Tipo	Periódico
Título	Clinical characteristics and comorbidities of COVID-19 in unvaccinated patients with Down syndrome: first year report in Brazil
Autores	Boschiero MN, Palamim CVC, Ortega MM, Marson FAL.
Autor (es) USF	Boschiero MN, Palamim CVC, Ortega MM, Marson FAL.
Autores Internacionais	
Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.1007/s00439-022-02468-3
Assunto (palavras chaves)	Indisponível
Idioma	Inglês
Fonte	Título do periódico: Human Genetics ISSN: 1432-1203 Volume/Número/Paginação/Ano: 141/1887-1904/2022.
Data da publicação	Dezembro de 2022
Formato da produção	Impressa ou digital
Resumo	Patients with Down syndrome (DS) are more affected by the Coronavirus Disease (COVID)-19 pandemic when compared with other populations. Therefore, the primary aim of our study was to report the death (case fatality rate) from SARS-CoV-2 infection in Brazilian hospitalized patients with DS from 03 January 2020 to 04 April 2021. The secondary objectives were (i) to compare the features of patients with DS and positive for COVID-19 (G1) to those with DS and with a severe acute respiratory infection (SARI) from other etiological factors (G2) to tease apart the unique influence of COVID-19, and (ii) to compare the features of patients with DS and positive for COVID-19 to those without DS, but positive for COVID-19 (G3) to tease apart the unique influence of DS. We obtained the markers for demographic profile, clinical symptoms, comorbidities, and the clinical features for SARI evolution during hospitalization in the first year of the COVID-19 pandemic in Brazil from a Brazilian open-access database. The data were compared between (i) G1 [1619 (0.4%) patients] and G2 [1431 (0.4%) patients]; and between (ii) G1 and G3 [222,181 (64.8%) patients]. The case fatality rate was higher in patients with DS and COVID-19 (G1: 39.2%), followed by individuals from G2 (18.1%) and G3 (14.0%). Patients from G1, when compared to G2, were older (≥ 25 years of age), presented more clinical symptoms related to severe illness and comorbidities, needed intensive care unit (ICU) treatment and non-invasive mechanical ventilation (MV) more frequently, and presented a nearly two fold-increased chance of death (OR = 2.92 [95% CI 2.44-3.50]). Patients from G1, when compared to G3, were younger (< 24 years of age), more prone to nosocomial infection, presented an increased chance for clinical symptoms related to a more severe illness; frequently needed ICU

	treatment, and invasive and non-invasive MV, and raised almost a three fold-increased chance of death (OR = 3.96 [95% CI 3.60-4.41]). The high case fatality rate in G1 was associated with older age (≥ 25 years of age), presence of clinical symptoms, and comorbidities, such as obesity, related to a more severe clinical condition. Unvaccinated patients with DS affected by COVID-19 had a high case fatality rate, and these patients had a different profile for comorbidities, clinical symptoms, and treatment (such as the need for ICU and MV) when compared with other study populations.
Fomento	Bolsa da FAPESP – Matheus Boschiero no. 2021/05810-7.