The challenges of the lack of occupational data and the absence of information about COVID-19 in workers in Brazil

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Primary data collection is essential to assist public managers in monitoring diseases and planning services and actions; even more so in the face of global health crises such as the one generated by SARS-CoV-2. Databases with numerous missing data are a major challenge in epidemiological studies and could result in biased interpretations.

Two years into the pandemic, we now have better understanding that, due to its biological characteristics and its socioeconomic effects, it has unequally affected population subgroups.1 Unemployment, informality and jobs classified as essential have been linked to higher mortality from COVID-19, but there is no accurate, reliable information on the number of work-related cases and hospitalizations in Brazil. This is a very important information gap in a country where unemployment reached 13.5 million people and 38 million workers had no formal employment contract at the end of 2021 (40.6% of the employed population).2

Brazil has several disaggregated databases that have been used by various institutions to study the impacts of COVID-19 on different occupations, like e-SUS Notifica, SIVEP-Gripe and SIM. However, these databases have more than 90% missing data for occupational variables, such as morbidity indicators, or with great heterogeneity among Brazilian states for mortality indicators (SIM). Data from employment records have been used as denominators to measure COVID-19 impact, but only among formal workers. The Census 2020 was cancelled due to the pandemic emergency and will be carried out in 2022, but the funding assigned to the project suffered severe cuts. Currently, the latest available information for work and employment dates from 2010, when there was full employment with low informality and income growth in the country and does not take into account the country’s economic crises since 2015. The universal scope of the Census allows the collection of more accurate individual information, making the population as a whole visible and enabling broad access to data, such as demographic and socioeconomic.4 The data collected allows for the calculation of fundamental public policy indicators, such as age/gender distribution, fertility rate, mortality rate, and life expectancy. The absence of census data can generate long-term impacts in the distribution of resources to municipalities, the parliamentary representation of each state and the implementation of government programs such as the new Auxílio Brasil.

The most recent effect of the new SARS-CoV-2 Omicron variant further intensified the unemployment and adverse effects on several productive sectors, such as civil aviation.3 The lack of occupational health data in Brazil and in several countries around the world makes it difficult to guide public policies about restrictions and flexibility in work environments. The false dilemma between health and work imposed by the Brazilian government and the erratic handling of the pandemic have been responsible for incalculable human losses and deterioration of the population’s living and working conditions. Data gaps prevent accurate scientific analysis of the impacts of COVID-19 on Brazilian workers.

Contributors
Authors contributed equally on writing, review and editing.

Declaration of interests
None.

Funding
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
References
1 Editorial. COVID-19—break the cycle of inequality. Lancet Public Health. 2021;6:e82.
2 Instituto Brasileiro de Geografia e Estatística — IBGE. Desemprego [Internet]. Brazil; 2021. Available from: https://www.ibge.gov.br/explica/desemprego.php Accessed 18 January 2022.
3 United Nations — Brazil: Realizar o Censo e garantir que ninguém fique para trás. [Internet]. Brazil; 2021. Available from: https://brasil.un.org/pt-br/126901-artigo-realizar-o-censo-e-garantir-que-ninguem-fique-para-tras. Accessed 10 March 2022.
4 CNN Business: Airlines cancel another 1,600 flights, citing worker coronavirus cases. USA; 2022. Available from: https://edition.cnn.com/2022/01/06/business/more-canceled-flights-airlines/index.html Accessed 7 February 2022.