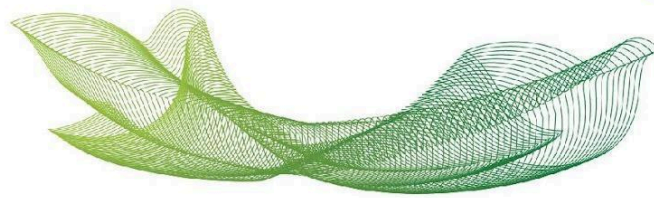


Tipo	Periódico
Título	Evaluation of the case fatality rate in 2 031 309 hospitalised Brazilian patients due to COVID-19: An observational study of the first 3 years of the pandemic in Brazil
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Resumo	<p>Introduction: Since the beginning of the COVID-19 pandemic, in Brazil, there has been a high rate of deaths, mainly among those who were hospitalized due to the disease and those who needed intensive care units (ICUs) and mechanical ventilation support. Methods The study evaluated the hospitalised patients with COVID-19 as well as subgroups considering those hospitalised patients who needed ICU treatment and those who received invasive mechanical ventilation in an ICU. The risk of death was compared in these three groups with adjustments for gender, age, race and comorbidities. A multivariable analysis was performed to identify the main predictors of death. A hospitalised patient was considered COVID-19 positive if they had a positive real-time polymerase chain reaction (RT-PCR) or serological test, followed by a notification form completed by a health professional, usually a medical doctor. The study was approved by the ethics committee of the institution (Certificate of Presentation of Ethical Appreciation n° 67241323.0.0000.5514; Study Approval Technical Opinion n° 5.908.611). Results The study evaluated 2 031 309 hospitalised individuals with COVID-19. The case fatality rate was 33.2% (673 527/2 031 309). The case fatality rate was even higher among those patients who required ICU (372 031/665 621; 55.9%) treatment with the need for invasive ventilation support (240 704/303 505; 79.3%). In the multivariable analysis, the male sex (OR=1.14; 95% CI=1.13–1.15), older age [61 to 72 years old (OR=2.43; 95% CI=2.41–2.46), 83 to 85 years old (OR=4.10; 95% CI=4.06–4.14) and +85 years (OR=6.98; 95% CI=6.88–7.07)], race [mixed individuals (<i>Pardos</i>) (OR=1.33; 95% CI=1.32–1.34), Black people (OR=1.57; 95% CI=1.55–1.60) and Indigenous peoples (OR=1.82, 95% CI=1.69–1.97)] and the presence of comorbidities</p>



[mainly, hepatic disorder (OR=1.80; 95% CI=1.73–1.87), immunosuppressive disorder (OR=1.80; 95% CI=1.76–1.84) and kidney disorder (OR=1.67; 95% CI=1.64–1.70)] were associated with an increased chance of death, except asthma (OR=0.77; 95% CI=0.75–0.79). In addition, among all admitted patients with COVID-19, the need for an ICU OR=2.08; 95% CI=2.06–2.13) and invasive ventilatory support (OR=14.86; 95% CI=14.66–15.05) had an impact on death as an outcome. Conclusion Although the number of daily deaths from the coronavirus dropped during the COVID-19 pandemic in Brazil, our retrospective analysis showed a higher case fatality rate in patients requiring ICU, mainly when using invasive ventilation, compared with the rest of the world.

## Fomento

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