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.

Double trouble: a pandemic of obesity and COVID-19

The Lancet Gastroenterology & Hepatology's editorial, Obesity: another ongoing pandemic,[1] is appropriate during the current times to focus on the issue of obesity across the world. Obesity is a major health-care concern, even in middle-income and low-income countries, because of its association with chronic diseases such as diabetes, cardiovascular diseases, and some cancers.

Research has revealed that obesity weakens the immune system, thus making the individual susceptible to infectious diseases. Obesity has emerged as a strong risk factor for severe disease during the COVID-19 pandemic; several studies have shown that individuals with COVID-19 and obesity have an increased risk of severe disease, hospitalisation, and death.[2] The findings of a prospective community-based cohort study highlighted that a body-mass index greater than 23 kg/m^2 is associated with increased risks of severe COVID-19 outcomes, particularly in patients younger than 40 years.[3] This large population-based study corroborated evidence of obesity being a major risk factor associated with adverse outcomes in patients with COVID-19.[2]

See Online for appendix

The prevalence of overweight and obesity in India has doubled during the past two decades, leading to a notable increase in the burden of non-communicable diseases.[4] Although India has made tremendous progress in providing primary and preventive health care to its citizens, it has not recognised obesity as a major health-care concern to be acted on. The severity with which the second wave of the COVID-19 pandemic has hit India, affecting millions of young people who haven not been immunised, suggests that obesity could be one of the most important determinants of adverse outcomes. The current wave of the COVID-19 pandemic, which has caused the loss of thousands of young lives, should be a wake-up call for the policy makers to address the issue of the pandemic of obesity in India and across the world.

Obesity is a modifiable risk factor of COVID-19 and one goal of public health bodies should be to achieve a healthy weight at the population level that might reduce adverse outcomes for non-communicable and infectious diseases, including COVID-19.

We declare no competing interests.

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1 The Lancet Gastroenterology & Hepatology. Obesity: another ongoing pandemic. *Lancet Gastroenterol Hepatol* 2021; **6:** 411.
2 Mohammad S, Aziz R, Al Mahri S, et al. Obesity and COVID-19: what makes obese host so vulnerable? *Immun Ageing* 2021; **18:** 1.
3 Gao M, Piernas C, Astbury NM, et al. Associations between body-mass index and COVID-19 severity in 6·9 million people in England: a prospective, community-based, cohort study. *Lancet Diabetes Endocrinol* 2021; **9:** 350–59.
4 Luhar S, Timæus IM, Jones R, et al. Forecasting the prevalence of overweight and obesity in India to 2040. *PLoS One* 2020; **15:** e0229438.

Pooling samples for hepatitis C RNA detection

Despite the negative impact of the COVID-19 pandemic on elimination of hepatitis C virus (HCV), the use of mass testing for SARS-CoV-2 might represent a glimmer of opportunity to increase HCV diagnostic capacities. Processing SARS-CoV-2 diagnostic tests has created an enormous workload for laboratories worldwide and has resulted in decreased processing of many other tests, such as those for HCV infection. Diagnosis of an active HCV infection is the necessary first step set by WHO as a key target to reach elimination. We propose a diagnostic strategy to overcome this challenge and to contribute to increasing the diagnostic capacity of clinical laboratories.

In many countries, sample pooling strategies have already been used for molecular screening of HCV RNA in blood banks and transfusion centres.[1] The strategy of pooling samples for diagnosis and only in cases of positive results doing an individual analysis was introduced by Dorfman in 1943,[2] and has shown its usefulness in the diagnosis of different infectious agents, including SARS-CoV-2.[3]

Here, we present proof of concept that a pooling strategy for HCV RNA might allow for the identification of patients with chronic HCV with excellent sensitivity performance. We tested two commercially available diagnostic tools (CAP CTM HCV v2.0 and the COBAS 6800 system, Roche Diagnostics GmbH, Mannheim, Germany) to determine their sensitivity through the ability to detect one positive HCV sample within a different number of pooled samples (ranging from 10 to 1 000 000 samples). Both tests were able to identify a positive sample when pooled in up to 10 000 samples (appendix).

Implementing a pooling strategy to increase diagnostic capacities for the elimination of HCV has some challenges, which include determining a pool size that maintains the maximum precision in the analysis and having appropriate laboratory technology for grouping and reporting results. Our results show that a plausible pool size in Spain, with an estimated prevalence of chronic HCV infection of 0·22%,[4] would be 100 samples. This size allows for the detection of a single positive sample in a pool that is within the detection limit of commercial RNA assays, and also within the detection limit of core antigen (2000 international units per mL).[5] Given current market prices, the price of pooled testing for HCV RNA could be €0·30 per sample for a pool