

Vulnerability and Covid-19 infection rates across Malaga neighbourhoods (Spain)

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Abstract

In the first year of the COVID-19 pandemic, Spain was one of the worst-hit countries, although not all areas and social groups were affected equally. This study focuses on Malaga, a cosmopolitan tourist destination located on the southern Mediterranean coast that has the sixth largest population in Spain. Specifically, it examines the relationship between multidimensional vulnerability and COVID-19 infection rates across the city's census tracts for the period February 2020 to February 2021. The analysis uses high frequency (daily) data on the accumulated incidence of the disease at 14 days and shows that COVID-19 did not spread symmetrically across the census tracts of Malaga but had a greater impact on the most vulnerable neighbourhoods. However, the pattern of this relationship was not uniform in the period examined, with specific contextual factors driving the higher infection rates across time. Our findings show that pandemic containment regulations cannot overlook vulnerability considerations and universal restrictions to reduce the spread of disease should be supplemented by targeted regulations for specific areas.

Keywords: multidimensional vulnerability, COVID-19 infections, census tracts, daily data, Malaga

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