What is the role of the scientific community in the fight against COVID-19 pandemic? Observations concerning fake news, predatory journals and public policies

Brazil is one of the countries most affected by COVID-19 pandemic, with approximately 684,262 confirmed deaths, second only to the United States in deaths by the disease. It is estimated that four fifths of these deaths could have been prevented.

Besides the high number of cases and deaths by COVID-19, the maternal mortality by the disease draws attention, an aspect that was not verified in other countries. Before the pandemic onset, the maternal mortality ratio (MMR) in the country was already unjustifiably high, far above the goals agreed in international treaties – such as the Sustainable Development Goal that proposes the reduction of maternal mortality rate in 30% by 2030. In 2019, a 57.9 MMR was observed, and after COVID-19 onset, the mortality rate increased in 77% in 2 years, exceeding 107 maternal deaths per 100.000 live births in 2021. Meanwhile, international documents informed that, besides the higher risk of unfavorable maternal outcomes, pregnant women with COVID-19 did not have higher probability of death.

The main hypothesis to justify this phenomenon is the inequality in access to healthcare services in Brazil. Even relying on a public healthcare system, unpaid and universal, approximately 22% of patients in the gravidic-puerperal cycle that died because of COVID-19 did not have access to Intensive Care Units and 14% had not even been intubated.^{5,6} Brazil has continental dimensions, and tertiary and high-complexity services are still concentrated in capitals, which leads patients in the countryside to be vulnerable to delays and lack of access to adequate care due to logistic and transport issues. Besides, SUS (Unified Health System) has been underfunded through the years, receiving governmental incomes of only 3.8% of the GDP in 2019 – a value currently limited by Constitutional Amendment n° 95 (Public Costs Limit), approved in 2016. Due to this, patients of middle and low income, which do not have access to supplementary healthcare, challenge consequences of overcrowding and insufficient material and human resources.

Another determinant factor for the high mortality of the disease in Brazil was the lack of consistent public policies and in timely manner in order to ensure social distancing, vaccines, medications and high complexity resources for the entire population. The government invested in the promotion of a so called "herd immunity", and with this stimulated people to be in the streets, did not promote lockdowns, recommended medications without confirmed effectiveness against COVID-19 and initially adopted an anti-vaccine attitude.⁸

Furthermore, investments in informative campaigns were minimal, whilst we are unfortunately challenging the spread of fake news, including in the scientific community environment. Several health professionals, mainly those involved with the government, defended the prescription of medications without confirmed benefits, exposing false side effects of vaccines and propagandizing actions based on preprint texts and articles published in predatory journals.

In this context, we are challenging low adherence to vaccination, which is one of the main measures to avoid mortality and severe complications of COVID-19, In April, 14 months after the onset of vaccination in Brazil, the Ministry of Health estimated over 18 million people with an incomplete vaccination schedule.⁹ Data from the September 15, 2022 bulletin of the Brazilian Obstetric Observatory demonstrated that only 37% of pregnant and puerperal women have their schedules complete (first and second dose or single dose).⁹

Given the above, contributing to the spread of reliable scientific information and combating fake news should be a compromise for researchers. We agree that it is necessary to produce knowledge in order to guide public policies, which could be presented to the population, aiming to contribute to the overcome of the COVID-19 pandemic tragedy in our country.



References

- Ministério da Saúde (BR). Coronavírus Brasil. [Internet]. Brasília (DF): Ministério da Saúde; 2022.
 [access in 2022 Set 5]. Available from: https://covid.saude.gov.br/
- World Health Organization (WHO). WHO Coronavirus (COVID-19) Dashboard | WHO Coronavirus (COVID-19) Dashboard With Vaccination Data. Geneva: WHO. [access in 2022 Set 5]. Available from: https://covid19.who.int/
- Senado Federal (BR). Pesquisas apontam que 400 mil mortes poderiam ser evitadas; governistas questionam [Internet]. Brasília (DF): Senado Notícias; 26/06/2021. [access in 2022 Set 19]. Available from: https://www12.senado.leg.br/noticias/materias/2021/06/24/pesquisas-apontam-que-400-mil-mortes-poderiam-ser-evitadas-governistas-questionam
- 4. Ministério da Saúde (BR). Plataforma Integrada de Vigilância em Saúde. Painel de Monitoramento da Mortalidade Materna [Internet]. Brasília (DF): Ministério da Saúde; 2022. [access in 2022 Set 5]. Available from: http://plataforma.saude.gov.br/mortalidade/materna
- 5. Khoury R, Bernstein PS, Debolt C, Stone J, Sutton DM, Simpson LL, *et al*. Characteristics and outcomes of 241 births to women with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection at Five New York City Medical Centers. Obstet Gynecol. 2020 Aug; 136 (2): 273-82.
- Takemoto MLS, Menezes MO, Andreucci CB, Nakamura-Pereira M, Amorim MMR, Katz L, et al. The tragedy of COVID-19 in Brazil: 124 maternal deaths and counting. Int J Gynaecol Obstet. 2020 Oct; 151 (1): 154-6.
- Santos DS, Menezes MO, Andreucci CB, Nakamura-Pereira M, Knobel R, Katz L, et al. Disproportionate impact of COVID-19 among pregnant and postpartum Black Women in Brazil through structural racism lens. Clin Infect Dis. 2021 Jun; 72 (11): 2068-9.
- 8. Centro de Pesquisas e Estudos de Direito Sanitário (CEPEDISA), Conectas. Direitos na Pandemia: Mapeamento e análise das normas jurídicas de resposta à COVID-19 no Brasil. Boletim n.º 10; São Paulo (SP): CEPEDISA; 2021. [access in 2022 Set 21]. Available from: https://www.fsp.usp.br/site/wp-content/uploads/2018/02/Boletim Direitos-na-Pandemia ed 10.pdf
- Observatório Obstétrico (BR). [Internet]. Boletim Semanal OOBr. Instagram: @observatorioobr; 15 set 2022
 [access in 2022 Set 21]. Available from: https://www.instagram.com/p/CilQPB5g2ue/?igshid=NmY1MzVkODY=.

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