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Title: Early phases of COVID-19 management in a low-income country: Case of Bangladesh

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Dear Editor,

With the WHO emphasising the importance of diagnostic testing in tracking and managing COVID-19, most high-income economies have adopted widespread population testing schemes. The United States now leads the way with over 370,000 tests performed as at March 26. This is in stark contrast to low-income economies such as Bangladesh where an almost contrarian strategy seems to have been adopted that is arguably masking the true national spread of the virus.

From the first reported case of COVID-19 in Bangladesh on March 8 until March 28, 1068 samples were tested by the Institute of Epidemiology, Disease Control and Research (IEDCR) located in Dhaka. EDCR was the sole institute in Bangladesh with testing facilities for COVID-19 until March 26 when a second facility was given testing rights. Centralised testing in these under-resourced public institutions has been unable to effectively respond to the wave of suspected COVID-19 patients. Even at this initial stage with limited confirmed cases, engaged telephone hotlines and inadequate timely testing on symptomatic patients raise concern of Bangladesh's preparedness. With a population of 161 million and a total of 1,169 ICU beds, this strategy could potentially devastate Bangladesh's health system with multiple outbreaks as it is missing the opportunity to proactively limit community transmission from primary cases.

This risk is compounded by thousands of Bangladeshi workers returning from COVID-19 struck countries and poorly adhering to self-quarantine recommendations as there are limited education and monitoring mechanisms. This is particularly problematic for Bangladesh as a significant portion of returning workers reside in rural areas outside Dhaka and therefore are significant sources of COVID-19 transmission to some of the most vulnerable and ill-equipped communities. This was likely worsened by the government declaring a 10-day holiday without travel restrictions from March 26 which encouraged millions of city workers to leave Dhaka and return to their rural communities.⁴

We believe Bangladesh has lacked coordinated policy decision and enforcement measures to curtail COVID-19 transmission so far. We urge policy makers to follow WHO's guidance and observe other countries' experiences which point to a strategy of acting decisively – quickly and early – well before case numbers reach crisis level being critical for containment. As we believe Bangladesh is yet to reach this point, urgent implementation of coordinated policy may prevent a spike in cases that will likely stretch Bangladesh's health facilities well beyond their capabilities.

We declare no competing interests.

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