

Correspondence

Challenges to the prevention of COVID-19 spread in slums of Bangladesh

Bangladesh is a lower-middle income country in South Asia with a population estimated at ~160 million. The country has been facing rapid urbanization over the past few decades. More than one-third of the population lives in urban areas in Bangladesh.¹ Of the total urban population, ~55% live in slums.² These slum dwellers live a life without basic amenities.

The first coronavirus disease (COVID-19) case was identified in Bangladesh on 8 March 2020. To prevent the possible spread of this virus pandemic, the World Health Organization (WHO) recommends some measures, including handwashing, sanitation, physical distancing and home quarantine. Preventing the spread of this pandemic is unfeasible in slums in Bangladesh because of some major challenges such as congestion, inadequate water supply, poor sanitation facilities, poverty and lack of awareness.

Physical distancing, keeping at least 3 feet away from the nearest person while coughing, sneezing and even speaking, is an important measure to prevent the spread of the pandemic. In the slums of Bangladesh, population density is very high, amounting to 205 415 people per square kilometer.³ About 37% of slum households in city corporations have 26–50 square feet per person.⁴ Because of this congestion, slum dwellers cannot maintain physical distancing properly. Home quarantine for those who may have been exposed to coronavirus is crucial to prevent community transmission. As recommended by the WHO, people must stay in a separate room during quarantine.⁵ But three-fourths of slum households live in a single room.⁴ This prevents most of the slum dwellers from practicing home quarantine in slums. Handwashing is another important measure to prevent the COVID-19 virus from spreading. According to the WHO, functional handwashing facilities with water and soap should be available within 5 meters of toilets.⁶ Only 28% of the population has a handwashing station equipped with soap and water in Bangladesh.⁷ Handwashing facilities are expected much less in slum settlements than in non-slum settlements. Almost two-thirds of households share a water source with 10 or more households in slums.⁵ Hence, slum dwellers find it difficult to wash hands with soap and running water. Usually, slum dwellers are poor and engaged in daily wage-based

occupations. So, they have to go out every day for their livelihood even during lockdown. Furthermore, they have no adequate knowledge on personal hygiene.

To minimize the spread of COVID-19 infection, some effective measures should be taken for slum dwellers. Temporary shelters, including living space, handwashing facilities and latrines should be built to meet their additional housing needs during the virus pandemic. The government should provide basic needs such as food, housing, healthcare and utility services for all slum dwellers free of cost during the whole pandemic period so that they are not forced to go out for a livelihood. Moreover, both the government and NGOs should work together to raise awareness on personal hygiene among slum dwellers and improve sanitation facilities in slums to fight against the COVID-19.

Acknowledgement

None.

Funding

The authors did not receive any fund for this paper.

Conflict of Interest

The authors declared that they did not have any competing interest.

Ethical approval

Not required. Ethical approval was not taken because the article was written on secondary data.

References

- 1 United Nations Population Division. *World Urbanization Prospects: 2018 Revision [Internet]*. New York: United Nations; 2018. <https://www.indexmundi.com/facts/bangladesh/indicator/SP.URB.TOTL.IN.ZS?fclid=IwAR2JfceNIRz0X1Hzupj-sEFmnE8HVN5F1uyU5gsiV56MgjJj-1D4ChN-NXQ> (8 May 2020, date last accessed).

- 2 United Nations. *Millennium Development Goals Indicators [Internet]*. New York: United Nations; 2015. <http://mdgs.un.org/> (8 May 2020, date last accessed).
- 3 Centre for Urban Studies. *Slums of Urban Bangladesh: Mapping and Census*, Vol. **2005**. Dhaka: Centre for Urban Studies, 2006.
- 4 National Institute of Population Research and Training. *Bangladesh urban health survey 2013*. Dhaka: National Institute of population research and Training, 2015.
- 5 World Health Organization. Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19). Geneva: World health Organization; 2020. [https://www.who.int/publications/i/item/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-\(covid-19\)](https://www.who.int/publications/i/item/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19)). (05 Jun 2020, date last accessed).
- 6 World Health organization. *Water, sanitation, hygiene and waste management for the COVID-19 virus: Technical brief*. Geneva: World Health Organization, 2020.
- 7 Fanmd Q, Azad AK. World Bank Blogs. *Towards a Cleaner Bangladesh: Safe Water, Sanitation, and Hygiene for All [Internet]*. 2017. <https://blogs.worldbank.org/endpovertyinsouthasia/towards-cleaner-bangladesh-safe-water-sanitation-and-hygiene-all> (20 May 2020, date last accessed).

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doi: 10.1093/pubmed/fdaa088