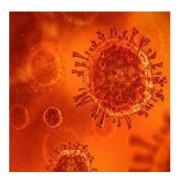


Two-Thirds COVID-19 Hospitalisations Due to Four Conditions



Findings from a new study show that a majority of adult COVID-19 hospitalisations are attributable to one of four pre-existing conditions. These include obesity, hypertension, diabetes and heart failure, in that order. The study is published in the Journal of the American Heart Association.

Researchers used a mathematical simulation to estimate the number and proportion of COVID-19 hospitalisations that could have been prevented if the patients did not suffer from these four cardiometabolic conditions. Each of these conditions has been linked to an increased risk of poor outcomes with COVID-19 infection.

Study researchers highlight the need for interventions to determine whether improving cardiometabolic healthy can reduce hospitalisations, morbidity and healthcare strains from COVID-19. Metabolic health can be improved within six to eight weeks with changes in the quality of diet alone, even if this is not accompanied by weight loss. Hence, testing such lifestyle approaches could help reduce the severity of the COVID-19 infections in such patients.

According to the findings of the study, out of 906,849 hospitalisations in the U.S. as of November 2020, 30% were attributable to obesity, 26% to hypertension, 21% to diabetes and 12% to heart failure. These numbers represent the percentage of COVID-19 hospitalisations that could have been prevented if these four cardiometabolic conditions were not present. The researchers report that approximately 64% of COVID-19 hospitalisations could have been prevented. Overall, even a 10% reduction in the prevalence of each of these conditions could prevent around 11% of all COVID-19 hospitalisations.

"Medical providers should educate patients who may be at risk for severe COVID-19 and consider promoting preventive lifestyle measures, such as improved dietary quality and physical activity, to improve overall cardiometabolic health. It's also important for providers to be aware of the health disparities people with these conditions often face," said first author Meghan O'Hearn, a doctoral candidate at the Friedman School.

The researchers also report race/ethnicity disparities in hospitalisations due to these four conditions and a COVID-19 infection. COVID-19 hospitalisations attributable to all four conditions were higher in Black adults compared to white adults; hospitalisations were higher for diabetes and obesity in Hispanic adults compared to white adults. Diabetes was the cause of about 25% of COVID-19 hospitalisation among white adults compared to 32% among Black adults and 34% among Hispanic adults.

"National data show that Black and Hispanic Americans are suffering the worst outcomes from COVID-19. Our findings lend support to the need for prioritizing vaccine distribution, good nutrition, and other preventive measures to people with cardiometabolic conditions, particularly among groups most affected by health disparities," said Dariush Mozaffarian, lead author and dean of the Friedman School.

Source: Tufts University
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