Abstract

This paper studies the relationship between development and COVID-19 severity at the country level, expressed as total deaths per million inhabitants. The original perspective of this work is to consider that economic development factors could have a causal effect on COVID-19 deaths, instead of studying the inverse relationship. Bayesian Model Averaging procedures are used to select the most relevant predictors from a set of 21 candidate variables, using cross-sectional data from 01/01/2020 to 10/30/2022. This method solves the uncertainty issue on a topic where many potential factors could be included. In the end, four variables are selected based on their statistical significance, on the size of their standard deviation, and on other interpretability considerations. Ranked by order of importance, these predictors are the *median age*, *overweight prevalence*, *democracy index*, and *(hydroxy)chloroquine* variables, although the latter suffers from certain weaknesses. As three of these variables are characteristic of development, these robust results suggest that as a country develops, it becomes more vulnerable to outbreaks such as the COVID-19 one. This paper therefore concludes that public health policies should focus on these variables to mitigate the impact of development on the severity of future similar pandemics.