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Long COVID: the elephant in the room

On April 1, 2022, the UK government ended free universal COVID-19 testing, as part of the Living with COVID-19 plan. The legal requirement to isolate if positive has also been scrapped in England under this plan, and all other public health restrictions have now been removed.

The Living with COVID-19 strategy portrays the restrictions from the past 2 years as "necessary" but as also coming with a "huge toll on wellbeing and economic output", and states that the "next phase of the COVID-19 response is to enable the country to manage COVID-19 like other respiratory illnesses, while minimising mortality and retaining the ability to respond if a new variant emerges with more dangerous properties than the Omicron variant".

At a time when SARS-CoV-2 infections remain at record levels in the UK due to the omicron (B.1.1.529) sublineage variant BA.2 (about one in 13 people were estimated to be infected in the week ending March 26, 2022), and hospitalisation and mortality rates are rising again, removal of all public health restrictions is problematic, if not highly unethical. The new policies will also disproportionally affect the clinically vulnerable and those who are in situations of precarious employment, further increasing disparities. Adding to this exceptionally bleak picture, there is now irrefutable evidence pointing to a high incidence and large burden of long COVID, with devastating effects on quality of life and on the economy already visible. As of Jan 31, 2022, according to data from the Office for National Statistics, 1.5 million people in the UK (2.4% of the population) reported experiencing long COVID symptoms, with 65% of those reporting a negative impact on their day-to-day activities. In the USA and UK, millions are taking long-term absence from the workforce due to long COVID.

The adverse health effects from long COVID range from fatigue and difficulty concentrating, to neurological and neuropsychiatric symptoms, respiratory and cardiovascular problems, and metabolic disease. Earlier in the pandemic, the discourse largely centred on acute illness, and perhaps rightly so. However, long COVID has now clearly emerged as a public health concern that will not only disrupt health care of people living with non-communicable diseases (NCDs) but likely also increase the burden of NCDs.

The Lancet Diabetes & Endocrinology has, on many occasions, editorialised on the alarming increasing rates of

poor metabolic health worldwide, and, in August, 2020, we published a large population study showing increased risk of death from COVID-19 in people with type 1 and type 2 diabetes. In this issue of the journal, Yan Xie and Ziyad Al-Aly report significantly increased risk of diabetes in the post-acute phase (>30 days) of COVID-19 in a cohort of US veterans, including those who had had mild infections and for whom no previous risk factors for diabetes were known. Publication of this study follows the release of data from the US Centre for Disease Control and Prevention showing that people younger than 18 years were more likely to receive a new diabetes diagnosis in the post-acute phase of COVID-19 than those without it or with pre-pandemic respiratory infections. However, a number of other studies did not report similar associations. A cohort from Scotland shared on the preprint server medRxiv, found that incidence of type 1 diabetes in children (aged 0-14 years) during 2020-21 was 20% higher than the 7-year average, but these findings were attributed to other causes and not a direct effect of SARS-CoV-2.

Large and well controlled epidemiological studies with reasonably long follow-up (>1 year) will be key to further clarify the association between COVID-19, newonset diabetes, and metabolic complications, and assess potential causal relationships. Epidemiological efforts should also be examined in the context of comprehensive clinical data, such as data from CoviDIAB, a global clinical registry launched in June, 2020, to determine the presentation and course of COVID-19-related diabetes. The contributions of basic and translational research to our understanding of COVID-19 and its prevention have been remarkable and should continue to complement and inform clinical research. Selfless and open collaboration within the international scientific community will be fundamental. If the link between COVID-19 and newonset diabetes holds true, even a small increase in the global prevalence of diabetes could have disastrous consequences.

In a world where the new mantra is to learn to live with COVID-19, long COVID cannot be ignored. Any strategy to learn to live with COVID-19 must also aim for a fair, thriving, and healthy post-pandemic world—that is what return to normalcy should look like. The Lancet Diabetes & Endocrinology





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For the Living with COVID-19 plan see https://assets. publishing.service.gov.uk/ government/uploads/system/ uploads/attachment_data/ file/1056229/COVID-19_ Response__Living_with_ COVID-19.pdf

For more on the **high number of** SARS-CoV-2 infections in the UK see https://www.huffpost. com/entry/uk-hits-record-covid-19-levels-nearly-5-millioninfected_n_6248b8ade 4b007d38456b662

For long COVID data from the Office for National Statistics see https://www.ons.gov.uk/ peoplepopulationand community/healthandsocialcare/ conditionsanddiseases/bulletins/ prevalenceofongoingsymptoms followingcoronaviruscovid19 infectionintheuk/3march2022

For the population study on COVID-19-related mortality in people with type 1 and type 2 diabetes see Articles Lancet Diabetes Endocrinol 2020; 8: 813-22

For the **study on increased diabetes diagnosis in long COVID** see **Articles** page 311

For the CDC data on COVID-19 and diabetes diagnosis in people younger than 18 years see https://www.cdc.gov/mmwr/ volumes/71/wr/mm7102e2.htm

For the cohort study from Scotland on COVID-19 and type 1 diabetes see https:// www.medrxiv.org/content/10.11 01/2022.02.11.22270785v1.full

For the **CoviDIAB registry** see https://covidiab.e-dendrite.com/