

COVID 19 Endemicity in Bangladesh: The Future Challenge

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Bangladesh had experienced numbers of stages of COVID-19 pandemic since March 2020 which have enormous impact on the health sector due to heavy burden of the infections and deaths. It is obvious that poor compliance and adherence to health safety rules as well as health care seeking behavior were the root cause of the health disaster and huge loss of life and failure to contain the virus transmission rate in the country. In Bangladesh, the first case of COVID-19 patient was detected on 8th March, 2020.

The repercussions on socioeconomic condition of COVID 19 pandemic and it highlights the importance of social cohesion of the health and other health related sectors. Social cohesion is the bonding and interdependence that brings the society together, as an “attribute of a collective, indicating the quality of collective togetherness”.¹

Bangladesh has a young population of its 30% of total who have a strong immunity which might have played an important role in keeping most of the cases asymptomatic. Direct transmission (person to person contact) was the main mode of transmission and remain the main mode of transmission for COVID-19 indicates that health measures should be followed in public to contain the further wave of transmission.²

On May 5, 2023 WHO announced that COVID-19 is no longer an international public health emergency. This raised the question what is the status of the infection wave? Is it now an endemic disease? What is the situation in Bangladesh.³

According to the epidemiologists, a disease is endemic when it is steadily present in a defined geographical area or region, or at least predictable, e.g. seasonal influenza. By this broad definition, endemicity is not concerned with how common it is or severity of the disease. Malaria is endemic in Bangladesh and in many more countries with varying severity in different districts of Bangladesh.⁴

As WHO defines endemic, epidemics, and pandemics on the basis of rate of spread of a disease's. So, the difference between an epidemic and a pandemic is not the severity of the disease, it is the degree of spread of the disease. A pandemic spread across international socio-political boundaries, while epidemics are regional within a country or territory. The wide geographical distribution of pandemics leads to large-scale social disruption, economic loss, and individual as well as social hardship.⁵

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Epidemics generally wane out to an endemic phase. There is a relatively stable number of infections in the population in endemic phase, the situation is as a result of buildup of immunity in the population resulting to a decline in the number of infections and a transition.⁶

Widespread vaccination or natural infection can generate sufficient herd immunity against a particular disease allow for elimination of the infectious disease. But immunity wanes over time in most of the cases resulting in endemicity. In the case of viruses against which infection does not generate life-long immunity, including SARS-CoV-2 (COVID 19), it is important to the understand natural history and to role of natural infection and vaccination.⁷

The strategy of Bangladesh government is to ensure vaccination for the entire population, at least for the vulnerable (the elderly over 60, the health care personnel and person with co-morbidity) free of cost unlike other vaccines. The Government procures the vaccine and it is not for sale.⁸

Now the challenge for Bangladesh is to keep the infection rate low to prevent the public health crisis in future. To keep the condition stable, the people at large should get vaccinated as per local vaccination guideline, when physical distancing is not possible, wear a properly fitted mask and in poorly ventilated settings, frequently clean hands using alcohol-based hand rub or soap and water, when cough or sneeze, cover mouth and nose with a bent elbow or tissue, dispose of used tissues, clean hands regularly immediately and finally, self-isolate until recovery from infection if develop symptoms or test positive for COVID-19. To make environment as safer, avoid the 3Cs: spaces that are closed, crowded or involve close contact. It is better to meet people outside. Outdoor gatherings are safer than indoor ones, particularly if indoor spaces are small and without outdoor air coming in.⁹

Urban and rural residents of Bangladeshi have a positive attitude towards prevention of COVID 19, it is the authority to make the information regarding preventive practices related to COVID-19 readily available and accessible to every individual of the country.

References

1. Schiefer, D., and van der Noll, J. (2017). The essentials of social cohesion: a literature review. *Soc. Indic. Res.* 132, 579–603. doi: 10.1007/s11205-016-1314-5
2. Islam MT, Talukder AK, Siddiqui MN, Islam T. Tackling the COVID-19 pandemic: The Bangladesh perspective. *J Public Health Res.* 2020 Oct 14;9(4):1794. doi: 10.4081/jphr.2020.1794. PMID: 33117758; PMCID: PMC7582102.

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3. COVID-19 is no longer a Public Health Emergency of International Concern. Does this mean the pandemic is over? Available from: <https://www.gavi.org/vaccineswork/covid-19-no-longer-public-health-emergency-international-concern-does-mean-pandemic?>
 4. Tell Me More: Epidemic, Endemic, and Pandemic, what do they really mean? Available from: <https://www.publichealthontario.ca/en/About/News/2022/Endemic#:~:text>
 5. Epidemic, Endemic, Pandemic: What are the Differences? Available from: <https://www.publichealth.columbia.edu/news/epidemic-endemic-pandemic-what-are-differences>
 6. Antia R, Halloran ME. Transition to endemicity: Understanding COVID-19. *Immunity*. 2021 Oct 12;54(10):2172-2176. doi: 10.1016/j.immuni.2021.09.019. Epub 2021 Sep 24. PMID: 34626549; PMCID: PMC8461290.
 7. What is herd immunity? Available from: <https://www.gavi.org/vaccineswork/what-herd-immunity?>
 8. Nazmunnahar, Ahamed B, Haque MA, Tanbir M, Roknuzzaman ASM, Sarker R, Rabiul Islam M. COVID-19 vaccination success in Bangladesh: Key strategies were prompt response, early drives for vaccines, and effective awareness campaigns. *Health Sci Rep*. 2023 May 17;6(5):e1281. doi: 10.1002/hsr2.1281. PMID: 37205936; PMCID: PMC10190122.
 9. Advice for the public: Coronavirus disease (COVID-19). Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
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