



Letter to the Editor

Understanding the Slow COVID-19 Trajectory of Cambodia



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ABSTRACT

COVID-19 has resulted in large number of mortalities across the globe. However, Cambodia has recorded low number of COVID-19 cases with no death. A number of factors buttress the accuracy of this phenomenon such as significant support from international health partners, culture of wearing a face mask when sick, timely response of Cambodia's neighbouring countries, and the compliance of the general public to the restrictions. Cambodia started to take stringent measures and augmented efforts to initiate policies and plans to curb the spread of the virus, including but not limited to: closure of inbound and outbound borders, shutting down of schools, and banning religious activities, gatherings and meetings, with more than 50 people. Another source of success of Cambodia is extensive mass testing, complemented with contact tracing. A strategy called "box in" the virus was introduced. Healthcare workers were trained to help in contact tracing and detection at the community level. Measures enacted so far has helped Cambodia control the pandemic. Other countries could adopt and adapt to the policies and best practices of Cambodia. However, possibilities of new waves of the pandemic may affect the country, thus, the Cambodian government needs to be cautious when lifting restrictions to avoid explosion of new cases.

Since COVID-19 was declared a global public health emergency [1] by the World Health Organization (WHO), many countries, have undertaken strict measures to contain the spread of the disease [2]. The virus has ravaged its way across the globe [3] and Cambodia has not been spared. The first case of COVID-19 in Cambodia was reported on January 27, 2020. It was a man from Wuhan, China, who came with his family to visit the coastal city of Sihanoukville [4]. Despite having a weak healthcare system compared to other developed countries, and being a resource limited country, Cambodia is amongst the countries with the lowest number of COVID-19 cases. As of November 15, 2020, there were only 302 confirmed cases with no death in a population of 16 million people, confirming only 18 cases per one million population [5].

This has come as a surprise to many countries, particularly among its ASEAN neighbours, due its apparent success to tussle the virus. Although some critics question the accuracy of these figures by arguing that the government has underreported the true number of cases due its insufficient testing capacity, discouraging its people from testing and hiding the reported cases [6], a number of factors buttress the probability of low number of cases in Cambodia. This paper aims to provide an analysis on the possible factors and the strategies initiated by the Cambodian government which led to a low number of cases.

Factors such as strong support from international health partners, the culture of wearing a face mask when sick, timely response of Cambodia's immediate neighbours i.e. Vietnam and Laos [7] and the compliance of the general public has played a substantial role to help the country curb the spread. While devising precautionary strategies, Cambodia took advantage of developing its capacity to combat epidemics way back. Having experienced previous epidemics such as SARS in 2003 and periods of the Avian Flu between 2004 and 2010, the country was well equipped with the vital preventive lessons [8]. With the help of WHO and partner countries, it started to make substantial investments in its

healthcare system, since a decade ago. Strengthening the surveillance system in Cambodia was started prior to the pandemic. It firmed up its surveillance system and contract tracing capacities, aimed at detecting and immediately responding to infectious disease threats and other acute public health issues [5].

The government of Cambodia recognized COVID-19 as a formidable public health threat to its nation and thus began to employ a multi-pronged approach. The Training of Trainers was conducted by the Ministry of Health of Cambodia and this transcends up to district level health centre [5]. It is called the Rapid Response Teams (RRT). The RRTs are spread in 25 provinces across Cambodia, working closely with Cambodia's early warning and response system (CamEWARN), which collects an aggregated information on disease symptoms, including respiratory infections, data, news and reports of new infections. CamEWARN together with RRT set up and scaled-up toll free lines, whereby citizens can report suspected cases of COVID-19 in the community immediately and directly to the authorities, so that preventive measures could be implemented quickly [5].

Cambodia started to take stringent measures and augmented efforts to initiate policies and plans to mitigate the spread of the disease. Border restrictions were imposed with neighbouring countries, i.e. Thailand and Laos. Meanwhile, all inbound travel and flights coming from Malaysia, Indonesia and the Philippines were suspended [9,10]. Furthermore, domestic travel restrictions were imposed, prior to the Khmer New Year celebrations, as well as the cancellation of the celebration – so as to prevent the formation of new clusters of infections, that may result from the large gatherings [9]. Schools were to remain closed until late November 2020 and religious activities, gatherings and meetings, with more than 50 people were banned [10]. The government introduced a State of Emergency law to allow proper disease containment, raise awareness through social media platforms, and smart phone messaging

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and to form the COVID-19 steering committee at the national and sub-national level [9,10]. Over 933,171 people received behavioural preventive message, 167,185 hand-washing supplies and 14,813 comprehensive hygiene kits were distributed to households. These households included caregivers and children, to prevent the spread of infection of COVID-19.

Another source of success of Cambodia is extensive and exhaustive mass testing, complemented with contact tracing. Since January up to early June 2020, 16,000 tests have been conducted among members of the general public [6]. Having a laboratory diagnostic testing centre is an important element in diagnosing and validating COVID-19 cases, thus contributes in crafting new policies. The Institute Pasteur Cambodia (IPC) and the National Institute of Public Health are the main laboratories designated to test COVID-19 samples in Cambodia [5]. About 300 diagnostic tests are performed per day, assessing probability of transmission at the wet markets along Mekong Delta region [11]. With a high level of technical proficiency, diagnostic testing capabilities with an effective specimen management system for real-time testing that supported contact tracing, investigation procedure and robust clinical management, the IPC was recognized as an International Reference Laboratory for COVID-19 by the WHO – providing referral functions such as assay validation, capacity building, data management and analysis, and culture and sequencing of the virus [5,12].

Whilst the country lacks resources to mobilise the testing infrastructure, a strategy called “box in” the virus was introduced. About 2900 healthcare workers were trained between January and February 2020 to help out in contact tracing and detection at the community level [8]. This includes targeted testing, whereby testing was done among high-risk individuals, buildings or neighbourhood based on the report of positive cases. Contact tracing was facilitated by the use of mobile application, which provides information on health status, suspected cases and those who are possibly exposed [12].

Conclusion

Cambodia has successfully battled against COVID-19 and controlled the spread of new infections among general public, through the multifaceted approach enacted by its government. Moving forward, countries could adopt and adapt to the policies and best practices from Cambodia, which could be tailored to their countries, in order to combat and mitigate the spread of the disease. Measures enacted so far has helped Cambodia to control the pandemic, but new waves of the pandemic should be seen as a possibility. Thus, the Cambodian government needs to be cautious while lifting restrictions until a vaccine is available for all, to avoid explosion of new cases.

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Authors' contributions

Buntongyi Nit, Don Eliseo Lucero-Prisno III and Attaullah Ahmadi conceived the idea. Buntongyi Nit, Alexander Lourdes Samy, Shu Leed Tan and Attaullah Ahmadi wrote the draft of the manuscript, collect data and literature with an important contribution by Sopanha Vory, Youhok Lim and Ryan Rachmad Nugraha. Don Eliseo Lucero-Prisno III and Xu Lin assisted with article interpretation and language edit. All the authors read and approved the final manuscript.

Declaration of competing interest

The authors declare no competing interests.

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