



Short Communication

SARS-CoV-2 pandemic: An emerging public health concern for the poorest in Bangladesh

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ABSTRACT

The novel coronavirus (SARS-CoV-2) pandemic is now a global crisis and the poorest in Bangladesh are the most vulnerable. With the whole country being subjected to lockdown measures, millions of poor people are unable to go to work and have lost their incomes, leaving them in profound poverty without access to food and basic health services. Furthermore, living in cramped conditions, lack of health awareness, basic hygiene practices, and failing to maintain social distance measures which are inherently present among the poor, put them at an increased risk of SARS-CoV-2 infection. As the pandemic threatens to expand its devastating grip on Bangladesh, the government and the aid organizations must take urgent and comprehensive initiatives to assist those most in need in this unprecedented health crisis.

1. Background

The outbreak of the novel coronavirus (SARS-CoV-2) pandemic that emerged in Wuhan, China has already infected more than 6 million people around the world and 370,000 deaths [1]. The SARS-CoV-2 transmission has now been reported on every continent except Antarctica, and in virtually every country, with approximately 3 billion people, more than a third of the world's total population being now under some kind of lockdown measures in an attempt to control the spread of the disease [2]. Consequently, residents of every country irrespective of whether they live in developed or emerging economies are facing acute economic recessions. However, the impact of this hitherto unprecedented combination of pandemic and global economic depression does not necessarily impact everyone similarly, and people of the lowest socioeconomic quartile are the worst affected, due to losses in earnings which can translate to spikes in poverty.

2. Rise of extreme poverty

Indeed, according to the World Bank report, the SARS-CoV-2 pandemic and accompanying effects are leading to a sudden increase in poverty with an expected 20% global decrease in income; furthermore, the number of people living in extreme poverty will be expected to rise by 434 million to nearly 1.2 billion worldwide [3]. Bangladesh is home to

around 40 million poor, and to 21 million extremely poor, according to 2016 data from Bangladesh Bureau of Statistics (BBS) [4], with 87.7% working under informal employment arrangements, i.e., no job security. In Bangladesh, the SARS-CoV-2 pandemic has already led to losses of ~US\$ 3 billion, and around 1 million jobs have disappeared in this short time. Low-income people and particularly the poorest families are sustaining great declines in their earnings, especially since the enforcement of social distancing and lockdown measures. According to a study conducted during the present lockdown conditions in Bangladesh, extreme poverty has spiked by 60%, and 1 of every 6 persons does not have any food at home [5].

3. Increased vulnerability to SARS-CoV-2 transmission

In addition to the income struggles, the poorest citizens and low-income families are more likely to be transient dwellers and geographically mobile due to lack of permanent settlements, making it difficult to track and prevent SARS-CoV-2 transmission and to treat those who need medical care. The average household in Bangladesh has more than five members and usually includes three generations. Like many other least developed countries (LDCs), the poorest and most vulnerable groups of the society, e.g., slum dwellers living in cramped conditions with the absence of basic hygiene practices (e.g. use of masks, hand washing, inability to socially distance) are at increased risk of SARS-CoV-2

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infection in Bangladesh. Families share one latrine and more than 80% of households living in slums share a water source with five or more other households. Most of the people living in slums are uneducated, and as such, they are unaware or cannot implement most if not all of the preventive measures required to contain the pandemic. Taken together, the multitude of potential vulnerabilities and extreme risk that the poorest sectors of the population endure cannot be ignored and must be addressed through coordinated public government and other agencies' efforts to provide comprehensive solutions, rather than simply tackling individual issues separately.

4. Financial uncertainties and food insecurity

The poorest and even low-income people are also experiencing some additional issues related to the SARS-CoV-2 pandemic in a place as densely populated as Bangladesh. Indeed, in these socioeconomic settings, people's ability to eat and to feed their families depends on earning daily wages. According to World Bank data, only 15% of the Bangladeshi population makes more than 500 Taka (\$5.90) a day [6]. It is quite arduous for people with such low wages to stock up on 30-day supplies as needed for lockdown conditions when they could only purchase 1-2 days' worth of food at best before the pandemic began. Now, with the prices of most basic foods skyrocketing due to high demand and limited supply, the situation has further aggravated. The government has repeatedly assured the public that enough food was available in the stockpiles, but has so far failed to put together a system to deliver such food reserves to those most in need. In such a situation, the poor and low-income families who live from day to day and have gone without work and, thus, lost their daily earnings, are crowding places where public authorities and private individuals distribute relief supplies. In doing so, they huddle, jostle, tussle, and even brawl over the supplies, frustrating the objectives of social distancing and the stay-at-home orders meant to prevent the spread of the virus [7].

5. Immediate public health response required

As cities in Bangladesh impose lockdown measures to prevent SARS-CoV-2 transmission, there are few if any emergency preparedness plans to transport and provide shelter for a large number of low-income people and informal daily laborers. If large-scale physical distancing is required, solutions must be found to mitigate the economic recession that will undoubtedly bring the majority of the country population into food insecurity conditions. The SARS-CoV-2 pandemic has also been devastating for 2 million garments workers in Bangladesh, as factories are extensively laying off workers, most without pay [8]. Conversely, due to the dire economic situation, workers have returned to work across Bangladesh amid the nationwide shutdown, raising concerns over the risk of infection. Indeed, factories do not have adequate safety measures to protect workers against the risk of SARS-CoV-2 infection, and workers usually operate under very cramped conditions with poor aeration. Finally, the pandemic containment procedures might also be deleterious to mental health, and in extreme cases lead to suicidal behaviors. Indeed, faced with severe poverty in the ongoing SAR-CoV-2 crisis, a van-puller allegedly committed suicide by hanging himself in the village of

Dalbhanga in Maheshpur Upazila as he lost his income [9].

6. Conclusion

In summary, the confluence of an unprecedented pandemic with an acute and severe global economic recession is further emphasizing the unique vulnerability and disproportionately onerous burden assumed by the weakest and poorest sectors of the society, a phenomenon that is further amplified in LDCs such as Bangladesh. Without concerted and integrated initiatives that concomitantly address all financial, food, health, and preventive aspects of this crisis, the human price of SARS-CoV-2 will continue to exact its toll for many years to come.

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Authors' contribution

All authors contributed equally.

Declaration of competing interest

Authors declare no conflict of interest.

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