



Rapid Communication

Pitfalls of exceptions for COVID-19 travel quarantine: lessons from a dignitary visit to Thailand

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International travelling has been transformed during the COVID-19 pandemic. Pre-travel screening and quarantine have been recommended to prevent importation of SARS-CoV-2.¹ Thailand requires a 14-day travel quarantine for individuals entering the country. Due to detrimental impacts on governmental affairs and international relations, potential alternatives have been actively discussed to allow the movement of travellers into the country without a full quarantine. Recently, a new transmission event presented a unique opportunity to explore these issues further.

A high-ranking Dignitary from a European country visited Thailand on 3 November 2020 for a 2-day visit to meet several senior Thai government officials (Figure 1A). Due to the nature of this visit, the 14-day quarantine requirement was waived. After arriving by a private aircraft at an international airport in Bangkok, the Dignitary (with no face mask) was greeted by Diplomat #1 (wearing of face mask; no handshaking) and Diplomat #2 (wearing of partially covered face mask; handshaking). The Dignitary and Diplomat #2 (with no face mask) travelled by car together with a driver and a police officer, both partitioned from the passengers, for an \sim 30-minute ride to a hotel. Upon arrival, the Dignitary was greeted with handshakes by Diplomats #3-#5 and the hotel manager (all without face mask). Porters and elevator operators were equipped with face shield, mask, gloves and disposable plastic raincoat. At the hotel, the first nasopharyngeal/throat swabs were collected from the Dignitary for reverse transcription polymerase chain reaction (RT-PCR) COVID-19 testing. The Dignitary and Diplomat #2 then dined together at a private facility.

The test conducted on the same day revealed positive RT-PCR diagnosis for SARS-CoV-2. The Dignitary was transferred to a special isolation facility on 4 November 2020 without any COVID-19-related symptoms. From the interview, the last COVID-19 test was administered for the Dignitary at the country of origin in Europe prior to the international travel on 2 November 2020. A total of 52 individuals directly exposed

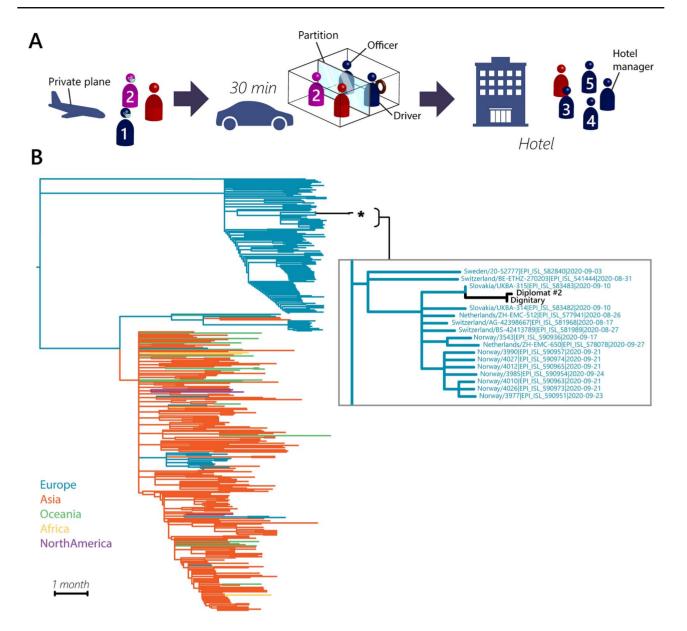


Figure 1. COVID-19 disease investigation in a visit of a Dignitary. (A) Diagram depicting Dignitary (red) and sequential encounters with individuals described in the text (infected Diplomat #2 shown in purple). (B) Maximum-likelihood tree with estimated molecular clock for SARS-CoV-2 lineage B.1.160. Geographic regions associated with samples are shown in different colours. Insert shows the portion of tree containing the two virus genomes described in the text

to the Dignitary were immediately notified and placed under a 14-day quarantine. All were confirmed to be COVID-19 RT-PCR negative. Only Diplomat #2 who travelled in the same vehicle compartment and dined with the Dignitary showed positive RT-PCR results on 9 November 2020 and was admitted to a hospital for observation; Diplomat #2 presented no COVID-19-related symptoms and had no recent international travel history.

RNA samples collected for RT-PCR testing were also used for SARS-CoV-2 genome analyses.^{2,3} The same 23 mutations in comparison to a reference genome (MN908947.3) were found in both samples, strongly indicating direct transmission from the Dignitary to Diplomat #2 (Supplementary Table S1). The two virus genomes belong to the B.1.160 lineage. A time-series and maximum-likelihood analyses demonstrated these two genome samples are clustered with recent B.1.160 genomes circulating among European countries (Figure 1B).

An ideal COVID-19 control measure is to quarantine travellers regardless of their previous test results. However, the required quarantine period is not practical for certain visiting dignitaries due to the nature of their mission, short duration of stay and security concerns. Even though risks exist from direct and indirect exposures, successful chain of transmission in the present report occurred in a closed space. In situations where a conventional quarantine period is required to be waivered, the following procedures are recommended: (i) COVID-19 testing is conducted upon arrival and during the stay regardless of any previous negative results, (ii) strict social distancing measures especially in a closed space must be respected and (iii) the use of personal protective equipment is recommended for those who come into contact with the visitor. Nevertheless, full preventive measures without a standard quarantine of visitors are not risks-free.

Author Contribution

AM, KA and WP collected and analysed clinical and epidemiological data. TK, EMB, WC and TC analysed genomic and phylogenetic data. PK, AK and PP performed medical laboratory testing. KJ, NK and DL performed genomic sequencing. TC wrote the manuscript. Every author reviewed and approved the manuscript.

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Supplementary Data

Supplementary data are available at JTM online.

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