# Impact of lockdown measures in abating the COVID-19 pandemic: Lessons from India's phased approach

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#### **Background:**

World Health Organization (WHO) declared that the outbreak of novel coronavirus (2019-nCoV) constituted a Public Health Emergency of International Concern (PHEIC) on 30 January 2020 and characterized the novel coronavirus disease (COVID-19) as a pandemic on 11 March 2020. India enacted such measures early on for effective mitigation and suppression to reduce community transmission, including an onerous national lockdown. The impact of the health system governance is quite apparent among all stakeholders including the public in such emergency contexts.

## Methods:

We compiled the daily data on the number of COVID-19 cases, recoveries and deaths from January 30th until June 16th, 2020. Different stages were categorized from post PHEIC declaration (pre-lockdown) phase to lockdown phases and unlocking phase as implemented. The several measures adopted by the national government were structured in four broad categories as Governance and socioeconomic, travel restrictions, lockdown and public health measures. These measures were compared during each phase.

#### **Results:**

It was revealed that while the cases are rising the phased restrictions has helped in delaying the peak and remarkably interrupted the rate of transmission. The national average doubling rate was 3 days at the beginning which improved to 22 days. The basic reproduction number remained close to 1 during the last week of lockdown. However, the initial interruption of needed aid and technical support had negative social and economic impacts on the affected population.

## **Conclusions:**

As the situation abates following the measures adopted by the government, an articulate strategy of unlocking through increased testing and prompt isolation needs to be developed for more effective reduction and protecting the livelihoods allowing to further relax the lockdown measures.

## Key messages:

- There is need for the local government to consider a strategic easing of the lockdown for protecting the rights of the most affected population.
- As the transmission rates are low, the easing of lockdown can be benefited from improved testing and prompt isolation.