

Sex, gender and race dimensions in COVID-19 research

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CCOVID-19 is a disease that emerged in China at the end of 2019, spread rapidly over the five continents and was declared to be a pandemic by the World Health Organization (WHO) on March 11th 2020. Combating this totally new disease requires production of epidemiological and clinical knowledge, as well as development of diagnostic tests, treatment and vaccines. Within this context, research and technological development must be prioritized, as well as rapid publicizing of their results.¹

The scientific literature relating to COVID-19 had grown exponentially, accompanying the evolution of the number of cases and deaths from this disease worldwide. Between January and mid-May 2020, the literature on COVID-19 had included 31,000 articles and by mid-June it was close to 50,000.²

Notwithstanding, research on COVID-19 incorporating the perspective of sex, gender and race is scarce, despite the evidence that these characteristics play a substantial role in shaping risks of disease, death and other associated harm. International initiatives, such as that led by the organization called GENDRO, draw attention to this fact, and call for renewed commitment to gender-sensitive research and other dimensions of inequality to ensure health equity and human rights in the context of the COVID-19 pandemic.³ These initiatives are aligned with the Sex and Gender Equity in Research (SAGER) guidelines which, among other aspects, emphasize the role of all those involved in scientific research and reporting – including researchers, editors, reviewers and funders – in order to promote equity for the benefit of all of society.^{4,5}

Moreover, studies have evidenced aggravation of sex and gender inequalities in scientific research and reporting in the context of the pandemic. Low representation of women as lead authors of articles about COVID-19 published in March and April 2020 in medical journals has been found.⁶ In these months, female authors published fewer articles on preprint servers, in comparison to the same period in the previous year,⁷ while the number of male authors has grown more quickly than the number of female authors.⁸ In addition to the preexisting causes of such inequalities, principally related to sexism, less time dedicated by women to developing their research has been reported, as a result of increased time spent doing domestic and care activities during isolation, especially among women who have children at home.⁹

The race/skin color of researchers and authors is not easily identifiable from the information published in articles. However, racism is known to exist and the Black population is known to be underrepresented in the scientific milieu.¹⁰ This situation has been evidenced in the wave of protests against racism in response to the killing of Black men by police officers in the United States of America in June 2020.¹¹ It is important to acknowledge that Black women face even bigger challenges and the need exists to develop structural actions to support their participation in scientific research and reporting.⁹

The limited participation of women and Black people in conducting research into COVID-19 can alter emphasis on aspects that are relevant for specific populations.⁷ Ensuring their presence is fundamental for overcoming the pandemic, given that within the academic world these minorities report, more frequently, research results disaggregated by sex, gender and race. This contributes to better understanding of the clinical and epidemiological aspects of COVID-19, particularly in the face of evidence of sex and race disparities in the incidence, mortality and socioeconomic aspects of the disease.¹²

Brazil is a country marked by large social and regional inequities, which overlap with inequalities to health service access. Within this context it is even more important to investigate aspects of the pandemic that can lead to the worsening of existing disparities. The journal *Epidemiology and Health Services: journal of the Brazilian National Health System* reiterates its commitment to sex, gender and race equality in scientific research and reporting, stressing that clinical and epidemiological research into COVID-19, as well as research into the social, economic and human rights impacts of the pandemic, needs to be designed, conducted and reported in such a way as to systematically take into consideration sex, gender, race and other dimensions of inequality.

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