. *BMJ Glob Health* 2018;3:e000829. PubMed doi: 10.1136/bmjgh-2018-000829
- 4 Neves RG, Flores TR, Duro SMS, Nunes BP, Tomasi E. Time trend of Family Health Strategy coverage in Brazil, its regions and federative units, 2006-2016[PubMed]. *Epidemiol Serv Saude* 2018;27:..
- 5 Phillips D. Brazil loses second health minister in less than a month as Covid-19 deaths rise. *Guardian* 2020. <https://www.theguardian.com/world/2020/may/15/brazil-health-minister-nelson-teich-resigns>
- 6 Biernath A. Brazil strives to replace its More Doctors programme for underserved regions. *BMJ* 2020;368:m537. PubMed doi: 10.1136/bmj.m537
- 7 Dyer O. Cuba begins pulling 8300 doctors out of Brazil following Bolsonaro’s comments. *BMJ* 2018;363:k5027. PubMed doi: 10.1136/bmj.k5027
- 8 Baqui P, Bica I, Marra V, Ercole A, van der Schaar M. Ethnic and regional variations in hospital mortality from COVID-19 in Brazil: a cross-sectional observational study. *Lancet Glob Health* 2020;8:e1018-26. PubMed doi: 10.1016/S2214-109X(20)30285-0
- 9 Phillips T, Maisonnave F. “Utter disaster”: Manaus fills mass graves as Covid-19 hits the Amazon. *Guardian* 2020. <https://www.theguardian.com/world/2020/apr/30/brazil-manaua-coronavirus-mass-graves>