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EDITORIAL

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COVID-19 and obesity

As this issue of *Clinical Obesity* goes to press, the world is reeling from the health, economic and social impact of the global pandemic of COVID-19 (the disease) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It is becoming clear that several factors put people living with obesity at greater risk of the disease.

On April 17, the World Health Organization had recorded 2 034 802 cases affecting 213 countries and causing 135 163 confirmed deaths.[1] A key emerging issue has been the extent to which those living with obesity are more at risk of the disease. The US Centers for Disease Control (CDC) reported in their Morbidity and Mortality Weekly Report on April 17 that, for the period of March 1–30, of 1482 patients hospitalized with COVID-19, the highest rates of hospitalization were among adults aged ≥65 years (13.8 per 100 000 population compared with 4.6 overall).[2] The CDC also found that for "…the 12% of adult patients with data on underlying conditions, 89.3% had one or more underlying conditions; the most common were hypertension (49.7%), obesity (48.3%), chronic lung disease (34.6%), diabetes mellitus (28.3%) and cardiovascular disease (27.8%)".[2] Of course, obesity prevalence is higher in older adults compared to the young, and its complications, such as hypertension, diabetes and cardiovascular disease, increase with increasing obesity severity and duration. Importantly, a report on 4103 patients with COVID-19 disease in New York City found that the most important clinical features leading to hospital admission were age >65 years and obesity itself, more than hypertension, diabetes or cardiovascular disease.[3]

It is clear from this evidence that those with obesity, and particularly its complications, such as diabetes and hypertension, may be more liable to develop a more serious illness, requiring hospital admission and probably invasive ventilation.[4] Additionally the Intensive Care National Audit and Research Centre (ICNARC) in the United Kingdom reported a disproportionate number of those critically ill with COVID-19 were from black, Asian or minority ethnic backgrounds - nearly a third compared to the 13% BAME in the general population.[5] Whether this is driven by the greater prevalence of and risks from obesity (driving diabetes and hypertension) in such populations is not known. Nor do we yet have data on outcomes for those with obesity and less serious COVID-19 disease in terms of progression to more serious severity requiring critical care or mortality. Such data will be important to fully understand the mortality risk to those with obesity, particularly with the knowledge that critical care survival may be higher in those with modest degrees of obesity.[6]

However, perhaps a more pressing concern is that highlighted in the recent editorial in Obesity, namely, that appropriate resources for those with (severe) obesity are often inadequate in hospitals[7]; for example, the access to imaging may be limited by the lack of machines able to accommodate patients with severe obesity.[8] If the more complex lifting and handling demands of those with obesity[9] are also factored in, there is a real risk that people with severe obesity may be seriously disadvantaged regarding health care. The pandemic may expose the failure of healthcare systems and providers to meet the needs of our changing population.

The impact of the COVID-19 pandemic on submission processing and journal production has resulted in a smaller than usual edition of Clinical Obesity. [Correction added on 11 May 2020, after online publication: This statement was previously omitted and has been added in this current version.]

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