School reopening and COVID-19 in Brazil

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In the absence of a nationally coordinated strategy to control and mitigate the spread of SARS-CoV-2, Brazilian state and municipal governments adopted non-pharmaceutical interventions to reduce the spread of COVID-19 starting in mid-March 2020.[1] Twenty-six state governments mandated the closure of schools in Brazil for in-person learning affecting over 35.2 million children and adolescents (roughly 17% of the nation's population).[2] The overwhelming majority of these students depend on public schooling, and for those children, especially those living in situations of high vulnerability across Brazil, on-site school closures also resulted in the increase in hunger and nutritional deficiencies in the absence of school meals and rising unemployment in already vulnerable pre-pandemic communities further exacerbating inequalities with those enrolled in private schools.

While school closures effectively reduce virus transmission, the Brazilian Ministry of Education did not coordinate a large-scale, national effort to guarantee education, thus exacerbating pre-existent inequalities. Remote learning programs were implemented with considerable delay and limited attention to guaranteeing access to education. Only 81% of Brazilian households have access to the internet, and among these households, 60% of families rely on cellular phones for digital access.[3]

Governments reopened schools for in-person and hybrid learning programs in the second semester of 2020 and the 1st semester of 2021. School reopening occurred when community transmission continued to be at high levels,[4] and the SARS-CoV-2 Gamma variant was spreading rapidly throughout the country. The mitigation measures mandated by the federal government during school reopenings were minimal. Indeed, the Federal Government's October 2020 safety protocol for in-person educational activities is less stringent than most state and municipal protocols.[5]

By February 2021, only 56% of state capitals and 49% of 26 Brazilian states published a structured mitigation plan with reopening protocols. The subdivision of school classes into pods, in which in-person attendance by cohorts is rotated, reduces classroom occupation and serves as an efficient tool for isolating contacts in an infection outbreak. However, this mitigation measure was proposed by 12% of state capitals and 44% of state governments. Only two of 26 states and 4 of 26 state capitals mandate contacts should be tested in their protocols. Student testing of symptomatic cases is mostly only recommended and does not require a mandatory quarantine of the class or pod. Due to the quality of these protocols and the reduced investments and delayed planning directed at preparing schools for in-person learning in the context of the pandemic, including low priority directed at vaccinations for teachers and students, Brazilian students resumed in-person learning in an unprotected school environment.

Younger Brazilians have also been neglected in terms of pandemic surveillance. There is no public policy at the federal level to promote early diagnosis, no strategy for testing and tracking suspected cases. The absence of testing effort has been a pattern in Brazilian pandemic response; however, there is a diagnostic gap among children and adolescents compared with other age groups. In São Paulo State, the main pandemic epicenter in Brazil, the number of COVID-19 RT-PCR tests from January to September 2021 after school reopenings did not increase, and test positivity rates remained high for both children and adolescents.[6]

In October 2021, the Brazilian Ministry of Health announced the National Testing Plan with a revised protocol to include lateral flow rapid tests and RT-PCR testing in the public health system. With over 18 months after the detection of community transmission of SARS-Cov-2, no guidance regarding testing efforts directed at children, indicating an antigen testing approach aimed at children only Covid-19 outbreak scenarios in school settings is specified. Furthermore, vaccination has been only authorized in Brazil for adolescents 12 years of age or older since September 2021. As a result, most children lack access to a vaccine, and 91% of teens have not yet received two doses.

The main result from this absence of surveillance strategies focused on children is the high number of cases, hospitalizations, and deaths due to COVID-19 in Brazil. For admissions confirmed by COVID-19, 20,286 admissions were reported for children aged 0 to 9 years and 14,793 for children aged 10 to 19 years. In 2021, 10,606 and 7,997 hospitalizations were notified with confirmation of COVID-19, respectively, in the age groups from 0 to 9 years and 10 to 19 years.[7] By October 11, 2021, 1,213 deaths from COVID-19 were registered in

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Brazil in children aged 0 to 9 years, and 50.4% of these deaths occurred in 2021. Among those 10 to 19 years, 1,259 deaths were registered and 51.5% up to September. Brazilian children's incidence and lethality rates are estimated to average 5%, but most likely much higher due to reduced testing. Without increased surveillance efforts, multi-layered mitigations, and speedy deployment of vaccinations for children and adolescents, the risk of transmission within schools and into households will continue to rise.[8,9]

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Declaration of interests

The other authors have no conflicts of interest to disclose.

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