COVID-19 VACCINE, TREATMENT

## World push sees initial success

AGENCIES

Funded governments, pharmaceuticals and research labs across the world have stepped up their efforts to find vaccines and treatments for the new coronavirus, using a variety of different technologies and some of them have claimed initial

In a first, scientists in the United States on Monday said that clinical trials on human had begun for a vaccine developed by its National Institute of Allergy and Infectious Diseases and the US biotech firm

French pharmaceutical giant Sanofi and American drugmaker Regeneron said they had started clinical trials for Kevzara, a drug currently used to treat rheumatoid arthritis and which they hope will reduce lung inflammation in severe cases of coronavirus illness.

On Tuesday, China joined in saying it has also given the go-ahead for researchers to begin human safety tests of an experimental vaccine.

European Union and Australia have also claimed important breakthroughs against the virus that has killed more than 8,000 people worldwide and infected more than 200,000.

This unprecedented speed – given that the outbreak began in December last year - is thanks in large part to early Chinese efforts to sequence the genetic material of Sars-CoV-2, the virus that causes Covid-19. China

shared that sequence in early January, allowing research groups around the world to grow the live virus and study how it invades human cells and makes people sick.

Coronaviruses have caused two other recent epidemics - severe acute respiratory syndrome (Sars) in China in 2002-04, and Middle East respiratory syndrome (Mers), which started in Saudi Arabia in 2012. In both cases, work began on vaccines that were later shelved when the outbreaks were contained.

One company, Maryland-based Novavax, has now repurposed those vaccines for Sars-CoV-2, and says it has several candidates ready to enter human trials this spring. Sars-CoV-2 shares between 80% and 90% of its genetic material with the virus that caused Sars.

Moderna, meanwhile, built on earlier work on the Mers virus.

However, experts at the World Health Organization say they do not expect any fully tested and approved vaccine to reach the market until the middle of next year.

But recent developments have been

Medical authorities in China have said a drug used in Japan to treat new strains of influenza appeared to be effective in coronavirus patients, The Guardian reported yesterday citing Japanese media reports.

 $Zhang\,Xinmin, \hat{a}n\,official\,at\,China's$ 

### Stranded in ME, Europe

stranded in Saudi Arabia, Kuwait, Qatar, and Oman as these countries recently suspended flight operations to and from Dhaka to stop spread of coronavirus.

Civil Aviation Authorities of Bangladesh (CAAB) also instructed all foreign carriers operating flights to and from Dhaka not to bring in passengers, including Bangladeshis, from any country in Europe except England. The directive came into force at noon on

Among those stranded in Saudi Arabia are 37 staff members of a foreign airlines. They could not fly to Dhaka as the Saudi government banned flights to and from Bangladesh earlier this week, said a stranded staff member.

Earlier on Tuesday, Bangladesh Airlines brought home over 409 Bangladeshis from Saudi Arabia after securing special permission from the Saudi civil aviation authority. The passengers, most of whom went there to perform umrah, had been stranded in the Gulf country for several days.

Meanwhile, CAAB Chairman Air Vice Marshal M Mafidur Rahman last night said they refused three Bangladeshis entry to the country as the trio were travelling from Sweden on a Qatar Airways flight. The aircraft carried many

other passengers from Doha. "We are very disappointed with Qatar Airways over carrying passengers from the European country defying a ban," he told The Daily Star.

The CAAB chief said Qatar Airways told them that the three passengers took permission from the Bangladesh embassy in Qatar for travelling to Dhaka

Mafidur said they referred the issue to the foreign ministry to decide about

Earlier in the day, Group Captain AHM Touhid-ul Ahsan, director of Hazrat Shahjalal International Airport, told reporters that they asked all foreign carriers not to fly in passengers from European countries via a third country. PASSENGERS SUFFER DELAY

Among the three passengers denied entry to Bangladesh last night is Mozammel Haque Bhuiyan.

media, Mozammel had said, "We have airport for 24 hours since March 16. Me and my wife came to Doha airport from Stockholm by a Qatar Airways flight on way to Dhaka. But after our arrival in Doha, a customer service official told us that the Bangladesh government will not allow any passenger from a European state to enter the country."

see his daughter, said before boarding the aircraft in Stockholm, he repeatedly requested the carriers' staff to make sure whether it would be able to take them

He said the airlines authorities assured him that there would be no problem.

"We have been waiting at the Doha airport for the last 24 hours. The airlines authorities didn't give us any food other than drinking water. Following repeated requests, they gave us coupons to have food. The quality of food is very poor,' he alleged.

Despite repeated attempts, this newspaper couldn't reach Qatar Airlines officials in Dhaka over phone for comments.

**BIMAN CANCELS 14 FLIGHTS** 

at least 14 flights on five domestic routes and two flights on the Dhaka-Kathmandu route due to a shortage of passengers.

domestic routes Dhaka-Jashore, Dhaka-Saidpur, Dhaka-Rajshahi, Dhaka-Chattogram, and Dhaka-Sylhet -- would remain suspended from March 19-22 due to shortage of passengers, said Biman Managing Director and Chief Executive Officer Mokabbir Hossain.

Earlier, the national flag carrier had suspended flight operations to 10 destinations -- Dammam, Riyadh, Jeddah, Madinah, Kolkata, New Delhi, Oman, Kuwait, Qatar and Kathmandu -- as those countries suspended air communications to and from Dhaka

Biman is now operating flights on six routes out of 17, said officials.

# In a video message posted on social been stranded at Doha [international]

Mozemmel, who went to Sweden to

Yesterday, Biman was forced to cancel

The flight operations on the five

over coronavirus fears.

### Air pollution can elevate risk

are more likely to die. This is likely also the case for Covid-19," she was quoted as saying.

Early research on Covid-19 has also suggested smokers and former smokers are more susceptible to the virus. One of the top medicine specialists

in Bangladesh and the Prime Minister's personal physician Dr ABM Abdullah said, "Coronavirus does not spread due to air pollution. That does not happen. But pre-existing lung conditions made worse by exposure to severe air pollution can make people more vulnerable.

Meanwhile, Dr Shamim Ahmed, associate professor of Respiratory Medicine Department at Bangabandhu Sheikh Mujib Medical University (BSMMU) said the novel coronavirus outbreak is very recent and not many studies have been conducted on it to come up with any conclusive remark.

He, however, did say that anyone with a pre-existing chronic lung condition worsened by long-term exposure to pollution is likely to be more vulnerable. Dr Shamim warned against drawing any connection between air pollution and growing fatality risk of coronavirus.

"This is because exposure to air pollution can result in short term health complications as well," he said.

But people who are most at risk are the ones who already suffer from chronic lung or heart condition which has also most likely compromised their immunity, Dr Shamim further added.

"Given what we know now, it is very

likely that people who are exposed to more air pollution and who are smoking tobacco products are going to fare worse if infected with [Covid-19] than those who are breathing cleaner air, and who don't smoke," Aaron Bernstein, at the Harvard TH Chan School of Public Health, told the Washington Post.

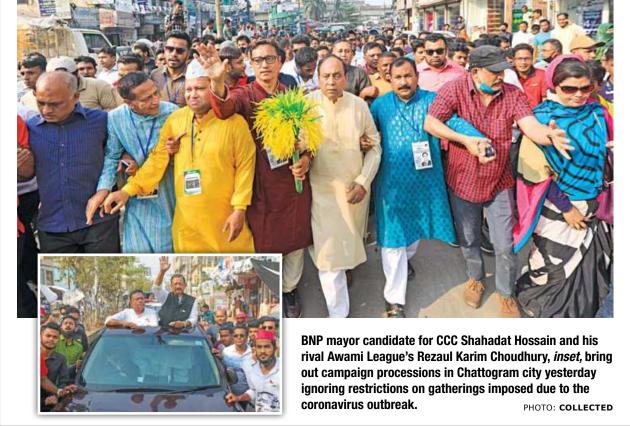
This is not good news, because air quality in Bangladesh was the worst in the world last year and Dhaka was the 21st most polluted city, according to 2019 World Air Quality Report. And among capital cities, Dhaka was the second worst.

Here is an example of just how bad the situation is in Dhaka. A report published in this paper on March 15, highlighted the level of dust accumulation on roadside trees in this

A study titled "Assessment of total dust accumulation on tree leaves in Dhaka city" conducted by the Center for Atmospheric Pollution Studies (CAPS) at Stamford University said every single day 436 tonnes of dust is accumulated on the trees

Overall, Bangladesh's response over the handling of coronavirus has not been consistent with the enormity of the danger. And for a disease, that has no known cure vet, prevention, early testing, and awareness could be the difference between life or death.

Dhaka, it appears, is especially in precarious position, considering its population breathes in the city's hazardous air day-in, day-out.



### Will go for

operation] even after that," he said.

As the chief of the World Health Organization put highest emphasis on testing, the minister said they will go forward following this.

About the screening of passengers at airports, he said there is chaos even in developed country like the

"We have no prior experience in this regard. However, we're taking lessons from mistakes. Everything will be done to tackle the situation," he

Quader also sought suggestions from media in this regard.

He urged all political parties to come forward to fight the disease instead of "doing politics" over the

Bangladesh has so far reported 10 coronavirus cases.

Meanwhile, the death toll from the coronavirus has climbed to 7,987 globally as of today.

It has so far infected 198,426 people around the world, according to Worldometer.

### Dangerously exposed

He pleaded with the general population, "If any patient has coronavirus-like symptoms, please go to the hospitals that can deal with such patients. Please don't come here."

### NO PROTECTION AT OTHER PUBLIC HOSPITALS EITHER

Even hotels have equipped their guards with infrared thermometers to check the temperature of incoming guests and offices have installed hand-washing facilities. But public hospitals, which see the highest number of sick patients in the city, lag deplorably behind in preventive measures.

None of the hospitals are checking the temperatures of people entering the hospital, and most public hospital units do not have mandatory hand-washing facilities.

Nor is there much concern for the health professionals treating the patients. Forget full-body gear and personal protective equipment (PPE) even basic protective equipment like masks, gloves, sanitising alcohol, and liquid hand soap are often bought by ne doctors and nurses themselves.

This situation was observed on Tuesday, when The Daily Star correspondents visited the National Institute of Diseases of the Chest and Hospital (NIDCH), Bangabandhu Sheikh Mujib Medical University (BSMMU), Sir Salimullah Medical College Hospital (Mitford), Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic (Birdem), Shaheed Disorders Suhrawardy Medical College and Hospital, and Mugda Medical College and Hospital. **BSMMU** 

At one of the nurse's stations between the wards housing neurosurgery patients and dialysis patients at BSMMU, two female nurses said that there is an acute shortage of liquid soap, hexisol, masks,

"I bought the mask I am wearing. They usually at least give us rubbing alcohol, but even those have not been provided for weeks as it is short in supply," said a nurse wearing a disposable mask, already thin and frayed from being reused.

The other nurse took out a small bottle of liquid soap from her pocket. "See, I brought this from home. I carry it around in my pocket and use it to keep myself and my patients safe," she said.

On Tuesday, our correspondent observed that several hand-washing stations were being set up outside the building with the outpatient departments -- this basic measure was being taken 10 days after the first coronavirus case in the country was announced, and months after the global outbreak.

None of the other entry-gates of BSMMU were being equipped with such facilities however. This means neither does one need to get their temperature checked, nor wash their hands, before entering the wards, the ICU, and NICU housing critical patients, doctor's chambers, or blood banks.

**BIRDEM** Across the street, a similar situation was found in Birdem. "We have rubbing alcohol, but we do not have masks or any protective suits," said a nurse treating patients of a ward.

The ward was filled to the brim with not just patients but also their families. A common scenario in public hospitals -- families of the patients camped out beside their beds, on the floor. Nobody

Similarly, the hospital has not

separated the elevators carrying the diabetes patients, who are already immunocompromised, from those to be used by the general public. Our correspondent observed a ward boy wheeling in an elderly patient with

diabetes-induced swollen feet and open

sores in an elevator so tightly-packed that

there was no space for even a small child. Nazimul Islam, joint director of Birdem General Hospital, told The Daily Star that it was not possible to screen incoming patients with infrared thermometers. "We see 4,000 outpatients every morning. The queue would stretch to Shahbagh intersection if we did that.'

He also said that the lack of masks was due to the global shortage.

"The scary thing is patients are now starting to hide their travel history from

### SUHRAWARDY

While nurses and doctors at Suhrawardy Hospital were given gloves and disposable masks, they were not given the full-body, full-face protective gear that has become a standard in countries dealing with Covid-19.

"We are working in a situation of risk," said the hospital's director Uttam

The hospital has set up a flu corner to screen patients who are afraid that they might have been infected with coronavirus, and only people dealing with these patients have been given PPE. This has left nurses and doctors of

other sections in considerable panic. "I work in the medicine ward. Patients with flu symptoms are all sent to my department. Flu and coronavirus have similar symptoms," said a nurse. She has reason to fear. Remember the

Bahrain-returnee suspected coronavirus patient who ran away from the hospital on March 15? She was the one who dealt with him -- without any protection. MITFORD

Mitford Hospital has not been able to manage full-body protection for their nurses and doctors, said its Director Brig Gen Morshed Rashid.

"We do not even have masks and gloves. We are trying to provide these to emergency cases like surgery, but there is not enough to distribute among the general nurses and doctors," he said. We have given them cloth masks to wash and reuse.

"I too am going about without wearing a mask," he added.

Meanwhile, since free treatment was offered at government hospitals to mark the birth centenary of Bangabandhu Sheikh Mujibur Rahman, an unusual crowd of patients was found on Tuesday afternoon at the hospital. With bare hands, on-duty doctors

were examining patients at the hospital's emergency department. "No precautionary

equipment is being provided by the hospital authorities. The mask that you've seen on my face was bought by me," said a doctor preferring anonymity.

Expressing concern, he said, "Like me, many other doctors of the hospital feel exposed to coronavirus."

Nobody going into the hospital was being screened for fevers either. "We have not asked the government for infrared thermometers yet, but we might in the future," said the director. **NIDCH** 

At NIDCH, the main hospital in the city for respiratory diseases, doctors and nurses complained that they were buying their own masks and gloves.

At the outpatient department, none of the doctors and nurses wore masks. Only two ward-helpers wore masks. There were three people sitting at the ticket counters and nobody wore a

Our correspondent peeked into the vacant washroom of the outpatient department -- there was no bar of soap or liquid soap at the sink.

Nobody entering the hospital was being screened for fevers. Hospital Director Shahedur Rahman

told our correspondent, "We will get 200 sets of PPE from the ministry, but even those can be used only once. So, we will have a shortage of protection."

The hospital has dedicated five beds in three rooms to isolate coronavirus patients, should they be needed. MUGDA HOSPITAL

Mugda Medical College and Hospital is among the multiple hospitals the government is prepping for dealing with coronavirus patients, but they do not have sufficient PPE.

Some 100 beds have been kept reserved in separate places, of which 40 are for coronavirus positive patients and 60 are for suspected coronavirus patients, said Shahid Mohammad Sadiqul Islam, director of the hospital.

However, they only have 10 PPE Doctors and nurses fear they will run out of protective suits on the first day, should a coronavirus patient be admitted.

Furthermore, a special corner called the coronavirus centre has been made on the ground floor of the hospital for patients who are coming with cough, fever, neck pain, sneezing, and breathing problems, said the director. However, none of the doctors or nurses there have been given PPE.

(Shaheen Mollah, Zyma Islam, Helemul Alam, Mahbub Rahman, and Asif Taasin contributed to the report.)

### First death amid sloppy response

not deadly.

Flora said they would ready some labs -- both inside and outside the capital -within a week to carry out coronavirus

"The labs will work under the direct supervision of the IEDCR.' The director urged everyone not to hide information, especially about

travel history and coming into contact with returnees from abroad, while consulting doctors. "Covid-19 is highly contagious but

She said the IEDCR is working on mobile app to ease pressure on its otline numbers. "Apart from this, we will provide an email address and open a Facebook page." She requested people to use these

means to contact the IEDCR and to call

on the hotline numbers only if they are

unable to use the alternatives. **CURRENT SITUATION** Though the government insists that it has taken all-out preparations, there is concern about whether the country is

fully equipped to prevent an outbreak and treat the infected. The IEDCR claims there has been experts say the reality could be different as the authorities don't have a complete picture of the crisis that is unfolding.

know about community

transmission, the World Health Organization (WHO) has advised testing all the cases of atypical pneumonia in National Influenza Centre at the IEDCR has surveillance centres in 19

hospitals across the country. The IEDCR chief claimed that they are testing all atypical pneumonia cases. The experts, however, said those tests must be done through an active method

-- a planned and targeted way to select and test the cases. If we systematically test some cases of atypical pneumonia and suspected cases who have not travelled any virusaffected countries, we could be able to know whether there is any community transmission," Prof Mahmudur Rahman, former director of the IEDCR, told The Daily Star yesterday.

However, no tests have yet been done on such suspected cases, he said.

According to experts, the failure to enforce home quarantine of the

no community transmission yet. But suspected cases across the country is also an issue of concern.

> A total of 631,538 passengers from different parts of the world entered the country from January 21 till yesterday, according to the IEDCR. The majority of them were from the

> virus-hit regions. This week, around 400 Bangladeshis returned from Italy and were allowed to go home on condition of self-quarantine. Media reports show that many of them were not following the instruction

> to remain in self-quarantine, putting the community people at risk of infection. Prof Saif Ullah Munshi, chairman of virology at Bangabandhu Sheikh Mujib Medical University, said, "Since the outbreak went out of control in

> China, we got more than two months for preparations. But we failed to understand the gravity of the crisis." The first major lapse on the part of the government was a lack of proper screening of inbound passengers at the international airports in Dhaka, Sylhet and Chattogram, and at the land ports,

> he noted. Experts pointed out that even when Covid-19 turned pandemic in Europe,

banging of pots ring out in evenings at 8

p.m. as self-isolating neighbours express

gratitude to health services. In several

countries, stores began reserving special

the government allowed expatriates from Italy, Germany and other countries to enter the country without proper

And then instead of keeping those expatriates in strict quarantine, the authorities allowed them to go home,

they said. WHAT SHOULD BE DONE?

"The government must take drastic measures. We need strict monitoring to ensure proper quarantine. There should be arrangements to treat patients at facilities. The intensive care units [of hospitals] should be ready," said Prof Muzaherul Huq, former regional adviser (Southeast Asia) to the WHO.

He suggested that the government should put the entire country under

ockdown immediately. "All health staffers should be equipped and trained for Covid-19 patient management. There should be arrangements for their [staffers] accommodations near hospitals, away

from their families," he added. He also suggested that Covid-19 patients should not be admitted to general hospitals as this could lead to

transmission of the virus.

### Rattled world at war with coronavirus

FROM PAGE 1 nearly empty with more than 90% of lawmakers staying away and a masked and gloved cleaner wiping handrails

between speeches. "And our society, which had grown used to changes that expand our possibilities of knowledge, health and life, now finds itself at war to defend all we have taken for granted." There was particular alarm in Italy, which has experienced an unusually high death rate - nearly 3,000 from 35,713 cases. It has called on student and retired doctors to help an overwhelmed health

deaths, the biggest increase since the outbreak started and the highest oneday total posted by any nation. France also reported a spike in deaths

Yesterday, Italy reported 475 new

- rising by 89, or 51%, to a total of 264 in 24 hours. Around the world, rich and poor

alike saw lives turned upside down as events were cancelled, shops stripped, workplaces emptied, streets deserted, schools shut and travel minimized.

"Cleanliness is important, but here it's not easy," said Marcelle Diatta, a 41-year-old mother of four in Senegal, where announcements rang from loudspeakers urging people to wash hands but water was often cut off in her suburb.

The crisis has created a wave of solidarity in some countries, with neighbours, families and colleagues coming together to look after the most needy, including dropping supplies at the doors of those forced to stay inside.

Around Spain, applause and the

times for elderly shoppers to help keep the most vulnerable away from those who might infect them. The United States, which closed its border with Canada except for essential travel, was sending its two military hospital ships - Comfort and Mercy - to

New York's harbor and the West Coast, while the Swedish military is setting up a field hospital near Stockholm. US President Donald Trump yesterday said the country was on wartime footing and invoked special powers through the Defense Production

Act to rapidly expand manufacturing of masks and protective equipment in short supply.

p/ LONG RECESSION OR BOUNCE Spooked by a seemingly inevitable global recession, rich nations are unleashing billions of dollars in stimulus to bolster economies, aid health services, provide loans to tottering businesses and help individuals with mortgages and other routine payments. Extra cash from governments and

central banks failed to calm markets: Stocks and oil prices reeled again, with European shares down nearly 5% to approach seven-year lows and major U.S. indexes off by 9% and down 30% from highs reached last month.

Taking their cue from the waning of the coronavirus in China, where it emerged late last year, optimists predict a bounce back once the epidemic also passes its peak elsewhere - hoped to be

within months