

Coronavirus Pandemic

No new community COVID-19 infection in four consecutive weeks: what lesson can be learned from Vietnam

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Abstract

Sharing a common land border with China, Vietnam has faced a high risk of transmission of Coronavirus Disease 2019 (COVID-19). Rapid decision making and robust public health measures were established by the Vietnamese Government to control the situation. As of 17 May 2020, Vietnam reported 320 total confirmed cases of COVID-19, of whom 260 had fully recovered, while the remaining 60 cases were still under treatment. Noteworthy, the current data still confirms zero deaths and within the last 32 consecutive days prior to this submission, there have been no new infections in the country. Valuable lessons from Severe Acute Respiratory Syndrome in 2003 such as use of quarantine, early recognition and quick response to the infection, and increased awareness of its citizens have put Vietnam in a somewhat better position against COVID-19 compared to other places. Vietnam, at the current time, mulls declaring an end of the current COVID-19 outbreak.

Key words: COVID-19; Vietnam; situation; public health measures; challenges.

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Dear Editor,

Sharing an approximate 1200 kilometers common border with China in the north of Vietnam, there is a voluminous exchange of Vietnamese and Chinese workers and travellers. Vietnam has faced a high risk of dissemination of Coronavirus Disease 2019 (COVID-19) since the beginning of this outbreak. When the World Health Organization declared this disease as a global pandemic on March 11th, 2020, the world had seen over a 2.6 million confirmed cases. As of 18 May 2020 the world has reported 4.6 million cases in 212 countries and territories with the number of deaths having exceeded 311,000 people [1]. Some countries including Italy, Spain, China, the United Kingdom, etc., have witnessed high fatality rates [2]. Nonetheless, at the time of our writing, Vietnam is standing firm with 320 total confirmed cases, of whom 260 have fully recovered, while the remaining 60 cases are still under treatment. Noteworthy, the current data still confirms zero deaths and within the last 32 consecutive days prior to this submission, there have been no new infections in

the country [3]. In this letter, we aim to delineate the current situation of COVID-19 in Vietnam according to each period of time.

The present picture of COVID-19 in Vietnam can be outlined into four waves in consonance with the number of new case and the original location of infection. The first wave was marked by the confirmation of COVID-19 in a 66-year-old Chinese man who travelled from Wuhan to Ho Chi Minh City on January 23rd, 2020. Thereafter, a Vietnamese woman was identified as the first Vietnamese resident with COVID-19 after having contact with the aforementioned person. Having experienced the epidemic of the Severe Acute Respiratory Syndrome (SARS) in 2003, Vietnam rapidly established numerous emergency measures in response and applied them to the current outbreak at the moment of the first infected case. Given that it is a populous country with over 97 million people and a concentrated population density, the central government cooperating with the Ministry of Health and the Vietnamese Centers for Disease Control

and Prevention immediately implemented: (1) physical distancing and barriers with restriction of movement, early closure of schools and universities, in addition to the lockdown of some villages in the north of Vietnam, and obligatory use of face masks in public areas; (2) implementation of strong measures including proactive tracking of people who had contact with confirmed cases of COVID-19, compulsory health declarations via a mobile phone application, and the quarantining of suspected and confirmed cases of COVID-19; (3) social and economic management such as adjustment of tax policies, financial recovery packages, and guarantee of food supplies; and (4) mobilization of the armed forces to assist the deployment of a large quarantine strategy.

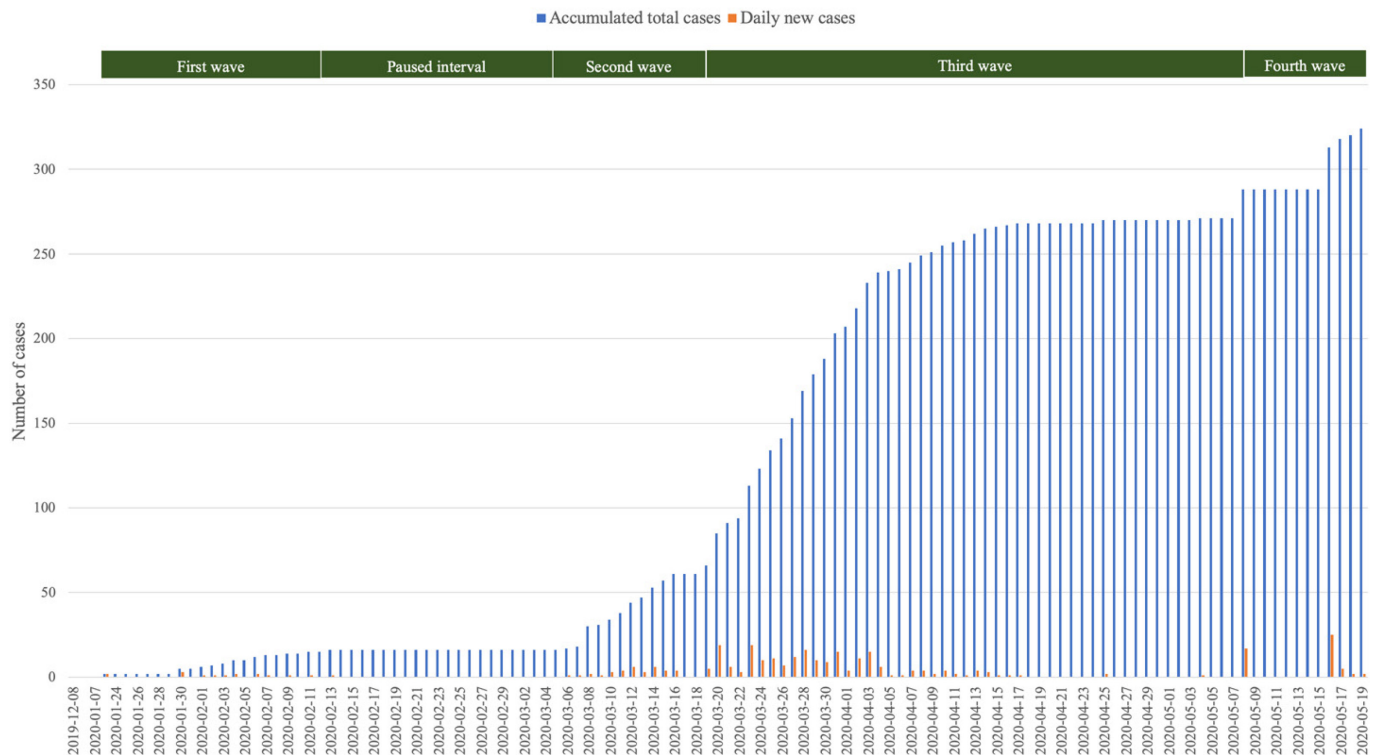
Consequently, Vietnam had an interval of three weeks from February 14th to March 5th, 2020 with a mere 16 test-confirmed cases and considered this as an initial success against the COVID-19 outbreak [4]. In the current absence of a COVID-19 vaccine and evidence-based antiviral therapies for the disease, quarantining of suspected and confirmed cases represented a powerful approach to mitigate the escalation of infection, as reported in some countries [5,6].

The second wave started when a large swathe of people, who had been living and travelling abroad in Europe and America, returned to Vietnam [7] causing a backflow of infection (Figure 1). This duration between

6 and 19 March 2020 was considered as the “imported case” period considering that the recent new infections were predominantly attributed to this cohort.

The third wave from 20 March until 7 May 2020 was striking by the vulnerability of infection in the community, characterized by the emergence of clusters with untraceable sources. In particular, two nurses who worked at Bach Mai Hospital, one of the biggest national health institutions in Vietnam, with 5,000-7,000 outpatients/day, were identified as the first Vietnamese medical health workers having become infected. Immediately, the government decided to lockdown the whole hospital for 14 days in parallel with proactively tracing and quarantining contacted cases. On 1 April 2020, the Prime Minister officially declared a nationwide COVID-19 crisis and a 15-day nationwide physical distancing strategy was initiated including the: closure of stores and shopping centers; closure of services including restaurants, bars, clubs, entertainment centres, and massage shops; suspension of public transportation, taxi and ride-hailing services; shutting down of the municipal bus stations; halting overseas transportation via international airlines, and the suspension of entry of all foreign people; urgent request for residents to stay at home and the obligatory use of face masks in public areas; prohibition of all meetings exceeding 20 participants.

Figure 1. Accumulated total cases and daily new cases of COVID-19 in Vietnam [1].



The fourth wave, from 7 May 2020 until now, has been characterized by the slight increased number of new confirmed cases, from people were repatriated from overseas. All of these new cases were sent to a centralized quarantine facility directly after landing, posing no risk of spreading infection among the community. At this moment, even though the number of new cases has been gradually increasing, no deaths, thus far, have occurred and Vietnam has gone 32 straight days without community transmission.

Conversely, numerous concerns and obstacles pose serious challenges to Vietnam. Whether the current modest economy can be sustained during the pandemic remains a concerning question. At present, drought and saltwater intrusion have led to an emergency situation in the Mekong Delta region. An estimated damage of more than 239 million US dollars has resulted in an enormous burden to the economy, especially during this wave when the government have allocated resources against the spread of COVID-19.

Finally, according to a World Health Report 2006, an estimated 22.8 physicians per 10,000 population are fundamentally required to guarantee a high level of coverage for essential health interventions [8]. However, the density of physicians in Vietnam remains limited and insufficient with just 7.61 per 10,000 people accompanied by an unbalanced distribution between urban and rural areas [9]. Additionally, asymptomatic carriage and transmission remains a challenge to the containment of COVID-19 and could potentially induce a large surge of infection. It could be regarded as a critical flaw in the management of the outbreak. Public awareness and more consideration should be paid to the insidious spread of the virus.

Over four months of the outbreak, Vietnam has reported a modest number of COVID-19 cases without any fatalities. The country is reopening gradually, and many schools resumed in the first week of May. While the number of new cases are still concerning in many parts of the world, Vietnam, a country of more than 90 million people have not seen any new cases over 32 consecutive days after plateauing at below 350 cases in total. Vietnam has learned valuable lessons from the SARS outbreak in 2003 that seems to have put it in a somewhat better position against COVID-19 compared to other places. The government with robust public health measures, and a vigilant attitude, has to date controlled the situation. Vietnam, at the current time, mulls declaring the end of the current COVID-19 outbreak.

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