

A Brief Review of Covid-19 Situation in Bangladesh

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Abstract

COVID-19 has affected 210 countries around the world, killed more than 240,000 and infected more than 3.4 million. Bangladesh, a South Asian low-middle-income economy, has experienced a demographic and epidemiological transition with rapid urbanization and a gradual increase in life expectancy. It is the seventh most populous country in the world and population of the country is expected to be nearly double by 2050. The increasing burden of noncommunicable diseases in Bangladesh can be attributable to rapid urbanization and nearly 50% of all slum dwellers of the country live in Dhaka division. In 2017, National Rapid Response Team of IEDCR investigated 26 incidents of disease outbreak. The joint survey of the Power and Participation Research Centre and BRAC Institute of Governance and Development reveals that per capita daily income of urban slum and rural poor drops by 80% due to present countrywide shutdown enforced by the government to halt the spread of Covid-19. 40%-50% of these population took loans to meet the daily expenses.

Keywords: Covid-19 Lockdown; Shortage of PPEs; Global Pandemic Crisis; Incentives for officials at Risk

Introduction

Notwithstanding the depressing state of major indicators such as negative export-import growth; significant revenue drop; shrinking private sector investment; rising un-performing loans documented in the last quarter of 2019, Bangladesh's government was optimistic that somehow the depressing trend of these indicators might be reversed. But this optimism has now been seriously dented with the severe onslaught of Covid-19. The decline in national and global demand for manufactured goods, particularly in the garment sector, risks creating unemployment and deepen poverty. The urban poor will be hardest hit while the number of additional poor will be higher in rural areas. More than 70% of the 10,143 coronavirus cases detected in Bangladesh have been reported in the Dhaka division and nearly half of them are in the capital, Dhaka [1,2]. Around 68% of them are men and the rest are women., according to the government's disease control agency IEDCR [3]. The IEDCR was Bangladesh's only Institute with testing facilities for COVID-19 until March 26, when a second facility was granted testing rights. Centralized testing has not yet been able to respond effectively to the wave of suspected COVID-19 patients in these under-resourced public institutions. Amidst this global crisis, Bangladesh has been identified as one of the 25 most vulnerable countries to be affected by the fast-spreading virus [4,5]. By 25.04. 2020, it was confirmed in 63 out of 64 districts [6]. The combined capacity of 19 corona testing laboratories is around 5,000 samples per day, but in the last few days, authorities have conducted only 2,100 tests. Unwillingness of the authorities concerned and bureaucratic complexities have indicated that the availability of a kit delays the detection of the novel coronavirus infection.

Moreover, the government in Bangladesh has not so far sought to proactively limit transmission from primary cases to community.

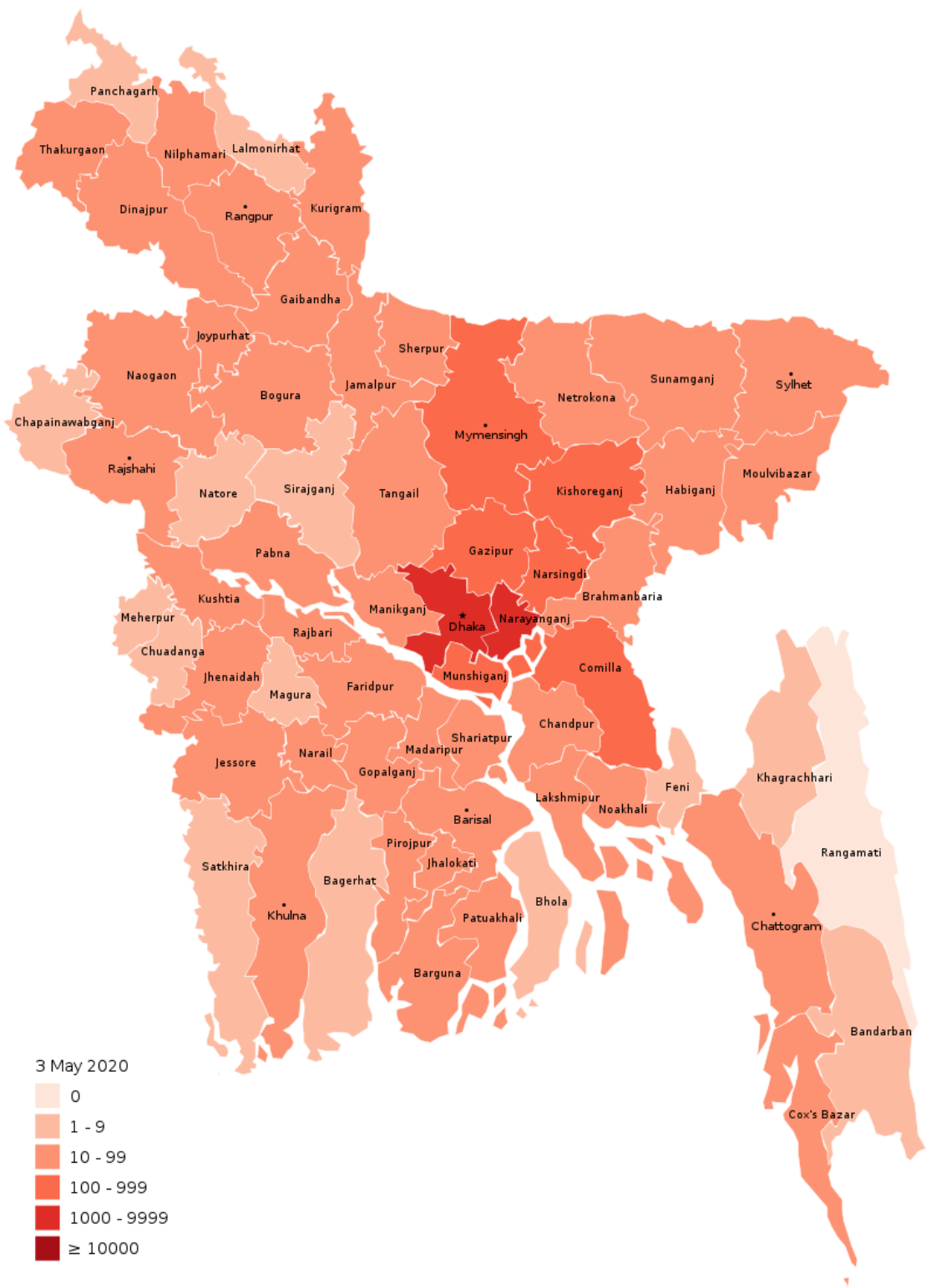


Figure 1. District wise COVID-19 Infected Cases in Bangladesh (As of 23rd April, 2020, Source: corona.gov.bd)

Present Hospital Situation with Covid-19 Patients

Many patients with fever, cold and breathing problems – which are also COVID-19 symptoms – have gone untreated as the hospitals in Dhaka are sending them to the IEDCR for coronavirus test [7]. Most hospitals are not in a position to provide doctors and other health associates with the personal protective equipment (PPE) like masks, gloves, and infected patients could walk into the hospital at any moment [8-14]. Many doctors are not providing services fearing the contagion and lab technicians are shunning workplaces, halting medical tests, according to the patients. In some cases, serious patients who are not affected by COVID-19, moved from one hospital to the other but could not receive treatment and finally died, the media reported. In another case, the doctor fled leaving the patient behind [15-18]. Doctors and other healthcare workers say that they do not have adequate personal protective equipment and the health system cannot cope with the outbreak [19]. Experts say elderly people infected with coronavirus need ICU support the most [20]. The number of older persons in the country is over 0.8 million [21]. In line with international standards, a 100-bed hospital should have at least five ICUs [22]. In reality, hospitals in Bangladesh have less than 1200 ICU beds (432 govt, 737 private) in total against a population of 161.4 million people [23]. The health minister on 29.03.2020 reported that there are only 500 ventilators in the country [24].

Public Awareness Vs Attitude

Most people in Bangladesh are now aware that the disease can happen to anyone and even cause death [25]. Although, a BRAC survey (31 March - 5 April 2020) throughout the nation says that nearly 40% of the respondents have no idea about how to prevent getting infected with the virus [26]. The shutdown, announced first on March 26, has already been extended fourth time to May 16th [27,28]. The government has discouraged movement after 6pm, instructing everyone to stay at home [29]. The people are fooling law enforcers by travelling from one district to another by mostly vehicles that transport goods [30]. Also, garment workers walk on the street demanding their due wages during the lockdown amid concerns over the outbreak in capital, Dhaka, April 13, 2020 [31]. Surprisingly, around 100,000 people attended a funeral gathering for a popular Muslim cleric, ignoring calls from different quarters to maintain physical distancing and hygiene [32,33]. Also, violence reported during this lockdown, where, 30 people were injured and one person's leg was cut off during the clash over establishing dominance [34]. Several other violations are also reported like unnecessary public gathering, gossiping, roaming without a purpose, staring at home under lockdown etc. in both print and online media, inside and outside the capital [35-38]. Decision-makers say "Chinese lockdown strategy" will not be fully applicable to Bangladesh because of poor socio-economic conditions for people and other factors (such as government capacity, support infrastructure, technology and medical facilities) [39]. This risk is compounded by thousands of Bangladeshi workers returning from COVID-19-struck countries and poor adherence to self-quarantine recommendations due to limited education and monitoring mechanisms [40]. Although general holidays extended, the government has decided to allow businesspeople to keep shops and shopping malls open, considering Ramadan and Eid-ul-Fitr [41]. The number of shops with less than 15 employees in the country is 5.6 million. Around 12 million

employees work at those shops [42]. So, community transmission may not be fully protected. However, Government employees will not be allowed to leave their workplaces on the occasion of the 2020 Eid-ul-Fitr, one of the religious festivals for Muslims. And also, inter-district public transport will remain closed during the period, according to the order of the cabinet division [43].

Health Providers and Law Enforcers are Getting Infected

According to The Directorate General Health Services' latest figures of registered physicians, there are 93,358 MBBS doctors and 9,569 BDS doctors in the country [44]. The last health bulletin published by the Health Ministry says that the country has only six doctors, nurses, and midwives for every 10,000 population [45]. At least 500 doctors have been infected with Covid-19 so far, along with some thousands other allied health professionals, making up 11% of the total infections reported in the country. Besides infection, some 600-700 doctors are also in home or institutional quarantine [10], [46-50]. Around 10,000 members of Bangladesh's armed forces and more than 200,000 police officers and fire fighters are working to control the Covid-19 outbreak. More than thousand police officers have been placed in quarantine and around thousands of them have become infected, with more than hundred tested Covid-19 positive in 2nd April, 2020 alone [51-54]. However, finance ministry of the country declared incentive BDT 0.5 million to 5.0 million to government officials and employees working with life risk in the field including doctors, nurses, health workers, police, local administration [55].

Price Hike of the Daily Necessities and Natural Disasters Amid Covid-19

Where income of the poor dropped by 80%, the prices of essential commodities surged, adding to buyers' woes amid the COVID-19 crisis between March and April, 2020 [56]. The suffering of some 7 million slum dwellers around Dhaka, is multiplying due to lost earnings and price hikes of consumer goods [57]. Consumers alleged some unscrupulous traders have hiked the prices of commodities to make quick buck during Ramadan [58]. After the first case of coronavirus was confirmed in Bangladesh the very next day the highest court of this country had to 'direct' the government to take necessary steps to stop price hike of masks, handwash, and sanitizers, or storing them to make extra profits later [59]. Nearly 35% of the country's total import is China based and prices of various disposable medical instruments (bouffant caps, shoe cover, medical clothing, test strips, surgical gauze and sponges, surgical gloves, bed sheet, lab test instruments, and diagnostic reagents) have been showing an upward trend due to decline in their shipment [60]. Although, Trading Corporation of Bangladesh launched open market sale of key essential items ahead of the fasting month of Ramadan, people que/social distancing is rarely maintained there [61]. Syndicates are taking advantage of poor surveillance by government agencies to monitor prices. Increasing the demand for products which in turn is allowing many unscrupulous traders to increase prices two months ahead of Ramadan. This is increasing the scope for such traders to make more money through hoarding [62-64]. An opposite scenario is found with the farmers, as the prices of their produces have declined sharply for lack of marketing following the lockdown amid the outbreak [65-68]. A massive stream of desert locusts may be heading towards Bangladesh and India passing over the Indian Ocean. This possible attack from the crop destroying insects may worsen the situation further [69]. Also, hailstorm, flood and other natural disasters are predicted for this year [70,71]. All these can multiply the severity of crisis in a near future.

Conclusion

Since there is no vaccine and specific anti-viral drugs so far, public health measures are considered as an effective tool to mitigate the impact of the virus in the community. Besides the set-up of health care, institutional safeguard against COVID-19 infection during a pandemic attack is also important. A strong public health infrastructure that can constructively think for future preparedness, development and research toward emerging and re-emerging infectious diseases is compulsory. The method includes community engagement in which individuals develop the potential to avoid COVID-19 contacts and entail community-based approaches in which planners, employers and social activists can adopt strategies to protect vulnerable groups and the community from COVID-19 infection.

Future Recommendations

1. During epidemic outbreaks, home care is particularly effective when health authorities are not apparently safe to implement social distance systems and hospitals. Telehealth can provide convenient access to routine care in a congested hospital or in medical practice without the risk of exposure.
2. The ideal goal of fighting the COVID-19 pandemic is to halt the spread. Slowing it is thus crucial. This reduces the number of cases that are active at any given time, which in turn offers doctors, hospitals, police, schools, and vaccine-manufacturers time to prepare and respond, without being overwhelmed.
3. So far, the Bangladesh government has been fighting the coronavirus with its limited capacity and resources. The National Disaster Council, under the leadership of Hon'ble Prime Minister, was formed on an urgent basis. As much work as it has been, the time has come to fold that whole work, to make it more integrated. The rationale for this is that other ministries are not yet fully integrated with the health ministry.
4. For too long we have seen a disparaging and negative attitude towards online education from policymakers. Most teachers in Bangladesh do not have any experience of teaching online and are unfamiliar with online assessment techniques. They should be trained to provide distant learning.
5. The awareness campaigns should be relentlessly conducted by the government, private organizations and the media to involve community participation with mutual distancing to be effective. Deploying maximum manpower in next few months to all those areas of the country where coronavirus infected patients have been identified and their families and all those who come in contact with the infected person. Adequate diagnosis and isolation/quarantine should be implemented in their own homes.
6. Samples can be collected by setting up coronavirus test booths without PPE like in South Korea in premises of medical colleges, districts, upazilas, union hospitals and community clinics, so that samples can be collected quickly anywhere in the country. Those who do not have experience in sample collection should be trained quickly through online / video conferencing.
7. Only those who can afford should pay and to deliver free food to all the poor and low-income people from door to door, by Army, Navy, BGB, Police, RAB, Ansar, Deputy Commissioner, UNO and public representatives. Then no one will get in trouble and no excuses will be left to get out of home. China, South Korea, Taiwan, Vietnam, India and Kerala have been successful with this method.

8. A large number of express trains, steamers, high quality hotels, Ashulia Iztema grounds, stadiums, public and private hospital beds are currently unused in Bangladesh. All these train bogies, steamer cabins, hotel cabins, unused grounds can be converted into isolation centers for infected people. Isolation / quarantine cannot be 100% effective at home, as not everyone has more than one separate toilet and adequate room in their home.
9. Fire service, WASA, city corporations, municipalities at all divisional, district, upazila and union levels of the country have to spray disinfectant on the streets every day. All vehicles coming from outside should be sprayed with body disinfectant including wheels outside the gate before entering the house/office and all those who go outside the house should spray shoes/sandals outside the main gate of the house and keep the shoes outside the house.
10. All those who have entered Bangladesh recently from abroad through airports, land ports, seaports, railways and their families, or all those returning home should be tested for coronavirus and to be monitored accordingly.
11. Allowing all A-grade private hospitals to conduct rapid coronavirus testing and treatment and announcing reasonable/fixed test fees by the government. Services of other hospitals/clinics, which were closed due to fear of coronavirus should be re-opened.
12. According to WHO, most people with COVID-19 develop only mild or uncomplicated illness, while approximately 14% develop severe disease that requires hospitalization and oxygen support. Only a few hospitals, including Dhaka Medical College Hospital, Bangabandhu Sheikh Mujib Medical University, Sir Salimullah Medical College Hospital, Square Hospitals, Apollo Hospital and Anwer Khan Modern Medical College Hospital, have central oxygen supply facility. This facility should be increased.
13. At less than 1% of GDP, government health spending in Bangladesh is among the lowest in the world. The WHO recommends allocating at least 5% of a country's GDP and 15% of the total budget for the health sector. Government should spend additional resources directly on government doctors, drugs, hospitals and health centers and also increase the allocation in education to ensure quality by recruiting qualified teachers, retaining them by providing incentives and ensuring better infrastructural facilities and resources.
14. All government and private offices, educational institutions, garments, factories, except for the essential service providers, should be closed until the coronavirus infection is brought under control. When lifting restrictions, it is important to be able to track and deal with any side effects, which could possibly be an increase in cases after lifting the restrictions which is why the nation has to be equipped to deal with that before it happens through testing and supply of protective gear. This may result in the crisis happening again; therefore, the nation needs to be prepared.
15. When buying drugs, food, raw markets, fruits and fish, guidelines should be disseminated for all who go out and bring these products home (money, clothing, packets, bags can also be infected with the virus).
16. The prevalence of comorbidities in the COVID-19 patients including hypertension, cardiovascular diseases, diabetes mellitus, smoking, chronic obstructive pulmonary disease (COPD), malignancy, chronic kidney disease and obesity, may be risk factors for severe patients compared with non-severe patients. Everyone is susceptible to this virus, but the elderly and those with underlying diseases are more at risk of adverse outcomes. Given that COVID-19 has a relatively long incubation period and during this time the infected person can transmit the virus without showing symptoms, it is strongly recommended that

patients with chronic or underlying diseases avoid any close contact with other people in the community, especially in epidemic areas.

17. To boost the immune system and preventing coronavirus, every person should consume ginger, cinnamon, cloves, sticky honey, black cumin, turmeric, triphala and tulsi, along with tea, consuming hot water and gargles twice or thrice every day and adding vitamin C or vitamin C twice a day.
18. Overburdened by patient loads, physicians have increasingly turned to pharmacists in US, UK, UAE, Australia for drug information, particularly within institutional settings. Pharmacy is taught in about 100 public and private universities in Bangladesh and about 8000 pharmacy students graduate every year. They can be more beneficial to the public if the good hospital and community practices are introduced properly.
19. Intermittent rainfall, temperature variation, and higher humidity as a result of climate change are affecting the change in disease incidence. Along with Covid-19, the country should also get well prepared for the impending dengue season. There were more than 100,000 reported cases within the country in 2019, so proper mosquito prevention should be everywhere.
20. Bangladesh ranks eighth globally in terms of receiving remittance income. However, a large number of Bangladeshi migrants living in the Gulf countries, where oil revenue is sharply falling, thereby affecting the prospect of wage reductions and job loss. There is a need to provide support to migrants through Bangladesh missions abroad.

Abbreviations

IEDCR-Institute of Epidemiology, Disease Control and Research

BRAC- Bangladesh Rural Advancement Committee

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