

## **Asymptomatic Transmission of Severe Acute Respiratory Syndrome-Coronavirus 2 within a Family Cluster of 26 Cases: Why Quarantine is Important?**

Sir,

The 2019–2020 coronavirus (CoV) pandemic is an ongoing pandemic of CoV disease 2019 (COVID-19), caused by severe acute respiratory syndrome CoV 2 (SARS-CoV-2). In this stage of lack of effective drugs, extensive measures to reduce person-to-person transmission of COVID-19 are required to control the current outbreak.<sup>[1]</sup> This process is complicated by epidemiologic uncertainty regarding possible transmission of the virus by asymptotically or subclinically symptomatic-infected persons.<sup>[2]</sup> The tracing of foreign travellers, checking on arrival and quarantine for mean incubation period of 14 days is being practiced. We hereby highlight a family cluster where four index cases

who lead to family cluster of 26 cases by refusing to follow the quarantine.

Initially, family of four (two males and two females of age 65, 62, 52, and 35 years) belonging to Islampur town in Maharashtra State returned from Saudi Arabia on March 13, where all of them were screened and advised home quarantine for 14 days. They belong to a big joint family who live side by side in a congested housing set up. In spite of being advised, the four index cases did not follow quarantine and were in contact with other family members round the clock for the next 5 days.<sup>[3]</sup> On March 19, four index cases were admitted to Government Hospital as three

of them started showing symptoms and were tested by Throat swab for reverse transcriptase-polymerase chain reaction. All four swabs of index cases came positive on March 22. Forty-three family members were quarantined and kept under observation and 325 nonclose contacts were home quarantined. On March 24, out of 43, five people were tested positive for SARS-CoV 2 including the housemaid and the driver followed addition of three more positive cases on March 26. The contact history of all family members was traced and more than 4000 people screened. By March 28, 13 people from the family were tested positive including a 2-year-old child and another family member was tested positive on April 7, making the total of 26. During the whole process, more than 51,000 people were kept under quarantine and the town was sealed completely.

Facts to be highlighted:

1. If all the advised precautions of the quarantine were followed by the index cases, the outbreak would have occurred
2. The index cases transmitted the disease in presymptomatic period of 6 days
3. Huge number of people who came in contact with the whole family were put at the risk.

To prevent and control this highly infectious disease as early as possible, people with family members with SARS-CoV-2 infection should be closely monitored and examined to rule out infection, even if they do not have any symptoms. Vigilant control measures are warranted to control the pandemic.<sup>[4]</sup>

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

**Kiran Sunil Mahapure, Nachikait Shirish Kulkarni<sup>1</sup>**

Department of Plastic Surgery, KLE Hospital and MRC, Belgaum, Karnataka,

<sup>1</sup>Department of Internal Medicine, Aster Aadhar Hospital, Kolhapur, Maharashtra, India

**Address for correspondence:** Dr. Kiran Sunil Mahapure,  
Department of Plastic Surgery, KLE Hospital and MRC,  
Belgaum, Karnataka, India.  
E-mail: drkiranmahapure@gmail.com

## REFERENCES

1. Lai CC, Liu YH, Wang CY, Wang YH, Hsueh SC, Yen MY, *et al.* Asymptomatic carrier state, acute respiratory disease, and pneumonia due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2): Facts and myths [published online ahead of print, 2020 Mar 4]. *J Microbiol Immunol Infect.* 2020;. doi:10.1016/j.jmii.2020.02.012.
2. Hoehl S, Rabenau H, Berger A, Kortenbusch M, Cinatl J, Bojkova D, *et al.* Evidence of SARS-CoV-2 Infection in Returning Travelers from Wuhan, China. *N Engl J Med.* 2020;382:1278-80. doi:10.1056/NEJMc2001899.
3. Available from: <https://economictimes.indiatimes.com/news/politics-and-nation/congested-dwelling-hastened-covid-19-spread-in-sangli-family/articleshow/74884215.cms>. [Last accessed on 2020 Apr 07].
4. Pan X, Chen D, Xia Y, Wu X, Li T, Ou X, *et al.* Asymptomatic cases in a family cluster with SARS-CoV-2 infection. *Lancet Infect Dis* 2020;20:410-1.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: <a href="http://www.jgid.org">www.jgid.org</a>
	DOI: 10.4103/jgid.jgid_64_20

**How to cite this article:** Mahapure KS, Kulkarni NS. Asymptomatic transmission of severe acute respiratory syndrome-coronavirus 2 within a family cluster of 26 cases: Why quarantine is important?. *J Global Infect Dis* 2020;12:115-6.

**Received:** 10 April 2020 **Revised:** 24 April 2020

**Accepted:** 28 April 2020 **Published:** 22 May 2020

© 2020 Journal of Global Infectious Diseases | Published by Wolters Kluwer - Medknow