Novel coronavirus: A Pandemic Situation in Nepal

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ABSTRACT

A novel coronavirus (2019-nCoV) has spread out rapidly from Wuhan, Hubei Province, China and has been spreading to other provinces and countries and has become pandemic. The COVID-19 infection spreads through droplets of saliva or nasal discharge when an infected individual coughs or sniffs. The common symptoms shown are fever, cough, fatigue and pneumonia. The total coronavirus cases are 21,357,711 and 763,381 deaths have been reported worldwide as of Aug 15, 2020. The total cases in Nepal has reached to 25,551 with total recovered cases of 17,077 and 99 deaths in total as of Aug 14, 2020. In Nepal, different parts of the country are in lockdown where individuals remain at home aside from emergency situations.

Keywords: COVID-19, Global Health, Pandemic, Quarantine period
INTRODUCTION

Infection with 2019-nCoV has spread out rapidly from Wuhan, Hubei Province, China to other provinces and countries since December 29, 2019.\(^1\) After increasing cases throughout China and different part of the world, the WHO Emergency Committee declared a global health emergency and later a pandemic disease on 30\(^{th}\) January 2020.\(^2,3\) Accordingly, the disease was rapidly transmitted to other countries through tourists and travelers carrying the virus.\(^4\) Most people infected with COVID-19 show three significant patterns:  

1. Mild to moderate illness with symptoms of upper respiratory tract infection  
2. Nonlife-threatening pneumonia and  
3. Severe pneumonia manifested with acute respiratory distress syndrome which requires advanced life support.\(^5\)

Most common symptoms of COVID-19 virus are cough, fever and shortness of breath. Few cases reported to have radiographic ground-glass lung changes; normal to low white blood cell lymphocyte, and platelet counts; hypoxemia; and deranged liver and renal function.\(^4\) The current circulating evidence shows that the incubation period of the COVID-19 virus is around 14 days.\(^6,7\) The COVID-19 infection spreads through droplets of saliva or nasal discharge when an infected individual coughs or sniffles.\(^8\)

With an underlying doubt of the animal to the human transmission for prior cases, presently the view has moved towards human to human transmission by means of droplets or through fomites.\(^8\) An ever increasing number of affirmed cases are being reported which has alarmed the worldwide specialists including World Health Organization (WHO), Centers for Disease Control and Prevention (CDC) and the National Health Commission of the People’s Republic of China to make quick action so as to lessen the transmission and mortalities related with COVID-19 to minimum that can be expected under the circumstances.\(^9\) We are currently facing with a circumstance of an outbreak with an enveloped positive-sense RNA virus which has multiple club like spikes on its surface, for which we currently have no particular treatments or vaccines.\(^9\)

Worldwide Situation

The WHO declared COVID-19 as a pandemic on the 11\(^{th}\) of March 2020, when a total of 183,112 cases were reported worldwide in 163 countries with 11,890 deaths.\(^6,10,11\) The total coronavirus cases are 21,357,711 as of Aug 15, 2020. The United States is currently leading the total number of confirmed cases worldwide accounting for 5,476,266 cases and 171,535 deaths followed by Brazil (3,278,895 cases) and India (2,527,308 cases) as of Aug 15, 2020. More than 210 countries has been affected by COVID-19 cases.\(^12\) While 4,634 deaths have been reported among patients suffering from COVID-19 in China alone, around 763,381 deaths have been reported worldwide: 28,617 from Spain, 41,358 from UK, and 55,908 from Mexico as of Aug 15, 2020.\(^12\)

Situation in Nepal

Nepal is among one of the nine countries that reported only five cases of COVID-19 until March 28, 2020. But as time passed the total cases has increased to 25,551 with total recovered cases of 17,077 and 99 deaths in total as of Aug 15, 2020.\(^13\)  

Table 1: Provinces of Nepal with reported lab-confirmed COVID-19 cases & no. of districts affected.

<table>
<thead>
<tr>
<th>Reporting Province</th>
<th>Total confirmed cumulative cases</th>
<th>No. of districts affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province 1</td>
<td>1211</td>
<td>14</td>
</tr>
<tr>
<td>Province 2</td>
<td>5638</td>
<td>8</td>
</tr>
<tr>
<td>Bagmati</td>
<td>1264</td>
<td>13</td>
</tr>
<tr>
<td>Gandaki</td>
<td>1628</td>
<td>11</td>
</tr>
<tr>
<td>Province 5</td>
<td>4401</td>
<td>12</td>
</tr>
<tr>
<td>Karnali</td>
<td>2026</td>
<td>10</td>
</tr>
<tr>
<td>Sudurpaschhim</td>
<td>4839</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>21007</td>
<td>77</td>
</tr>
</tbody>
</table>

(Data updated till 04/08/2020)\(^14\)

Most COVID-19 cases are handled and treated at Sukraraj Tropical and Infectious Disease Hospital as the primary hospital along with Patan Hospital and the Armed Police Forces Hospital in the Kathmandu Valley.\(^15,16\) Recently, all the central hospitals, provincial hospitals, medical colleges, academic institutions and hub-hospitals have been designed for treatment care of COVID-19 cases whereas more than 2000 hospital beds throughout the country are allocated for isolation of suspected and confirmed cases.\(^16\)

The first positive COVID-19 case in Nepal was reported on January 13, 2020, a 32-year-old Nepalese student studying at Wuhan University of
Technology. Nepal has recorded 99 deaths from the disease as of Aug 15, 2020. The first death was a 29-year-old woman from Sindhupalchok who had recently given birth in a Kathmandu Hospital. She died on 14th May 2020. The next three death were men aged 25, 41 and 70. The total PCR Test done is 494,613 and RDT Test is 312,402 as of Aug 15, 2020.

Nepal has started several measures to prevent risk of COVID-19 transmission. Different parts of the country are in lockdown where individuals are asked to remain at home aside from emergency situations. Health desk check-up have been set-up at the Tribhuvan International Airport and on the checkpoints within India and china borders. Every single international visitors who enter Nepal must stay in self-isolation for 14 days.

PREVENTION

As the threat of Coronavirus has been increasing in recent months, it is challenge for authorities to handle the problem, which can be easily seen. Therefore, it is of utmost importance that the preventive measures to be applied in community level carefully and people to follow those preventive measures as per the rules. Some of the steps that can be followed to prevent the further spread of the virus are:

- Avoid close contact with people who are sick.
- Wash your hand with soap and water or use alcohol-based hand sanitizer.
- Don’t touch your eyes, nose, and mouth.
- Cover your mouth while coughing or sneezing with a tissue, then discard the tissue in the dustbin.
- Clean and disinfect frequently touched objects and surfaces using a regular household bleach or alcohol based spray or wipe.
- Wear masks and gloves where physical distancing is not possible.
- Don’t stay in crowded place for long time.
- In case of medical emergency, contact health centers.

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