

Further Understanding of COVID-19

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The author's previous article, "About Coronary Viruses" has been accepted for publication in *Thammasat Medical Journal*¹. It contained information on observations made about the novel coronavirus and the disease it produced during the first few months since its outbreak in December 2019; the new virus was named SARS-CoV-2, and the disease it causes, COVID-19, by the World Health Organization. Even though little is still known about this new coronavirus and disease, scientists fortunately have gained some valuable insights:

1. A paper² published in March 2020 in the *Annals of Internal Medicine* by a group of medical scientists from three eminent institutes, namely Bloomberg School of Public Health, Johns Hopkins University, Amherst School of Public Health and Health Sciences, University of Massachusetts, in the United States, and Medicins Sans Frontieres, in Switzerland, found that the median incubation period for

COVID-19 was 5.1 days (95% CI, 4.5 - 5.8 days), which is similar to that of the coronavirus which caused SARS (Severe Acute Respiratory Syndrome) in the 2003 outbreak. The paper also found that, of those infected with SARS-CoV-2 who developed symptoms, the symptoms of 97.5 percent of them appeared within 11.5 days (95% CI, 8.2 - 15.6 days) of infection, which implies that, of every 10,000 cases, 101 (99th percentile, 482) would develop symptoms after 14 days of active monitoring or quarantine.

2. On the question about whether warming temperatures would slow the outbreak, *Sarah Gibbens*,³ writing in *National Geographic* magazine, focused on the "Seasonality" of such diseases, including the common cold and the "flu." She noted that some people think that ultraviolet light from strong sunlight might break down the nucleic acid of coronavirus as it does with other microorganisms, including viruses,

killing them in a technique used by hospitals to sterilize equipment and operating rooms. In noting the lack of seasonality in MERS (Middle-East Respiratory Syndrome), another coronavirus infection, she stated that for the time being there is not enough knowledge about the new coronavirus to determine whether it will be affected by different weather conditions. Many experts think that COVID-19 will likely become endemic, like the common cold and influenza, and recur annually and seasonally.

3. On March 19, 2020, a famous Thai Infectious diseases expert warned: “Time is running out for Thailand” if the government does not immediately close its border to all arrivals. He urged the Government to learn from China, which adopted a stringent lockdown and succeeded in turning the tide of the pandemic. He opined that the current means of tackling the emerging disease is far from effective in view of the insufficiency of supplies of effective drugs for the huge projected numbers of persons likely to be infected, and the insufficient hospital accommodations, facilities and specialized doctors and support staff needed to cope with the expected surge in patients.

References

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