Dr. Katia Koelle*,* Editor-in-Chief

Epidemics

The Journal on Infectious Disease Dynamics

29/06/2020

Dear Dr Koelle,

We would like to submit our manuscript entitled “A Study on The Effectiveness of Lock-down Measures to Control the Spread of COVID-19” for publication as a research paper in Epidemics, The Journal on Infectious Disease Dynamics.

In this work, we consider the ongoing pandemic of coronavirus disease COVID-19 and study the intervention methods taken by governments across the world. Our objective was to understand whether and to what extent lock-down measures were effective in saving lives.

We use a data driven approach to build a model that is trained on pre-intervention period data to construct a synthetic control unit corresponding to a treatment unit. Then the synthetic version of the unit is used to derive counterfactual scenarios. We show that in The State of New York the number of deaths could have been 6 times higher, and in Italy, the number of deaths could have been 3 times higher by 26th of June, 2020.

We believe that given the scope of this journal includes policy aspects of control and prevention of epidemic – our work would will be of interest and would add value. We will be extremely delighted if you consider our work for review.

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors (Subhas Kumar Ghosh, Sachchit Ghosh, and Sai Shanmukha Narumanchi) have approved the manuscript and agree with submission to Epidemics, The Journal on Infectious Disease Dynamics. The study was not funded by any organization. The authors have no conflicts of interest to declare.

Please address all correspondence to:

Subhas Kumar Ghosh

4/54 Botany Street,

Randwick, NSW, 2031

Australia

+610435067989

subhas.ghosh@cba.com.au