

## Epidemiology, social sciences and health policies in the fight against COVID-19

The COVID-19 pandemic took the world by surprise. As of 28/04/2020, there were more than 3 million reported cases and more than 210,000 deaths<sup>1</sup>. Because it is a new disease for which humanity has no immunity, and because it has remarkably high rates of transmission, this disease can saturate health services if social distancing measures are not adopted<sup>2</sup>.

In this issue, the journal *Ciência & Saúde Coletiva* publishes a thematic on COVID-19, fruit of spontaneous demand, in which published studies show the contribution of epidemiology, social sciences and health policies in the fight against this disease. It is known that registration of cases of COVID-19 covers only a small part of those infected and the proportion of asymptomatic cases is not known. Hallal et al., by means of rapid tests for the diagnosis of COVID-19, from the detection of the prevalence of infection in symptomatic and asymptomatic cases, plan to estimate the percentage of asymptomatic cases in the population. This is particularly important, because if the percentage of asymptomatic cases is high, the case-fatality rate of the disease will be lower than the currently estimated value of 1.4%<sup>3</sup>. We have published the protocol of this important study, which is still in progress.

Pedrosa et al. demonstrated that COVID-19 is migrating to areas in the interior of Ceará with lower intensive care bed distribution, thus contingency measures are required to increase the number of ICU beds in these locations. In another article, Hallal presented mortality statistics by COVID-19 in the world, adjusting for the population size and the pandemic stage in each country. At the same stage of the epidemic, on the 30th day after the 10<sup>th</sup> death, Asian countries presented much lower mortality rates than those observed in European countries.

In another article, Aquino et al. concluded that the social distancing adopted by the population is effective, especially when combined with case isolation and contact quarantine. Bezerra et al., in a convenience sample of 16,440 social network users, demonstrated that social isolation impacts social coexistence, increases stress, reduces sleep, and causes financial problems for people with lower income and education. In another article, conducted in Argentina, Johnson et al. concluded that the population feels fear and anguish, but also has responsibility and care towards COVID-19. Castro-de-Araújo et al. revealed the stress caused by the eminent risk of infection or economic uncertainty, especially in low and middle-income environments, which tends to cause mental health impacts.

Souza analyzed the COVID-19 pandemic in the midst of the dynamics of contemporary capitalism and globalization, in which the pandemic (globalized epidemic) is seen as the fruit of globalized capitalism. Among other issues, they addressed the prioritization given to the economic sphere, the weakening of health services, the dissemination of false information in the media, and the greater impact of the epidemic on the most impoverished groups. Deslandes & Coutinho discussed the implications of social isolation due to the Covid-19 pandemic for intensive Internet use among children and adolescents and its possible consequences for the practice of self-inflicted violence. And finally, Harzheim et al. highlighted the important role of primary care in the Brazilian Unified Health System in addressing the epidemic by Covid-19.

Antônio Augusto Moura da Silva (<https://orcid.org/0000-0003-4968-5138>)<sup>1</sup>

Maria Cecília de Souza Minayo (<https://orcid.org/0000-0001-6187-9301>)<sup>2</sup>

Romeu Gomes (<https://orcid.org/0000-0003-3100-8091>)<sup>3</sup>

<sup>1</sup> Departamento de Saúde Pública, Universidade Federal do Maranhão. São Luís MA Brasil.

<sup>2</sup> Escola Nacional de Saúde Pública Sérgio Arouca, Fiocruz. Rio de Janeiro RJ Brasil.

<sup>3</sup> Instituto Fernandes Figueira, Fiocruz. Rio de Janeiro RJ Brasil.

## References

1. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). 2020. [acessado 2020 Apr 28]. Disponível em: <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>
2. Ferguson NM, Laydon D, Nedjati-Gilani G, Imai N, Ainslie K, Baguelin M, Bhatia S, Boonyasiri A, Cucunubá Z, Cuomo-Dannenburg G, Dighe A, Dorigatti I, Fu H, Gaythorpe K, Green W, Hamlet A, Hinsley W, Okell LC, van Elsland S, Thompson H, Verity R, Volz E, Wang H, Wang Y, Walker PGT, Walters C, Winskill P, Whittaker C, Donnelly CA, Riley S, Ghani AC. Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. *Imperial College London* (16-03-2020), doi: <https://doi.org/10.25561/77482>.
3. Verity R, Okell LC, Dorigatti I, Winskill P, Whittaker C, Imai N, Cuomo-Dannenburg G, Thompson H, Walker PGT, Fu H, Dighe A, Griffin JT, Baguelin M, Bhatia S, Boonyasiri A, Cori A, Cucunubá Z, FitzJohn R, Gaythorpe K, Green W, Hamlet A, Hinsley W, Laydon D, Nedjati-Gilani G, Riley S, van Elsland S, Volz E, Wang H, Wang Y, Xi X, Donnelly CA, Ghani AC, Ferguson NM. Estimates of the severity of COVID-19 disease. *Lancet Infect Dis* 2020 Mar 30:S1473-3099(20)30243-7. doi: 10.1016/S1473-3099(20)30243-7. Online ahead of print.

