COVID-19 dilemma: lives or livelihood?

Dr Shahriar Rozen and Muhammad Rizwanur Rahman

'Lives or livelihood?' is the conflict haunting nations worldwide and Bangladesh is no exception. Whether to impose stricter restrictions to contain the virus or to relax such measures to earn livelihood has become the prime dilemma in the combat against the novel coronavirus.

Unlike previous months, Bangladesh is now experiencing a steeper rise in COVID-19 cases. The number of new infections has increased by more than 10,000 in less than two weeks. Although the country reported a total of 298 deaths related to COVID-19, the actual number would be higher as all suspected patients were not tested due to limited capacity.

Pertinent to what is seen in other countries and considering the highlydense population of Bangladesh, the situation is more likely to continue worsening throughout. Besides, there is the possibility of a potential resurgence (second wave) after Bangladesh has contained the first outbreak.

Waiting for the so-called 'herd immunity' to stop the virus can also come up only with the worst possible consequences. On the contrary, even if a highly effective vaccine has been discovered, it is very unlikely to be widely available in Bangladesh within a year.

As such, once the unthinkable has now become obvious - we have to deal with



the novel coronavirus for a considerable time and that not without the economy swirling. Hence, millions of families, who rely on daily wages, are being pushed to the edges for survival and this harsh reality necessitates the partial reopening of the economy. But, how do we ensure that an undue haste will not risk waves of infection and even a deeper economic

Although the educational institutions are closed and general holidays have already been extended, we have seen the reopening of the garment factories and shopping malls earlier this month. This decision of partial reopening came at a crucial time when the daily case counts are spurting and so are the deaths.

This notion strikingly differs from most other countries as they started lifting restrictive measures only after observing a stable decline in the daily counts. The more we lift our layers of protection, the more risk we invite towards seeing a surge.

Therefore, partial reopening must not be a random or date-driven decision. Instead, it should be based upon how the situation evolves, endorsed by wellformulated strategic analysis and scientific evidence with the daily case counts as an essential guidepost.

The following criteria may be proposed to inform the decision to either relax or strengthen the social restrictions:

Declining cases: Stable downward trajectory of daily case counts be observed.

Testing and contact tracing: Capacity to conduct adequate tests and contact tracing of patients be ensured.

Enhancing health system capacity: Protective measures for front liners, adequate supply of personal protective equipment and enhanced capacity of hospitals and isolation units to accommodate infected patients after any possible potential surge be secured.

Planning and strict monitoring: Well-developed guidelines to protect the health and safety of the workers and strict

monitoring for compliance be guaranteed. Relaxing mitigation strategies (such as lockdown and school closures) in absence of the above measures would jeopardise the entire system, sparking an even deadlier outbreak.

This virus is going to stay here for a while and the worst is yet to expect. The government needs to be prepared to reimpose lockdown measures, if necessary.

We must remember, if the quest to open up the businesses significantly increases the health risks, businesses will suffer the most in the long run. If not properly planned and executed, rushing towards the normal can only make our wait for the normal even longer.

Dr Shahriar Rozen is a public health professional, currently working as a Senior Policy Lead for Alberta Ministry of Health, Canada Email: rozen@ualberta.ca Muhammad Rizwanur Rahman is a doctoral student at the Department of Mechanical Engineering, University of Alberta, Canada Email: mrizwanur@ualberta.ca

GLOVES



We are cooking at home more than ever before because of COVID-19, and grocery shopping has become one of the few essential errands we leave the house for. One question that keeps coming up is – should you wear gloves at the grocery store? The short answer is no. You do not need any kind of gloves at the grocery store.

Gloves will not protect you. If you touch a contaminated surface, the virus can transfer to your glove just like it could transfer to your fingers, so there is no added protection from the gloves. If you touch your mouth or nose with the glove, you can pass the virus to yourself. And taking the gloves off after shopping is an especially vulnerable moment, as you can easily transfer any germs on the gloves to your hands and face if you are not careful.

The reality is you are much more likely to catch the coronavirus from the respiratory droplets of a person talking or sneezing near you rather than from an item you touch at the store - that is why physical distancing is so important. To protect yourself at the grocery store, wear a cloth face mask and keep a minimum 6-foot distance from others. Plan your grocery trip so you can get in an out quickly during quiet times to minimise contact with others.

Gloves do not replace hand hygiene. Given that gloves do not protect you from the virus, wearing gloves does not save you time from hand washing. You still have to keep up with hand hygiene. That is the most important way to remove the virus from your hands. When you get home, wash your hands well with soap and water for 20 seconds.

Source: WebMD

HEALT Houlletin

Chronic **Obstructive Pulmonary** Disease (COPD)



COPD and smoking associated with higher COVID-19 mortality

Current smokers and people with chronic obstructive pulmonary disease (COPD) have an increased risk of severe complications and higher mortality with COVID-19 infection, according to a new study published recently in the open-access journal PLOS ONE by Jaber Alqahtani of University College London, UK, and colleagues. COPD is a common, persistent dysfunction of the lung associated with a limitation in airflow. An estimated 251 million people worldwide are affected by

Critically ill COVID-19 patients with COPD had a 63% risk of severe disease and a 60% risk of mortality while critically ill patients without COPD had only a 33.4% risk of severe disease (RR 1.88, 95% CI 1.4-2.4) and 55% risk of mortality (RR 1.1, 95% CI 0.6-1.8). In addition, current smokers were 1.45 times more likely to have severe complications compared to former and never smokers (95% CI 1.03-2.04).

The study was not able to examine whether there was an association between the frequency of COPD exacerbations, or severity of COPD, with COVID-19 outcomes or complications.

The authors added: "Despite the low prevalence of COPD and smoking in COVID-19 cases, COPD and current smokers were associated with greater COVID-19 severity and mortality."

Genome sequencing of Coronavirus from Bangladesh - what's next?

STAR HEALTH REPORT

A team of Bangladeshi scientists at the Child Health Research Foundation (CHRF) has successfully managed to complete the genome sequencing of SARS-CoV-2 i.e. Coronavirus in Bangladesh very

The team of genetic sequencing was led by a very promising microbiologist Dr. Senjuti Saha and overall supervised by Dr. Samir Saha, Executive Director, CHRF. They described their experience of the genome sequencing of COVID-19 from Bangladesh in a Zoom interview.

Genome sequencing is the process of identifying what nucleotides - the basic building block of DNA and RNA - are present in a certain cell and in what order. A team of eight CHRF researchers worked on mapping the genome sequence of coronavirus from Bangladesh.

Many genome sequences of the novel coronavirus have been mapped in the whole world to date. But this was the first time a researcher team from Bangladesh made one footprint in the global library. That was the ultimate achievement the CHRF team earned, said Dr. Seniuti.

They informed that the task not very easy since Dr. Senjuti is stuck in the UK during the pandemic lockdown. She guided the whole team of CHRF in Bangladesh from afar over the Internet video conferencing apps. That was quite a challenge, but thanks to the technology that made it possible when it was needed the most.

The genetic sequencing is particularly important for us and all others to understand and study the virus to produce an effective vaccine against it.

The Bangladeshi scientists are optimistic about more genome sequencing from the country by engaging other labs. They informed that CHRF is willing to collaborate and building the capacity of other centers.

The scientist duo thanked the government of Bangladesh, especially the IEDCR for providing them the opportunity to conduct the research.

To see the full interview on YouTube, visit https://youtu.be/UWBp6Ic7gpg



Rationing ventilators during the COVID-19 epidemic

As the COVID-19 epidemic exploded, many hospitals began creating triage policies to prepare for the possibility of having to ration ventilators.

Although virtually all policies considered "benefit" in their rationing criteria, they also cited need, age, "lottery," and first-come-first-served, in varying proportions. Ten policies gave preference to healthcare workers. Twenty-one used physiologic scoring systems in assessing need and benefit (e.g., SOFA [Sequential Organ Failure Assessment | scores). Half the policies used specific clinical diagnoses in allocation criteria, and two thirds specified criteria that should not be used (e.g., insurance status, race, disability). Half the policies had age criteria. The composition and procedural guidelines of "triage committees" also varied considerably.

The striking finding here is the heterogeneity across policies. This likely reflects several factors, including haste (with institutions scrambling to construct policies on short notice), philosophical differences, and sheer difficulty of crafting rules about rationing. In late March, JAMA published "A Framework for Rationing Ventilators and Critical Care Beds.

Those authors assign points for likelihood of surviving to hospital discharge and points for likelihood of long-term survival (based on underlying life expectancy). Age itself is a "tie-breaker," favouring younger patients when point scores for two patients are



HOW TO HOME QUARANTINE

The home quarantined person should:



Stay in a well-ventilated single-room preferably with an attached toilet



Wash hand frequently with soap and water or with alcohol-based sanitizer



Needs to stay away from elderly people, pregnant women, children

Avoid sharing

household items

like dishes, glasses,

cups, utensils,

towels, bedding



Restrict his/her movement within the house.



Under no circumstances attend any social/religious gathering



Wear a surgical mask at all time. The mask should be changed every 6-8 hours



Dispose off used mask in a closed bin and bin should also be handled responsibly



If symptoms. appear, he/she should immediately inform the nearest health centre



COVID-19 OUTBREAK