COVID-19 hospitalisation demand in India could reach 18 lakh: CDDEP

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Against the availability of just over 7 lakh beds at government hospital facilities in India, the peak COVID-19 hospitalisation demand in the country could be as high as 18.7 lakh in a hard/moderate lockdown scenario, researchers associated with the Center for Disease Dynamics, Economics and Policy (CDDEP), Johns Hopkins University and Princeton University estimate. They assume a transmission rate (R0) — that is, the number of individuals an infected individual transmits the virus to — of 2.66 in a scenario in which there is no intervention.

This is pushed down to 1.5 due to the effect of the 21-day lockdown that started on March 25 in the hard lockdown scenario, while the R0 in a moderate lockdown scenario is pushed down only to 2. In both cases, transmission resumes at an R0 of 2.4 once the lockdown ends.

In another scenario, a hard lockdown with social distancing and isolation of symptomatic individuals, the R0 falls to 1.5 during the lockdown, but rises to just 2 once the lockdown ends. Even in such a scenario, there will be 13.5 lakh cases at the peak of the outbreak in the country that will require hospitalisation.

Given, even in the best case scenario, the hospitalisation demand will overshoot the entire private and public sector capacity in the country, the focus has to be on delaying the peak — multiple, focussed lockdowns to could be one way to do this, with the chance that the peak also gets pushed down.