

## Understanding COVID-19 in Nepal

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### ABSTRACT

The novel coronavirus COVID-19 (SARS-CoV-2) was first reported on 31 December 2019 in Wuhan City, China. The first case of COVID-19 was officially announced on 24 January, 2020, in Nepal. Nine COVID-19 cases have been reported in Nepal. We aim to describe our experiences of COVID-19 patients in Nepal.

**Keywords:** COVID-19; experience; Nepal

### INTRODUCTION

On 31 December 2019, the WHO was first informed of cases of pneumonia with unknown etiology in Wuhan city, Hubei province of China.<sup>1</sup> A new coronavirus, severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), was identified as the cause of this outbreak of viral pneumonia that causes coronavirus disease 2019 (COVID-19). On 24 January, Nepal officially announced its first confirmed COVID-19 in a 32-year old male patient, who had recently returned from Wuhan city, China.<sup>2</sup> Since then, nine confirmed COVID-19 cases have been reported in Nepal. We here describe our experiences of COVID-19 patients in Nepal.

### COVID-19 IN NEPAL

The first confirmed case of COVID-19 in Nepal was obtained from Wuhan city, China. By April 10, 2020, a total of 3525 samples from suspected COVID-19 cases were screened using RT-PCR, of which 9 were found positive (0.2%).<sup>3</sup> The characteristics of these patients are provided in Table 1. The median age of the patient was 32 years (range, 19 to 65); 56% of the patients were male. 89% of these cases were imported. One case was positive due to local transmission. There were no deaths. All, except one patient, did not isolate themselves at all. Despite this fact, there were no evidence to suggest transmission of COVID-19 infection in the community yet. Previous studies have shown that nearly 14% of the COVID-19 cases experienced severe disease.<sup>4</sup> Our observation was somewhat surprising that all infected patients have shown little or no symptoms at all.

### KNOWLEDGE GAPS AND CHALLENGES

According to the government protocol, travelers from COVID-19 affected countries (or close contact of confirmed COVID-19 cases) with onset of symptoms within the 14 days of return are eligible to test the virus by using RT-PCR method. A WHO report found that nearly 80% are mild or asymptomatic,<sup>4</sup> however, all COVID-19 patients in Nepal did show little or no symptoms at all. There is a growing evidence on transmission from pre-symptomatic and asymptomatic people infected with SARS-CoV-2 infection.<sup>5</sup> Thus, this issue may pose significant challenges to identify COVID-19 at its earlier stage and infection control.

Case 9 (Table 1) was contracted with SARS-CoV-2 infection from her own relative who did not comply with quarantine rules after tested positive for the virus. It also indicates that people are unaware about the benefit of self-quarantine measures. This could be another obstacle in preventing or slowing its spread in the community.

A 14-day quarantine period may not be enough to prevent spread of COVID-19 infection, and thus a cause for concern. For example, case 2 and 5, show persistent viral shedding even after 14 days of the initial positive test, meaning they may have still capable of transmitting the virus in the community. Previous studies have shown similar results elsewhere.<sup>6</sup> Thus, extending the current quarantine time period can effectively help to limit the spread of the virus in the community.

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Table 1 Characteristics of COVID-19 Patients in Nepal

Case	Age	Gender	Address (District)	Travel history	Date of laboratory diagnosis	Method	Quarantine measures	Clinical condition
1	32	M	Kathmandu	Wuhan, China	23-Jan-20	RT-PCR	No quarantine measure	Recovered
2	19	F	Kathmandu	France	23-Mar-20	RT-PCR	Self-Quarantine	Under Treatment
3	32	M	Kathmandu	UAE	25-Mar-20	RT-PCR	No quarantine measure	Under Treatment
4	34	M	Kailali	UAE	27-Mar-20	RT-PCR	No quarantine measure	Under Treatment
5	19	F	Baglung	Belgium	28-Mar-20	RT-PCR	No quarantine measure	Under Treatment
6	65	F	Baglung	Belgium	2-Apr-20	RT-PCR	No quarantine measure	Under Treatment
7	41	M	Kanchanpur	India	4-Apr-20	RT-PCR	No quarantine measure	Under Treatment
8	21	M	Kailali	India	4-Apr-20	RT-PCR	No quarantine measure	Under Treatment
9	34	F	Kailali	Local Transmission	4-Apr-20	RT-PCR	No quarantine measure	Under Treatment

Studies have clearly shown that elderly people are the most vulnerable to COVID-19, likely results in severe complications and even death. There is no clear treatment guideline for elderly people worldwide. Perhaps, this may be one reason for the high mortality rate among seniors due to COVID-19. Besides case 6, none of the elderly people have been infected with COVID-19 in Nepal (Table 1).

## CONCLUSIONS

At present, quarantine and social distancing are the easiest and effective way to break the chain of transmission of COVID-19 in Nepal. Poor knowledge about quarantine and social distancing among public, however, need to be addressed. Social media as well as female community health volunteers can play a significant role in spreading information about the benefit of quarantine or social distancing efficiently.

## REFERENCES

1. Novel Coronavirus (2019-nCoV). World Health Organization; 2020. <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf>. Accessed 12 April 2020.
2. Coronavirus disease (COVID-19) outbreak updates and resource material. Ministry of Health and Population; 2020. <https://drive.google.com/drive/folders/1SQz5zoNNwYGiwBeHxnU6sYs261fg1Tx>. Accessed 10 April 2020.
3. Coronavirus disease (COVID-19) outbreak updates and resource material. Ministry of Health and Population; 2020. <https://drive.google.com/drive/folders/1GcoNPNhWAv7y6r14idKYEMVOSyCUIB2e>. Accessed 10 April 2020.
4. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). World Health Organization; 2020. <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>. Accessed 4 April, 2020.
5. Coronavirus disease 2019 (COVID-19), Situation Report-72. World Health Organization; 2020. [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200402-sitrep-73-covid-19.pdf?sfvrsn=5ae25bc7\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200402-sitrep-73-covid-19.pdf?sfvrsn=5ae25bc7_2). Accessed 2 April 2020.
6. Wang Y, Wang Y, Chen Y, Qin Q. Unique epidemiology and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. J Med Virol . 2020; 1-9. DOI:10.1002/jmv.25748