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## COVID-19 vaccination challenge: what have we learned from the Brazilian process?



Despite a long tradition of strong primary health-care systems, some Latin American countries—such as Brazil and Mexico—have suffered the worst during the pandemic. Political denialism and conflict, lack of resources, and weak institutional contexts within federalised systems can account for high case numbers and mortality within these countries.<sup>1</sup> However, towards the end of 2021, Latin America had some of the highest vaccination coverage in the world. The EU had reached a vaccination coverage of approximately 74·3% of the total population with at least one dose as of Feb 12, 2022, yet such statistics mask the vast differences between member states, ranging from 93·6% in Portugal to only 29·8% of the population in Bulgaria.<sup>2</sup> In some African countries, vaccination remains the privilege of a very small minority.<sup>3</sup> How has Brazil, a Latin American country that had so many problems during the initial years of the pandemic, had such success in its vaccine programmes, with a vaccination coverage of 83% (one dose)?

Managing the pandemic requires political decision-making and commitment<sup>4,5</sup> to provide resources, make tough decisions as to relevant countermeasures, to establish leadership, improve training and education, and support the resilience of the health-care system and the health-care workforce.<sup>4,6,7</sup> In Brazil, federal, state, and municipal governments failed to provide this political determination, and political decision making led to denialism of the pandemic. Under the Government of the Brazilian President Jair Bolsonaro, the federal government denied the science and the severity of the pandemic at the cost of the health and wellbeing of Brazilians. As of February, 2022, the Ministry of Health has still not developed a national plan to combat the pandemic. States and municipalities continue to be neglected and receive insufficient assistance and resources.<sup>8</sup> Influenced by political interests, the federal government has disrupted the flow of financial resources and slowed the delivery of essential supplies to certain regions. Consequently, the federal government reduced the capacity of the health system to respond to the crisis and failed to offer support to health workers.<sup>8,9</sup>

However, the scenario is very different for vaccination programmes. On the supply side, Brazil is used to implementing mass vaccine campaigns against many endemic infectious diseases through the National Immunization Program (Programa Nacional de Imunizações [PNI]).<sup>10</sup> The PNI, created in 1973, has coverage of more than 95% of the target population despite the extreme inequalities across Brazil.<sup>11</sup> The characteristics of the Brazilian health system (Sistema Único de Saúde [SUS]) are important for the implementation of the PNI. In the past decade, Brazil has structured the SUS on the basis of territorial embeddedness, meaning that services are located and provided inside the territories where people live, a focus on primary health care, and local health clinics and health teams connected to local communities.<sup>12</sup> The SUS also invested in mandatory vaccination campaigns, creating policies with national unified campaigns offered in communities, including in schools and inside people's homes.<sup>10</sup>

Therefore, Brazil has one of the most consolidated immunisation programmes in the world, which has made it possible for the implementation of vaccination against COVID-19 to advance, even though the Brazilian government has actively acted to stop progress in other areas of pandemic response. The consequence is that, except for buying the vaccines, the health system is capable of implementing vaccination drives with little general hesitation or challenge, if the necessary resources are provided, given the high degree of resilience and self-organising abilities. We will have to wait and see what effect the culture of denialism has had on parents' willingness to get their children vaccinated, and the knock-on effect at the population level of low vaccination amongst children.

So far, a key lesson from the COVID-19 pandemic is that routine public-health expertise and clinical resources are very important for the crisis's policy implementation. So, when thinking about how health systems can be resilient to crisis: the more public-health services become routine and are embedded into the community, into citizens' lives and into health workers' daily activity, the easier it might be to both adopt

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already existing provision of services and to anticipate what areas can be deployed without political tension to serve the population at risk.

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