



## Commentary

## Risks of COVID-19 outbreaks in Rohingya refugee camps in Bangladesh

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## ABSTRACT

The COVID-19 pandemic was confirmed to have started spreading in Bangladesh since March 2020. Since then the new infections grew exponentially and now the rate is highest in Asia along with wider community-level transmission. In Bangladesh, the preventive measures have been found challenging to implement due to a lack of general awareness of COVID-19 and the absence of a social safety net. In this situation, there is a concern about the heightened risk of infection and its aftermath in Rohingya refugee camps in the southwest part of Bangladesh, where the world's largest refugee population resides. If COVID-19 starts spreading in the camps, there will have a devastating consequence given that almost one million people live in precarious and unhygienic conditions in an area of only five square kilometres. In this paper, the risk for the Rohingya refugee population of getting COVID-19 disease and the preparedness to diagnose new cases and their management by the facilities of government and international organizations are discussed. Several suggestions are also offered to protect the Rohingya refugee population from deadly COVID-19 disease.

## 1. Main text

Amongst the world's most heavily persecuted minority communities are the Rohingya people who fled from Myanmar over the decades and currently live in Cox's Bazar (a small town on the southeast coast) in Bangladesh [1]. Around 600,000 individuals departed Myanmar in 2017 and joined the previously fled 200,000–300,000 Rohingya refugees, making the total number almost 1 million [2]. Around 65% of them live in 34 extremely congested camps in 5 square miles in hilly areas of Kutupalong. To our knowledge, currently, this is the world's largest and most densely populated (120,000 people per square miles) refugee camp [3]. The living condition in the camps is woefully inadequate and unhealthy. The average number of people per household is 4.5. Almost all of them live in small makeshift shelters of 14 m<sup>2</sup> size built through bamboo and tarpaulins. They have limited access to clean water and sanitation [4, 5]. Most of them sleep on plastic paper spread over the muddy floor in their tents. In these circumstances, maintaining even minimum hygiene is challenging, and any infectious disease outbreak has the potential to kill thousands of people.

Since early 2020, coronavirus disease 2019 (COVID-19) outbreak has substantially affected almost all parts of the world, including Bangladesh, where a total of 12,425 confirmed cases was documented as of May 7,

2020 [6]. As the COVID-19 situation is evolving rapidly, the country is facing growing challenges to ensure preventive measures. Although no confirmed cases have been reported so far among the Rohingya refugees, recently the local transmission of COVID-19 in Bangladesh has changed rapidly with an exponential increase of this disease outbreak country-wide, similar to what we have witnessed in China, Italy, and some other countries [7,8]. There was a steep rise in infection in April. In the week ending 11 April 2020, the new cases in Bangladesh grew 1155 percent, the highest in Asia. People across the world are being advised to stay home, to practice "social distancing", and to make hygiene a priority. Such actions are next to impossible to practise in a refugee camp. Importantly, the Rohingya refugees and the Bangladeshi local community are living side by side with little or no restriction for local people to enter the camps, and for Rohingya people to exit the camp, although by law they are not permitted to do so. This refugee people are in a dire state of stress, many of them have a range of underlying health conditions and nutritional deficiencies. All these risk factors may suppress their immune systems to fight against COVID-19, and as a result, the current community-level transmission of COVID-19 puts them at risk of getting infected. Even if a single case of COVID-19 is detected in Rohingya camps, any interventions aiming to prevent further infection and manage the infected cases would be a "mission impossible" as the number of cases

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may increase to thousands within a small period of time due to close-proximity in the camps and high virulence of COVID-19. With neither treatment nor a vaccine in near future, the effect might be devastating because of the multiple health challenges the Rohingya people already face including lack of healthcare facilities and services, existing higher prevalence of infectious diseases, and poor knowledge of health hygiene [9]. There are important lessons to learn from the 2014–16 Ebola outbreak in West Africa, where the outbreak in malaria-endemic countries with poor health infrastructure led to a public health crisis and killed more than 11,000 of the total 28,000 infected people [10]. Therefore, the government of Bangladesh along with its development partners working in the Rohingya camps immediately needs to take a comprehensive strategy to save this refugee community from a potential outbreak of COVID-19.

Although there are reports of some degree of preparedness by the humanitarian agencies and government of Bangladesh [11], this is far from what is necessary. Currently, the international organizations (e.g., UN, UNHCR, IOM) are emphasising on equipping the local hospitals with at least some resources to tackle the potential outbreaks of COVID-19. Until now only a five-bed isolation ward in Cox's Bazar district Hospital and two fifty-bed isolation wards in Ramu and Chakaria Upazila (sub-districts) health complexes have been set-up for the entire Rohingya and local Bangladeshi people [12]. There is no program in the camps for Rohingya refugees to test the suspected cases. There are 29 labs across Bangladesh to detect COVID-19 which Rohingya refugees do not have access to given their stateless status and movement restrictions. Moreover, they test suspected patients if the possibility of getting infected with COVID-19 has been reported through hotline numbers or by the healthcare providers. The community-level awareness of COVID-19 prevention such as maintaining basic health hygiene, social distancing, and the common symptoms of infection is extremely limited [12]. Healthcare personnel working in the camps have inadequate access to telecommunication, and there are no telecommunication services for the Rohingya refugees. Thus, this preparedness may not produce the desired benefits. An arrangement of necessary testing kits and designated quarantine facilities inside the camps are two important elements need to be

ensured without any delay. The Rohingya people are worried about the risk, as the vulnerable conditions they live in could be a breeding ground for COVID-19. The humanitarian organizations in collaboration with the Government of Bangladesh should immediately scale up their efforts to avoid a potential catastrophe.

### Declaration of competing interest

The authors have not conflict of interest to declare.

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