

COVID-19 lockdown and increased incidence of dengue: A note

Beuy Joob¹  and Viroj Wiwanitkit^{2,3}

Abstract

COVID-19 is the important global problem. Lockdown is a general disease control measure against COVID-19. The aim of lockdown is the reduce incidence of COVID-19. From reappraisal on the available data from a tropical endemic country (1), the change of incidences of both COVID-19 and rotavirus infection incidence after lockdown can be seen.

Keywords

COVID-19, lockdown, incidence, dengue

Dear Editor, COVID-19 is an important pandemic. Lockdown is a general disease control measure against COVID-19. The aim of lockdown is the reduce incidence of COVID-19. After lockdown the decreased incidence of COVID-19 is observed and there is also a reduction of incidence of other respiratory infection such as influenza.¹ In a recent report from Thailand, the dramatic reduced influenza incidence is reported. To reappraise on that public data, it can be seen that the pattern of change of dengue incidence is also an interesting but little mentioned issue. From reappraisal on the available data from a tropical endemic country,¹ the change of incidences of both COVID-19 and rotavirus infection incidence after lockdown can be seen. While there is a decreasing trend of COVID-19 locking down, there is an increasing trend of dengue

(Figure 1). This can imply that lockdown successfully control COVID-19 but it might relate to the unwanted increasing incidence of dengue. In fact, dengue is a mosquito borne infection and the transmission usually occurs at daytime in house in the city. During COVID-19 lockdown, people have to stay at home and if there is no good mosquito control, the chance that the people get bitten by dengue mosquito vector might increase. This is an important but forgotten issue. When we focus on control of a respiratory disease outbreak and implement some strict infection control measure, it is necessary to manage the risk of other important disease. Not only dengue but also other endemic disease such as rabies might emerge due to unplanned lockdown.²


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ORCID iD

Beuy Joob  <https://orcid.org/0000-0002-5281-0369>

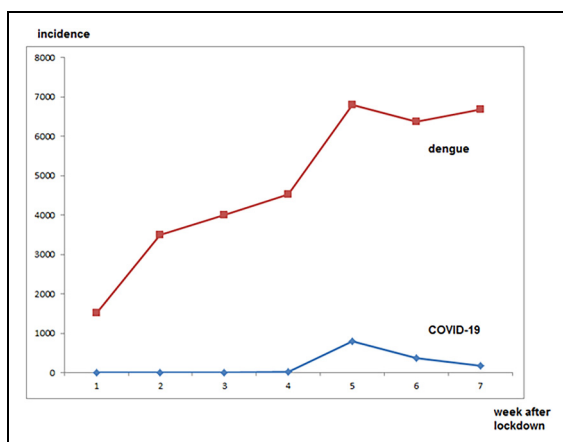


Figure 1. Patten of incidence change of COVID-19 and dengue locking down in a tropical endemic country.

¹Private Academic Consultant, Bangkok Thailand

²Honorary professor, Dr DY Patil University, Pune, India

³Adjunct professor, Joseph Ayobaalola University, Ikeji-Arakeji, Nigeria

Corresponding author:

Beuy Joob, Private Academic Consultant, Sanitation I Medical Academic Center, 26 Bangkok 112 Bangkok 10250 Thailand.

Email: wviroj@yahoo.com

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