Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

4 Gortazar C, Rodríguez del Río F, Hervás D, Dominguez L, de la Fuente J. COVID-19 severity declines over time. *Authorea* 2020; published online June 10. https://doi.org.10.22541/au.159181137.78287140 (preprint).

Authors' reply

Christian Gortázar and colleagues, in their response to our Correspondence about herd immunity in COVID-19,[1] suggest that the mutation of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) might provide an alternative explanation for the observed decline in deaths in Europe. As evidence, they highlight the observation that the SARS-CoV-2 virus has mutated,[2,3] alongside their own report arguing that the severity of COVID-19 has decreased over time.[4] Unfortunately, their own study appears to have ended before many recoveries could have occurred, severely undermining the main conclusion. There are, however, other data that could be interpreted as declining severity—for example, in Europe and parts of the USA from August to September, 2020, the number of cases have been rising without the expected spike in deaths shortly thereafter. The question is whether mutation can provide a parsimonious explanation for these trends.

When thinking about viral evolution it is useful to make a distinction between transmissibility (chance of onward infection) and virulence (severity of disease). The D614G mutation, noted by Gortázar and colleagues, has been found to increase transmissibility,[3] but large, well powered studies have not detected a link between this genetic variant and COVID-19 mortality.[5] Furthermore, the increasing prevalence of the D614G variant largely predates the observed changes in COVID-19 mortality. Other SARS-CoV-2 mutations, such as Δ382, have been found to confer reduced virulence, but with no data showing increased transmissibility.[6] Crucially, neither of these mutations, nor any other mutation identified to date, can explain the sudden and large scale drop in deaths observed in many European countries following lockdown. Furthermore, the mutation hypothesis still offers no explanation as to why countries that enforced lockdown earlier should have had fewer deaths in subsequent weeks. Hence, we strongly disagree that mutation offers an alternative explanation for the trends described in our original Correspondence.

What about the current trend of increasing cases without subsequent deaths? We think it is less plausible to be because of genetic factors, and basic epidemiological explanations should be first ruled out. Foremost among these explanations is that testing has increased, and might have been applied to a previously under-represented subset of the population. Cases might be concentrated in young people who are known to have a better prognosis. Treatment[7] and clinical management have improved, alongside increased hospital capacity and response speed.

SARS-CoV-2 will continue to evolve, and a gradual change in disease severity and transmissibility should be anticipated, but there is currently no evidence to support an evolutionary trend towards greater or lesser virulence. Competing epidemiological data must first be dismissed alongside more genetic evidence before it can be concluded that mutation has rendered COVID-19 a reduced threat to public health.

We declare no competing interests. LCO, RV, NMF, and SB contributed equally.

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1 Okell LC, Verity R, Watson OJ, et al. Have deaths from COVID-19 in Europe plateaued due to herd immunity? *Lancet* 2020; **395:** e110–11.

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4 Gortazar C, Rodríguez del Río F, Hervás D, Dominguez L, de la Fuente J. COVID-19 severity declines over time. *Authorea* 2020; published online June 10. https://doi.org.10.22541/au.159181137.78287140 (preprint).

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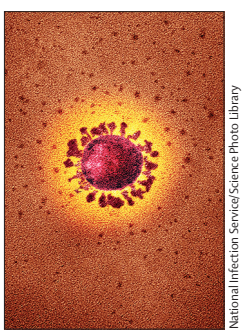

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Nursing's seat at the research roundtable

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For more on the **Year of the Nurse and Midwife 2020** see https://www.who.int/campaigns/year-of-the-nurse-and-the-midwife-2020

WHO's Year of the Nurse and Midwife 2020 began as an unforeseen global health-care crisis quietly gained traction. With no disease-specific prevention, treatment or cure for COVID-19, public health measures and supportive care—interventions developed and delivered largely by nurses—were the first and remain the only unequivocally effective defences against severe acute respiratory syndrome coronavirus 2.

Nurses have earned well deserved recognition for their essential roles in providing skilled, compassionate care for patients throughout this pandemic. What has been left out of the conversation is that, in addition

to being on the frontlines of care delivery, nurses are also researchers. In the year honouring nurses, it deserves mention that this profession has been responsible for some of the most important contributions to public health and the science of patient care.[1] The wealth of ideas flowing from nurses should come as no surprise, given that nurses spend the most time with patients and families as they navigate health, sickness, crisis, and bureaucracy in our health-care systems.[2] However, much of the public and some members of the academic community are surprised to learn that many nurses also earn the rigorous methodological training required to lead exacting programmes of research through PhD degrees in nursing, epidemiology, physiology, microbiology, data science, economics, and health policy—just to name a few.

Honouring individual historical nurse researchers as unusual inadvertently perpetuates a misleading narrative that nursing research has been dormant for centuries. To the contrary, countless nurse researchers live among us, working tirelessly to improve patients' lives and transform health care across the globe. There is perhaps no better evidence of this insidious narrative than the failure to include a nurse on the US White House Coronavirus Task Force, despite the fact that nurses make up the largest segment of the health-care workforce, are the most trusted profession, and are the members of the health-care team largely responsible for communicating with and educating patients and families.[3–5] With unparalleled perspectives gleaned from the frontlines, nurse researchers are uniquely prepared to advance any research agenda that addresses our collective health during COVID-19 and beyond.

In every aspect of public life, we are learning that policies made without all voices at the table are destined to fail, particularly when issues of equity and access are involved. To ensure a future in which health care is efficient, equitable, cost-effective, and patient-centred, let us remember to always fill nursing's seat at the research roundtable.

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Ending support for medical organisations puts the world at risk

We read with interest and deep concern the Correspondence from Arlene King and colleagues[1] regarding the decision of some countries to stop (or delay) financing of WHO and, by default, the health organisations that depend on it, such as the Pan American Health Organization (PAHO). Although we do acknowledge the repercussions of the COVID-19 pandemic and how this unprecedented situation has affected not only the health of people living in the Americas but also the fragile economies, reducing the ability of health organisations to help to manage endemic, pandemic, and neglected tropical diseases by stopping financing of these organisations is a reason for global concern.

The Inter-American Society of Cardiology (IASC), representing each cardiovascular society from Canada to Argentina, the Caribbean, and Spain, stands up for PAHO and makes a call for an urgent review of this decision, with the ultimate goal to avoid PAHO going insolvent soon. Over more than 100 years, PAHO has been key in the articulation of solutions for multiple endemic and pandemic diseases. The continent needs PAHO's articulated strategies to continue fighting not only COVID-19 but also other devastating diseases affecting the Americas, particularly Latin America.

IASC makes a call to action to our member countries. We all share the responsibility of joining PAHO in their claim for the outstanding contributions needed to survive after September, 2020. In IASC, we believe that working together is the best way to reduce cardiovascular morbidity and mortality in our beloved continent. These are times to stand up for each other: PAHO is the organisation that ensures our wellbeing by protecting our global health. Let them know how much we value their essential work.

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