

LETTER TO THE EDITOR

COVID-19 Diagnostic Laboratory Capacity: a View from Indochina

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We would like to share ideas on the situation of COVID-19 diagnostic laboratory capacity during COVID-19 pandemic in Indochina, an area with limited resources.

Hendarwan et al. recently performed a study to assessing the COVID-19 diagnostic laboratory capacity in Indonesia in the early phase of the pandemic [1]. Hendarwan et al. noted that “several provinces would still be poorly served by diagnostic services in the event of a surge in cases” [1]. In fact, the problem of low laboratory capacity to correspond the COVID-19 outbreak surge is seen in many developing countries during the early phase of outbreak. There are many ways to increase the capacity such as laboratory rearrangement [2]. However, the dynamics change of the laboratory capacity when time passes is an interesting issue but seldom mentioned. Based on the public data from another Indochina country that has been affected by COVID-19 since January 2020, a similar problem during the early phase of the outbreak was also observed.

In January 2020, less than 10 laboratories could serve diagnostic tests for COVID-19. The local public health ministry tried its best to implement the technology to the local laboratories and the laboratory accreditation program was also run for confirmation of the quality of the medical laboratory. The number of laboratories that have abilities to diagnose COVID-19 increased to 80 in April 2020 (8 times) and 236 in November 2020 (23.6 times). Regarding the overall national diagnosis capacity, it changed from 100/day in January 2020 to 10,000/day in April 2020 and 20,000/day in November 2020.

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The increased number of laboratories and overall diagnostic capacity are also concordant with the success in controlling of the first wave of outbreak in the country, which turned from its peak in April 2020 to a controllable situation three months later. This observation can show that both increasing laboratory capacity and number of qualified laboratories are important factors for COVID-19 outbreak containment. Updates of laboratory techniques to correspond to the situation change, including occurrence of new variants and possible new waves of disease, is necessary for any clinical laboratory.

Declaration of Interest:

None.

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