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Clinical Profile of Cases of COVID-19 in Far Western **Province of Nepal**

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ABSTRACT

The novel coronavirus (COVID-19) cause various symptoms such as pneumonia, fever, breathing difficult and lung infection. Till now, total 9 cases are reported in Nepal and 4 cases from this province. This case series is to describe the initial clinical features of COVID-19 among the patients admitted in isolation ward of Seti Provincial Hospital. Oropharyngeal swab was taken from all four patients and sample was transfer to national reference laboratory. Three patients were coming from infected country and one is local transmission. Age of patients was range from 20 to 40 years of age with male preponderance. The patient coming from United Arab Emirate was presented with mild symptoms and others were asymptomatic. More tests, contact tracing and keeping them in quarantine are the necessitated action need to be taken by government of Nepal.

Keywords: COVID-19; local transmission; oropharyngeal swab

INTRODUCTION

The coronavirus belongs to a family of viruses that may cause various symptoms such as pneumonia, fever, breathing difficulty, and lung infection.1 The World Health Organization (WHO) used the term 2019 novel coronavirus to refer to a coronavirus that affected the lower respiratory tract of patients with pneumonia in Wuhan, China on 29 December 2019.2-4 The WHO announced that the official name of the 2019 novel coronavirus is coronavirus disease (COVID-19) and declared pandemic.4 On Jan 13, 2020, a 32-years Nepalese student at Wuhan University of Technology, China, with no history of comorbidities, returned to Nepal. He presented at the outpatient department of Sukraraj Tropical and Infectious Disease Hospital, Kathmandu, with a cough. 5 On 27 March 2020, 34 years male who returned from the United Arab Emirate (UAE) found first positive case in this province thereafter total three more cases have been detected with one of them with local transmission.^{6, 7} A total nine cases were diagnosed in Nepal so far and four cases were from this province. The purpose of this report was to describe the initial clinical features of COVID-19 positive cases from Far West of Nepal.

CASES PRESENTATION

CASE 1

A 34 years male foreign worker presented at fever clinic of Seti Provincial Hospital from Kailali district with history of cough and fever for 2 days. He developed symptoms after 2 days of coming from UAE and he had history of chronic allergic rhinitis. He was admitted to Isolation ward and oropharyngeal swab was sent to central laboratory at Kathmandu. After 3 days test came positive and he was shifted to COVID ward where treatment was started and plan to resend swab test after few days. In case if symptom aggravate plan to send for CT scan and patient will be shifted to high dependency ward. Detail history was taken regarding contact during his travel period and the information was given to the concerned authority.

CASE 2

A 20 years male foreign unskilled worker had history of travel from India and he was kept in quarantine nearby his home. He was asymptomatic while doing swab test at quarantine site, his report came to positive then shifted

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to COVID ward of Seti Provincial Hospital. Further plan was to resend the swab test after few days and also monitor him either he developed the symptoms or not. Detail history was taken regarding contact during his travel period and the information was provided the concerned authority.

CASE 3

A 40 year male foreign unskilled worker from Kanchanpur had history of travel from India. During lockdown period he crossed the border illegally, was caught by police and kept in quarantine. He was also asymptomatic while doing swab test at quarantine site, his report was positive then he was shifted to COVID ward of Seti Provincial Hospital. During admission period he will be watched for development of symptoms and manage it accordingly. Contact tracing and providing information to the concerned authority will be done.

CASE 4

A 34 year female, occupation by teacher from Kailali district, was relative of case 1. She came to contact with case 1 and all of her family members were kept in quarantine after case 1 COVID positive test. While doing swab test of all family member, her test came positive of COVID-19 then she was also shift to COVID ward of Seti Provincial Hospital. She was also asymptomatic and will be in close monitoring. Treatment plan of this patient was also similar to other patients and psychiatric consultation may be done if needed.

Table 1. Socio-demographic characteristics of four patients.							
Variables	Patient 1	Patient 2	Patient 3	Patient 4			
Age	34	20	40	34			
Sex	Male	Male	Male	Female			
Dostrict	Kailali	Kailali	Kanchanpur	Kailali			
Occupation	Foreign skilled worker	Foreign unskilled worker	Foreign unskilled worker	Teacher			
Education	Higher secondary	Lower secondary	Lower secondary	Graduate			

Table 2. Special and clinical characteristics of patients at hospital admission.							
Variables	Patient 1	Patient 2	Patient 3	Patient 4			
Arrival in Nepal	20 March	24 March	26 March				
Appearance of symptom	2 days						
Date of diagnosis	27 March	3 April	3 April	3 April			
Exposure and setting	UAE to Delhi to KTM to Home	Mumbai to quarantine	Uttarakhanda to quarantine	Home			
Co-morbidity	Chronic allergic rhinitis	Not significant	Not significant	Not significant			
Fever	Yes	No	No	No			
Cough	Yes	No	No	No			
Difficulty on breathing	No	No	No	No			
Sore throat	No	No	No	No			
Muscle ache	No	No	No	No			
Confusion	No	No	No	No			
Headache	No	No	No	No			
Nause/vomiting	No	No	No	No			
Diarrhea	No	No	No	No			
Rhnorrhea	No	No	No	No			
Chest pain	No	No	No	No			

DISCUSSION

In this case series, all four patient's demographic, special and clinical characteristics are mentioned in Tables 1 and 2. Among them only one patient was symptomatic and others were asymptomatic. Three patients had history of travel from COVID-19 affected countries and they worked there since years. One case was a local transmission and she was also asymptomatic. Similar finding is also reported from China where four fifth cases were asymptomatic.8 In contrast to this, another study done in China showed only 1% was asymptomatic out of 72 314 diagnosed cases.9 In initial stage of transmission, asymptomatic cases may be noted but after few days they may become symptomatic. In our case series, age of patients ranged from 20 to 40 years with male preponderance and studies showed majority of patients were between 30 to 79 years of age.9 Three patients travelled from the COVID-19 affected countries. According to the WHO, in stage one, cases are imported from affected countries and therefore only those who have travelled abroad test positive. At this stage there is no spread of the disease locally. One female who is a relative of patient 1 was also infected and she had not travelled to affected countries. According to the WHO, in stage two, local transmission from infected persons occurs. This is usually in relatives or acquaintances of those who travelled abroad who test positive after close contact with the infected person.

CONCLUSIONS

Currently Nepal is in stage two of disease transmission, government needs to do more and more tests, and contact tracing and keep in quarantine those persons who travelled from affected countries. Public health programs on awareness building, social distancing should be strengthened and for management of COVID cases, more dedicated COVID hospitals should be established with all the facilities.

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