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**Long COVID prevalence differences across 27 European countries that participated in the 2021 Survey of Health, Ageing and Retirement in Europe**

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The COVID-19 pandemic caused a significant burden in Europe, with over 60% of infected individuals developing Long COVID symptoms. Variations in Long COVID prevalence across countries are linked to individual-level factors, but the influence of population-based country-level characteristics remains unclear. Thus, our objective was to assess how country-level characteristics related to: (i) the way European countries responded to the COVID-19 pandemic, (ii) their population-level health status, (iii) provision and access to healthcare services, (iv) human development, governance, and environmental risk factors, are associated with Long COVID. We used a sample of 4,004 middle-aged and older adults from 27 European countries who, in summer 2021, participated in Corona Survey 2 (from Survey of Health, Ageing and Retirement in Europe) and who reported COVID-19 infection one year prior to the survey. To assess the potential role of country-level characteristics, while controlling for key individual-level factors, we estimated three sequential multilevel random intercept logistic regression models. Approximately 70% of respondents who had COVID-19 also experienced Long COVID symptoms and there were significant cross-country differences in Long COVID rates, ranging from 32% to 89%. About 13% of the total variance in the risk of having Long COVID can be attributed to cross-country differences and the remaining 87% to individual-level factors. The individual-level characteristics also accounted for 6% of the observed cross-country differences in Long COVID rates (compositional effects) while the country-level characteristics further reduced this variance by over 50%. Both individual and country-level factors influence Long COVID occurrence, emphasizing the need for tailored recovery plans, healthcare planning and resource allocation at the national level to address this condition.