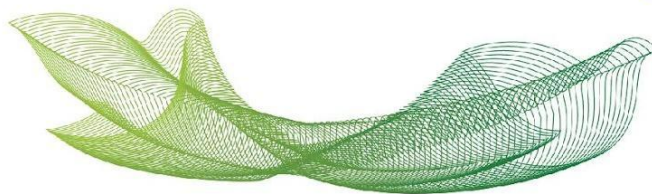


Tipo	Periódico
Título	Profile of coronavirus disease enlightened asthma as a protective factor against death: An epidemiology study from Brazil during the pandemic
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Resumo	<p>Introduction: The possibility that asthma is not a risk factor for the worst outcomes due to coronavirus disease (COVID-19) is encouraged. The increase in Th2 response dominance can downregulate the late phase of hyperinflammation, which is typically the hallmark of more severe respiratory viral infections, alongside lower angiotensin-converting enzyme receptors in patients with asthma due to chronic inflammation. Few studies associated asthma diagnosis and COVID-19 outcomes. In this context, we aimed to associate the asthma phenotype with the clinical signs, disease progression, and outcomes in patients with COVID-19.</p> <p>Methods: We performed an epidemiologic study using patients' characteristics from OpenDataSUS to verify the severity of COVID-19 among Brazilian hospitalized patients with and without the asthma phenotype according to the need for intensive care units, intubation, and deaths. We also evaluated the demographic data (sex, age, place of residence, educational level, and race), the profile of clinical signs, and the comorbidities.</p> <p>Results: Asthma was present in 43,245/1,129,838 (3.8%) patients. Among the patients with asthma, 74.7% who required invasive ventilatory support evolved to death. In contrast, 78.0% of non-asthmatic patients who required invasive ventilatory support died (OR = 0.83; 95% CI = 0.79-0.88). Also, 20.0% of the patients with asthma that required non-invasive ventilatory support evolved to death, while 23.5% of</p>



	<p>non-asthmatic patients evolved to death (OR = 0.81; 95% CI = 0.79-0.84). Finally, only 11.2% of the patients with asthma who did not require any ventilatory support evolved to death, while 15.8% of non-asthmatic patients evolved to death (OR = 0.67; 95% CI = 0.62-0.72). In our multivariate analysis, one comorbidity and one clinical characteristic stood out as protective factors against death during the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Patients with asthma were less prone to die than other patients (OR = 0.79; 95% CI = 0.73-0.85), just like puerperal patients (OR = 0.74; 95% CI = 0.56-0.97) compared to other patients.</p> <p>Conclusion: Asthma was a protective factor for death in hospitalized patients with COVID-19 in Brazil. Despite the study's limitations on patients' asthma phenotype information and corticosteroid usage, this study brings to light information regarding a prevalent condition that was considered a risk factor for death in COVID-19, being ultimately protective.</p>
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