Dynamics of COVID-19 in India: A review of different phases of lockdown

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Dear Editor,

WHO declared COVID-19 as a pandemic on 11 March 2020 due to its large-scale spread across the globe[1]. At present, there are 213 countries affected by this pandemic with a total of 7410510 confirmed cases and 418294 deaths with the majority of countries in community transmission stage[2]. India has become the third worst affected country in terms of the number of COVID-19 cases after the USA and Brazil[3]. The first case in India was detected on 27 January 2020[4]. The majority of the patients initially identified had a traveling history and constituted the primary cases that infected others[5,6]. India being the second-most populous country with a highly dense population is more vulnerable to the outbreak of any infectious disease. India has increased its testing capacity significantly, which has also resulted in a surge in the number of confirmed cases. India already has an overstretched public health system, which creates more challenges to address the health needs due to COVID-19[7].

The government of India implemented a nationwide lockdown in different phases to curb the spread of the infection: Phase 1 (25 March to 14 April), Phase 2 (15 April to 3 May), Phase 3 (4 to 17 May), and Phase 4 (18 to 31 May). The government lifted the lockdown from 1 June 2020 with restrictions to containment zones identified by public health authorities. The government has also issued SOP (Standard Operating Procedures) to all sectors in order to ensure physical distancing and contain the spread of the virus[8]. With the easing of the lockdown to restart economic activities, an increase is expected in the number of COVID-19 cases in the coming days. India needs to be prepared in terms of hospitalization needs and ICUs in public health facilities. The positivity rate (confirmed cases/tests) in India has increased

Table 1. Progress of COVID-19 in different phases of lockdown in India

	Pre-lockdown (30 Jan–24Mar)	Lockdown Phase 1 (25 Mar–14 Apr)	Lockdown Phase 2 (15 Apr–3 May)	Lockdown Phase 3 (4–17 May)	Lockdown Phase 4 (18–31 May)	Lifting of lockdown (1–12 Jun)	Total
Number of cases	571	10914	31294	52920	94949	118955	309603
Number of tests	22694	222199	801557	1181192	1509385	1626418	5363445
Number of deaths	1	395	1067	1562	2382	3483	8890
Number of recoveries	3	1362	10398	25032	55067	62369	154231
Positivity rate (%)	3	5	4	4	6	7	6
Case fatality rate (%)	0	3	3	3	3	3	3
Recovery rate (%)	1	12	27	38	48	50	50

Source: Authors calculation from www.covid19india.org

from 3% in the pre-lockdown period to 7% in the last phase of lockdown, suggesting that with an increase in the number of tests, the cases have also increased in all phases of lockdown. However, the case fatality rate in India has remained constant at 3% in all phases of lockdown, which is much lower compared to other countries including Italy (14.5%), Spain (9.3%), UK (14.2%), and USA (5.5%)[3]. The recovery rate has significantly improved from 12% in Phase 1 to 50% in the last phase of lockdown, which is definitely a positive sign amidst this coronavirus crisis. Still, it is a matter of serious concern for all the countries, including India, to strengthen public health surveillance and curtail the spread of infection.

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