

Clamping Coronavirus through Containment by Isolation and Social Distancing

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The coronavirus disease-2019 (COVID-19) outbreak, which was first detected in the Wuhan city of China in the December 2019, has now gradually been detected in 213 nations and territories across the world.¹ The sudden upsurge in the cases across multiple nations has eventually made the World Health Organization to declare the COVID-19 infection as pandemic on March 12, 2020.¹

In general, the fundamental pillars for the containment of an infectious disease are through three standard approaches, namely vaccine, treatment, and isolation. In case of COVID-19, it is important to note that the disease is caused by a novel virus and thus at present there is neither a vaccine available in the market to prevent the acquisition of infection nor a therapeutic drug available to treat the disease once a patient acquires the infection. Under these available circumstances, isolation remains the solitary strategy to minimize the risk of transmission of infection and thereby reducing the caseload of the disease.

It is anticipated that strict isolation of an infected case interrupts the chain of transmission and thus it will bring about a significant decline in the number of reported cases of the disease. In other words, isolation is a strategy that will reduce the demand of health care by protecting the majority of the individuals who are at significant risk to acquire the infection.

The effectiveness of isolation can be enhanced by practising hand hygiene and respiratory hygiene such as cough etiquettes.

At present, India is in stage 2 of local transmission and efforts are going at full pace to delay its progression to stage 3 of community transmission. This is very important that all the measures are taken to delay or avert the progression to stage 3 (community transmission), as it is anticipated that there will be an exponential rise in the number of cases, which will lead to tremendous scarcity of ventilators, hospital beds, and other resources. Stage 3 has already been reported in Italy, Spain, and some more European nations, and the impact of the same has been disastrous.

In order to avert the progression of the COVID-19 outbreak to stage 3, our honorable prime minister announced a nationwide complete lockdown for a period of 21 days starting from March 25 to April 14, 2020. This period of lockdown for a minimum of 21 days, proposed by the honorable prime minister in India, has got a scientific rationale. The coronavirus has an incubation period of usually up to 14 days. Further, the findings of the available studies have revealed that on an average, most of the infected persons will develop the symptoms of the disease within 7 days of incubation. Thus, it has been presumed that by the 14th day of the ongoing lockdown, most of the COVID-19 patients would become symptomatic and thus can be detected and then appropriately treated.²

The impact of this lockdown can be significantly enhanced by supplementing it with active interventions, including an active search for cases, isolation of confirmed cases, provision of treatment, contact tracing, and quarantine of health contacts.³ If we

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do not act in this period in an accelerated and focused manner, there may be a possibility that once the period of lockdown is over, there might be a second wave of rise in the number of cases.

The most common mode of disease transmission is through close contact and droplets. Thus, the spread of the disease can be effectively reduced by maintaining a distance of at least 1 m (also called as physical distancing) between people. Once again, the principle of isolation can be employed to interrupt the chain of transmission between the infected person and their close contacts. Keeping this scientific rationale in mind, educational institutions have been closed and the business sector has advised employees to work from home in various nations. Further, people have been advised to delay unnecessary travel and avoid social gatherings like weddings or other family functions.

Amidst the current scenario, wherein we do not have a potent vaccine or a therapeutic drug for the cure of the disease, isolation remains an extremely effective and scientific approach for the containment of the COVID-19. In-fact, the approach of isolation has given us a lot of hope to flatten the disease curve by reducing the caseload and avert the possibility of community transmission. In conclusion, at present, isolation including social distancing is the best and number one strategy to fight current coronavirus disease (COVID-19).

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