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Letter to the Editor

Letter to the Editor in response to the article: "Increase in the risk of type 2 diabetes during lockdown for the COVID19 pandemic in India: A cohort analysis" (Ghoshal et al.)

Dear Editor,

We read the article by Samit Ghosal et al. [1] with great interest and appreciate the findings of weight gain in non-diabetic individuals during the COVID-19 lockdown period. However, the weight gain following 49 days of lockdown can be brought about by either fluid retention or increased calorie intake [2]. Fluid retention is routinely noticed in hypertension and pathologies of the heart, liver, and kidneys. This change in weight is generally short-lived as they tend to get resolved with the use of diuretics. Ever since the COVID-19 pandemic lockdown, many patients are denied access to health care and medications [3]. This leads to fluid retention and weight gain in such patients with previously controlled by medications. Thus, it becomes crucial to exclude this set of patients from the study as they gain weight due to loss of access to medications rather than due to a sedentary lifestyle because of the COVID-19 lockdown. It is unclear in this study if inquiries were made to exclude such patients. According to the authors, there is an increased risk of developing diabetes based on the validated American Diabetes Association (ADA) risk score. As indicated by the table that is marked as 2 in this study, the change in ADA risk score post-lockdown appears to be 6.66%. But we did not find the p-value to learn if the change in ADA risk score post-lockdown is statistically significant or not [4]. Suppose ADA risk score after 49 days of lockdown is statistically significant, it is unclear how there is an increased risk of developing Type 2 Diabetes Mellitus (T2D) in the population without the disease. ADA scoring is primarily used to decide if an individual with certain risk factors would benefit from screening for T2D. The increased ADA risk score if found in a certain population during post-lockdown would simply mean that this group of the population qualifies to be screened for T2D. We thank the authors for sharing their findings, but for now, it remains unclear if the lockdown during the COVID-19 pandemic in India would lead to an increase in risk for developing type 2 diabetes. In the future, large well-designed cohorts are crucial to better understand the effects of COVID-19 lockdown on the risk factors associated with T2D. The study must provide important parameters like p-value, confidence interval, and relative risk to substantiate as evidence for conclusions of the study.

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