



Regular Article

COVID-19 pandemic: An analysis of the healthcare, social and economic challenges in Bangladesh

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ABSTRACT

Bangladesh is one of the worst hit countries in South Asia for COVID-19 outbreak. The objective of this article is to analyse healthcare, social and economic challenges faced by the country. Quantitative data and qualitative information from different sources have been used. Our analysis indicates that limited well-equipped hospitals, inadequate testing facilities, lack of awareness, improper knowledge, attitude to and practice of rules, poverty and precarious employment are the factors dominant in spreading COVID-19. Strict enforcement measures and ensuring people's adherence to rules may help reduce spread of infections. Adequate healthcare services are essential for establishing proper medical care.

1. Introduction

Coronavirus infection is a major threat to the global community, with confirmed cases and deaths estimated on November 7, 2020 at 48,786,440 and 1,23,4839 respectively. The first outbreak of coronavirus infection occurred in Wuhan, Hubei province in China. This virus has a high mutation rate and its massive transmission infects people very quickly. Severe acute respiratory syndrome is a major complication that occurs to the patient suffering from coronavirus infection. About 219 countries have been affected by this deadly virus resulting in an escalation in the number of cases. World Health Organization (WHO) has declared COVID-19 as a pandemic because of its significant spread throughout the world [1].

According to regions, Americas and Europe have been reported to have the highest number of COVID-19 cases 21,326,640 and 12,490,012 respectively. Till November 7, 2020 the five countries with the highest number of confirmed COVID-19 cases all over the world are- USA (9,504,758), India (8,462,080), Brazil (5,590,025), Russian Federation (1,733,440), France (1,567,332). USA (233,292), Brazil (161,106), India (125,562), Mexico (93,772) and UK (48,120) have the highest rates of fatal cases. So far, the total number of deaths in China stands at 4748 while the confirmed cases stand at 92,164 [1].

Bangladesh, a South Asian densely populated developing (lower-middle income) country with a total population of 161.3 million [2] is facing a

disaster due to the emergence and spread of this virus. COVID-19 was first identified in Bangladesh on March 8, 2020. Till 2nd November 2020, the number of COVID 19 cases was 410,988 with the death toll rises to 5966 [1].

High density of population makes Bangladesh more vulnerable to the spread of the virus compared to countries where population density is lower. As a result, a big challenge for Bangladesh is to limit the new cases as well as minimize the death rates.

The basic objective of this article is to analyse the healthcare, social and economic challenges faced by the country in handling the crisis caused by the COVID-19 pandemic. It also addresses the issue of compliance to rules and practices that need to be followed by the people in order to contain the spread of the virus.

2. Methodology

Both quantitative and qualitative research methodologies have been used in this article. Data from secondary sources, authors' own estimates/projections, information from newspaper articles, websites of WHO, Worldometer, Institute of Epidemiology Disease Control and Research (IEDCR), Government of Bangladesh (GoB), and relevant research organizations were used. Estimates have been made of the vulnerable population by using data from official sources. They have been supplemented by data

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from other surveys and studies. Personal observations of societal behaviour and qualitative information were obtained from a variety of sources. PubMed, Google scholars were searched for original research articles on COVID-19 pandemic. The search was performed from March to November 7, 2020 to collect data related to healthcare, social and economic perspective of Bangladesh. A series of key search terms was used in the process, such as, “COVID-19,” “Coronavirus,” “COVID-19 Outbreak”.

3. Analysis

3.1. Health care service

Bangladesh has adopted some policies in order to minimize the transmission of COVID-19 in accordance with the WHO guidelines. The policies include changes in lifestyle, using face masks, movement restriction, social distancing and changes in hygiene practices. In addition, the government and private sector are working on creating awareness among the people by using local media in order to strengthen personal hygiene practices. A study conducted by Farhana et al. [3] concluded that a significant proportion of the people in Bangladesh had poor knowledge about the transmission, signs and symptoms and incubation period of COVID-19.

Bangladesh healthcare facilities encountered huge difficulties for treating patients since the outbreak of COVID-19. Serious drawbacks were found in hospitals regarding the availability of ventilator support facilities to treat severe acute respiratory syndrome. With a size of population of 163,046,173, hospital beds per 1000 population is 0.8 and Intensive Care Unit (ICU) beds per 100,000 population is 0.7 [4]. The situation report of WHO states that as of 26 October 2020 there are 11,730 general beds and 564 ICUs for treating COVID-19 patients all over the country. Among which 3519 (30.0%) general beds and 314 (55.7%) ICUs are occupied by the patients only in Dhaka city [5]. The beds in the hospital were not being fully occupied as many infected people are taking treatment at home [6].

Initially the testing facilities were inadequate, however, with time the facilities improved as the number of cases increased. Over the time all the government and some private health care facilities across the country have started COVID-19 testing [6]. However, the testing coverage for COVID-19 in Bangladesh is 1485.6/1 million which is still modest when compared with the countries in the region [7]. WHO continuously supported Ministry of Health and Family Welfare (MOHFW), Bangladesh to expand testing capacity and the plans for further expansion are underway. WHO also undertook a vast operation of samples transportation from the entire 64 districts of Bangladesh. As of September 2020, over 400,000 laboratory samples have been transported with WHO support, representing nearly half of the samples transported all over the country [8].

After three months of coronavirus epidemic in Bangladesh, The GoB decided to charge 200 taka (£1·80) for the COVID-19 test in Government facilities, whereas the private sectors charge 3500 taka (£32). As a result, the rates of testing have reduced to 0.8 tests per 1000 people in one day [6].

This pandemic has seen doctors on the COVID-19 front-line make personal sacrifices by helping and treating patients with minimal support, even though they do have the ethical responsibility for their own protection [9]. Front-line doctors and other healthcare professionals struggled to treat COVID-19 patients efficiently due to shortage of appropriate equipment, inadequate number healthcare facilities providing COVID-19 support and unpreparedness of the Government to deal with the crisis [10]. Coronavirus has taken lots of lives including that of healthcare professionals since its first outbreak in Wuhan, China. Bangladesh is not an exception where physicians and health workers are highly vulnerable to get infected by this deadly disease [11].

3.2. Precarious living

Shutting down of public services and daily activities resulted in an economic crisis alongside the health crisis. About one-fifth of the country's population live below the poverty line and a significant proportion of the

workforce is dependent on casual jobs. The shutdown created a dilemma between saving lives and livelihoods [12].

In Bangladesh, out of the employed population of around 63 million, around 25 million are in wage/salaried employment, over 10 million of whom are in casual employment based on daily wages. Approximately 4.5 million casual labourers are engaged on a daily basis in construction, transport, trade and food and accommodation who were seriously affected [12].

The country's major manufacturing industry of readymade garments (RMG) employs about 4 million people [13], whose jobs are also of a precarious nature. When COVID-19 spread to developed countries that are major importers of the products of RMG industry, buyers started to cancel their orders – thus jeopardising the livelihoods of workers engaged in the industry [14–16].

The rest of the manufacturing sector employs another 5 million workers of whom 85% are informally employed [2]. Their conditions of employment are no better than the casual workers. Additionally, among the large proportion of self-employed working people, around 5.19 million self-employed people in the urban informal sector, live precariously [12]. Thus, the livelihood of approximately 18 million people was facing uncertainty during the shutdown period. Taking into account the average size of a family is 4, it would seem that about 72 million are now facing the challenges of livelihood [2].

The government came up with a policy package for economic recovery amounting to Tk 103,117 crore that included credit to export-oriented industries for payment of wage, credit to other enterprises of different sizes, credit for unemployed youth, migrant workers returning from abroad and other micro enterprises, as well as allocations for safety net for the poor – in cash as well as kind [17]. But the implementation record of the various schemes varies considerably, with the items for larger enterprises doing much better than those meant for micro, cottage and small enterprises. As for safety net measures, the cash transfer meant for the poor was small in amount, and the process of implementation was marred by errors in selection and delay. So, it is not surprising that the incidence of poverty increased substantially during the crisis – as can be seen from the findings of various research studies [18–20].

3.3. Social distancing

Social distancing is being adapted as the principal strategy to prevent and to slow down the transmission of COVID-19 infection [21]. Due to the unavailability of any established treatment, mankind has to maintain social distancing for mitigating the morbidity and fatality consequence. In Bangladesh, enforcement of strict social distancing becomes an important strategic dilemma for a significant proportion of people who are dependent on the availability of daily work.

According to World Bank data, over 55% of the urban population of Bangladesh live in slums [22]. The poor living in slums of the major cities typically have one small room for the family – the average size of the family being about 4, but in many cases higher. Uddin (2018) reported that in the slums of Chittagong, half the respondents have four to six members living in one room while a quarter have seven to ten members sharing one room [23]. Access to individual living quarters in slums is usually through narrow lanes barely passable for two individuals. In such an environment social distancing may be a far cry even for those who are willing to comply. The poorest members of society like, daily laborers, vendors, rickshaw pullers find themselves forced to break social distancing merely to survive [24].

Social distancing has also come under challenge in the larger socio-economic milieu of the country. The poor may have to queue up to get goods offered as relief, for buying low-priced food grains offered by the government, and to avail low-cost transport. Added to the socio-economic obstacles are the socio-cultural factors that may adversely influence compliance with the norms of social distancing. The situation is further complicated when people travel during holidays and festivals in crowded means of transport. Adherence to social distancing may have been a

problem also because of lack of access to appropriate information, and public awareness [25].

Another factor in maintaining social distancing is observation of religious ceremonies to which people automatically lean during stressful life. People prefer to attend religious gatherings as religion provides hope and a sense of social solidarity [26]. We observed two serious breaches in adhering to lockdown. One was the return of millions of workers of the RMG industry to Dhaka from different parts of the country for the sake of keeping their job and the second was to join the funeral procession of a religious leader. The GoB has been criticized by different segments of the society for these administrative failures [27,28].

3.4. Groups with special needs

Deterioration of physical and more so of mental health are serious negative consequences of lockdown. Multiple new stresses due to continued spreading of coronavirus also increase physical and mental health risks [29]. Elderly, disabled, socially vulnerable group (sex workers), and patients with low immunity and critically ill patients are more adversely affected [30].

Domestic violence and gender-based discrimination are on the rise according to both local media and social network as a result of lockdown which has been imposed by many countries around the world. Women, particularly working women across the society are now spending more hours doing household chores in addition to their regular jobs, as many businesses and organizations have shifted to work from home. Report from different countries have shown alarming figures of escalation of domestic violence [29,31].

According to a recent report by a local human rights organization, at least 4249 women and 456 children were subjected to domestic violence in 27 out of 64 districts of Bangladesh in April 2020, with 1672 women and 424 children facing violence for the first time in their lives. It was also reported that the family feuds have increased during this pandemic period [31].

4. Discussion

GoB adapted many initiatives to prevent and control the spread of COVID-19. MOHFW of Bangladesh developed “Bangladesh Preparedness and Response Plan for COVID-19”. The main goal of this plan is to prevent and control the spread of the disease.

The GoB increased number of ICU, recruited and trained 2000 doctors and 5000 nurses, provided safety measures for healthcare workers. GoB ensured supply of medical equipment, PPE and other medical aids for COVID-19 patients and health care providers [32].

However, Bangladesh lags behind the ratio of patients and their doctors and nurses compared to other neighbouring countries [33]. Inadequate COVID-19 testing facilities as well as limited clinical and health care services are the serious problems to treat COVID-19 infected people in Bangladesh. Therefore, adequate testing facilities and health care services should be provided by the GoB to combat this deadly virus.

For many people in Bangladesh who struggle at precarious levels of living, the stark choice during the period of shutdown was to face a deadly virus or hunger because of inability to access work and earnings. Many preferred to accept the former in order to prevent hunger; for them remaining shut was not a practical option. And when shutdown was imposed upon them, the result for many was inability to go to work and a loss of income. The assistance from the government was too little and too late. Consequently, many who were not poor became poor and those who were already poor became poorer.

The economic, physical and cultural environment in which people of Bangladesh live, the practice of social distancing is often a big challenge. Furthermore, lack of awareness about COVID-19, inadequate knowledge of, attitudes to and practice of social distancing are factors that make the COVID-19 epidemic a huge threat to the nation. At the same time, issues such as poverty, hunger, and the fear of losing employment are very important causes of peoples' noncompliant behaviour.

Wearing of a mask is most important and it is one of the essential and effective tools to limit the spread of infection caused by COVID-19. According to a report, 63% of people in Bangladesh wear masks. The report also showed that around 53% of people in Dhaka division wear masks to control the transmission of infections [34]. It indicates that the people in urban areas are also not compliant to the guidelines to prevent spreading of the disease. Therefore, it is a challenge for the Government to influence people and make them aware about this contagious nature of the virus. In order to do that, strict measures may be taken to ensure compliance with social distancing and wearing of mask in public places during this pandemic period.

Domestic violence increases during such restrictive times when families spend more time together [29]. This situation exists across all social classes and women see their self-esteem being crushed and shattered on a daily basis within the confinement of their homes. It is a well-known fact that violence against women and children in Bangladesh is a serious social, economic and cultural problem. According to the Bangladesh Bureau of Statistics 54.4% of married women face domestic violence by their partners [35]. Despite legislation and awareness this is still a huge problem faced by women. The Bangladesh government needs to provide leadership and guidance in this area and implement safeguards and services for women facing such abuse.

5. Conclusion

Based on the experience with regard to the management of the COVID-pandemic, a number of conclusions can be drawn. First, a well-thought out strategy is important in addressing such a big challenge. Rather than assuming that the challenge may not be serious, it is important to err on the more cautious side. Second, stricter measures and more effective enforcement are essential in preventing or slowing down the spread of such a disease.

Third, taking into account the weaknesses of the healthcare system that have been exposed by this experience, concrete measures need to be undertaken to bring about improvements in the area of public health. Appropriate preparations including better equipping the healthcare facilities and training of personnel are key in this regard. Measures should be taken to establish strict control on cross infections in hospitals in order to prevent further spreading of COVID-19 infections.

6. Recommendation

In order to contain the spread of infections, the government's health and social policies need strengthening. Following recommendations are being made in that context:

- (i) Health care services and testing facilities should be increased.
- (ii) There must be good coordination between policy makers and local health care providers.
- (iii) Firm steps should be taken by the local authorities to ensure compliance with social distancing and wearing of mask in public places.
- (iv) The government's economic recovery programmes for the poor and lower income people should be given greater priority in implementation.
- (v) Government and Non-Governmental organizations should come forward to implement some safety measures for women who are facing violence and abuse.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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