

BANGLADESH
UPDATE



11,291
New cases in 24hrs



11,64,635
Total cases



19,274
Deaths



9,98,923
Recoveries

GLOBAL
UPDATE



4,171,983
Deaths



194,616,521
Total cases

Schoolboy builds low-cost oxygen concentrator

Hopes it will help during Covid-19 pandemic

AHMED HUMAYUN KABIR TOPU, Pabna

Watching his father die without oxygen support while suffering from a cardiac condition last year, young Taher Mahmud Tarif resolved to build a device to prevent any more such tragic deaths.

Tarif's determination and tireless efforts paid off as the ninth grader of Ishwardi Sara Marwari High School has succeeded in producing an oxygen concentrator machine, mainly using local parts.

He has already received appreciation from medical professionals and experts after demonstrating his invention at the Ishwardi upazila nirbahi office and Pabna Medical College Hospital. Recently, he also demonstrated his device before top-level officials of the Ministry of Science and Technology.

"They appreciated my machine and asked me to develop it as a portable one and make a few other technical developments," Tarif told the Daily Star, adding that the device will be tested at Buet soon.

"About 90 percent oxygen [concentration] can be generated from my oxygen concentrator machine. This machine can provide high-flow oxygen supply too," Tarif added.

An oxygen concentrator takes in air and removes nitrogen from it, leaving oxygen-enriched gas for use by people needing medical oxygen.

Many Covid-19 patients experience low oxygen levels in their blood, with demand for oxygen concentrators among other medical equipment shooting up during the recent surge in cases.

Tarif said that his father's tragic death due to a lack of oxygen was the driving force for him to build the device.

"Capturing ambient air through a compressor, the machine separates oxygen from other gases using zeolite and gives output of oxygen," said Tarif.

Zeolite is the only imported material that he needed to build and operate the machine, he added.

He said that a locally made oxygen concentrator like his costs approximately Tk 65,000 whereas an



Taher Mahmud Tarif explaining how his oxygen concentrator works.

imported one costs over Tk 2 lakh.

He hopes his invention during the pandemic might be helpful for Covid-19 patients struggling to get medical oxygen, if it is approved by the authorities.

"This is obviously a good invention for oxygen generation. It is capable of producing high-flow oxygen so it can be used for patients or refilling oxygen cylinders," said Dr Md Sirajul Islam, assistant professor of the anesthesiology department of Pabna Medical College Hospital.

"It can be very handy in local areas with no scope of getting oxygen support," Dr Siraj added.

He, however, said that more lab and other examinations are needed before using the machine as medical equipment.

Imrul Kayes, Ishwardi upazila nirbahi officer, said Tarif's oxygen concentrator device had caught the attention of government high-ups.

"We have talked with the authorities concerned about getting a patent for Tarif's machine. If his invention gets approved, it will be a great achievement during this alarming Covid-19 situation," the UNO said.

Hospitals stare at tougher

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been rising in many places, the minister said the hospitals are under immense pressure due to rush of Covid patients.

"If Covid infections continue like this, there will be no place in the hospitals.

"...There is no alternative but to follow the health safety rules."

The hospitals in at least 24 districts had bed occupancy rate of more than 75 percent yesterday. And all these districts saw higher Covid positivity rate than the national average of 30 percent yesterday.

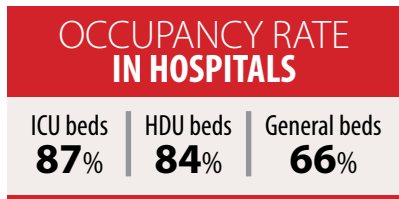
The situation is alarming, given that many of these districts have only one or two Covid-dedicated hospitals, meaning patients are being left with nowhere to go for treatment.

For example, the Covid positivity rate was 51 percent in Barishal. But it has only two Covid-dedicated hospitals and both are completely occupied.

Similarly, the positivity rate was 53 percent in Rajbari which has only one Covid-dedicated hospital. And 92 percent of the beds there was occupied yesterday.

Chattogram saw virus positivity rate of 40 percent yesterday. It has 13 Covid-dedicated hospitals, three of which were at full capacity and the rest three-quarters full.

Talking to The Daily Star, Brig Gen SM Humayun Kabir, director of Chattogram Medical College Hospital, said, "We already increased the number of beds for Covid patients to 300 from 100. As of today [yesterday], 304 Covid patients are receiving treatment here. The rush of patients is increasing every



day."

In Mymensingh, the positivity rate was 23 percent but Mymensingh Medical College Hospital had to admit patients twice its capacity yesterday.

There are 230 beds in the hospital which had to take in 478 patients.

In 24 hours till 8:00am yesterday, 228 people died from Covid said a DGHS press release.

The number of Covid deaths in the country stood at 19,274 yesterday with the death rate of 1.65 percent.

At least 11,291 new infections were recorded in the 24 hours. A total of 37,587 samples were tested during the period.

Meanwhile, the health minister said the government is planning to administer one crore jabs of Covid vaccines a month.

"We have calculated that we will get 21 crore doses and we are planning according to that."

He claimed that the facilities are there to store eight crore doses at a time.

Zahid also said the government can currently store at a time 30 lakh vaccine jabs that need to be kept at ultra-low temperature.

Arrangements are being made to raise the capacity to one crore, he added.

Soumya guides Tigers

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T20I series, three of those coming away from home.

Bangladesh kept themselves in the hunt right from the start of the chase despite losing opener Mohammad Naim early on as man-of-the-series Soumya looked solid at the other end. Shakib Al Hasan also started off in a positive manner before perishing for a 13-ball 25. Skipper Mahmudullah

Riyad then paired up with Soumya to add 63 runs for the third wicket, giving Bangladesh the platform for the late onslaught.

Earlier, Zimbabwe posted their second highest total in T20Is riding on a half-century from opener Wesley Madhevere. Regis Chakabva and Ryan Burl smashed some lusty blows too as the hosts posted 193 for five in 20 overs after electing to bat.

Israel launches direct flights to Morocco

AFP, Jerusalem

Israeli carriers yesterday launched the first direct commercial flights between the Jewish state and Morocco since the countries normalised diplomatic relations in a US-brokered deal last year.

About 100 passengers were on an Israir flight that departed from Tel Aviv

to Marrakesh, AFP spokeswoman Tali Leibovitz told AFP, adding that two to three flights per week were planned on the route.

National airline El Al later announced it too had launched its a service to Marrakesh on Sunday, and planned five flights per week there and to Casablanca.



Cars and other private vehicles cause congestion on DIT Road at Rampura in the capital on the third day of the "strict lockdown" amid surging cases of Covid-19.

PHOTO: ANISUR RAHMAN

Consumers suffer as govt fails to enforce

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bought import-based LPG at prices determined by market players.

Since April, the BERC started fixing prices, which were below the rates offered by the marketers.

Consumers, however, said they are having to pay extra to get LPG cylinders as importers, dealers and retailers have not been complying with the BERC rates, adding that the commission failed to implement its price in the market.

At least three dozen consumers from different parts of the country said they were yet to buy LPG at the price fixed by the commission.

They also said BERC was just doing its routine work and setting the price rate, while importers, dealers and retailers are taking advantage of its inactivity, and charging additional money from helpless people during the Covid-19 crisis.

Seeking anonymity, a teacher of a non-MPO secondary school, said recently he bought a 12kg LPG cylinder at Tk 1,050. "I know the government-fixed rate is Tk 891. But I was compelled to pay an additional Tk 209.

"There is a regulatory body but it has completely failed to play its due role. Is there no one else to see the injustice?" the teacher, who has not been getting his salary for the last

one year due to closure of his school during the pandemic, said.

Abul Kalam, another consumer, said, "If the regulatory commission cannot implement the price rate, then why would they take the responsibility to fix it? This is ridiculous."

Barkat Ali said he cannot afford the soaring prices of daily essentials, adding that he too had to buy an LPG cylinder at Tk 1,050 from a retail shop in Dhaka's Dohar upazila.

Speaking to this correspondent, a retailer in Dohar said he bought a 12kg cylinder from a Jamuna LPG dealer in the upazila's Maghula Bazar at Tk 970 and was selling it at Tk 1,050.

"We know the government-set rate but what should we do if the dealers charge more money than the stipulated price," he said, requesting anonymity.

Contacted, Azad, a dealer of Jamuna LP Gas in Maghula Bazar, cut the call just after hearing the questions related to the price.

Ghulam Rahman, president of the Consumers Association of Bangladesh, said it is seen that no one is abiding by the prices set by the BERC.

The BERC has the power to take legal action to enforce the price of LPG and it also has the power to take

action against companies who are not complying, said Rahman, also the former BERC chairman.

Mohammad Maqbul-E-Elahi Chowdhury, member (gas) of the BERC, said the price was somewhat implemented initially, but now traders are not abiding by it.

"We have written to the authorities concerned, including the deputy commissioners, through the ministry concerned, seeking their help in implementing the price. But we are not getting any cooperation for that either," he added.

He said it was not possible to implement the price without cooperation of all -- traders, consumers, government agencies and the media.

Azam J Chowdhury, president of the LPG Operators' Association of Bangladesh, said the BERC has not fixed the price locally.

For example, the BERC has fixed Tk 20 as transportation cost for dealers, which actually costs at least Tk 50, he said, adding that it is not possible to implement the prices by harassing sellers and dealers. The commission will have to determine the price locally first.

He said they will sit with the stakeholders concerned, including the BERC, to settle the issue soon.

Govt wakes up to oxygen crunch

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in hospitals and take steps where needed, the DG said.

Samuil Islam said central supply systems that use liquid oxygen tanks are used in 85 hospitals across the country and officials are working to get the system installed in 25 other hospitals. Oxygen cylinders are being supplied to 353 upazila-level hospitals.

The current daily capacity of liquid oxygen supply is 245 tonnes, 70 percent of which is locally produced, health officials said.

The government is assisting Linde, a major supplier, to import 240 tonnes a day using rail. Officials are also supporting Spectra to import oxygen from Singapore using ships.

"But our focus is on local production. We are trying to encourage the industrialists to set up their own plants in the country," Samuil said.

The DGHS has asked the suppliers to set up refilling stations close to public hospitals in every district.

Linde Bangladesh, a key supplier for public hospitals, yesterday imported 200 tonnes of medical oxygen by rail from India for the first time.

Ten tankers of the Oxygen Express arrived from Jamshedpur, India, via Benapole.

Oxygen is normally imported from India by road.

A Linde India spokesperson said the Oxygen Express was an initiative that Linde India worked on with the government of India.

The company will continue importing medical oxygen by rail to supplement local supplies.

Linde produces around 90 tonnes of

liquid oxygen per day at its two plants in Bangladesh, according to Linde officials.

Spectra also supplies around 90 tonnes every day to public and private hospitals. To meet the growing demands, Spectra officials told the government that they would bring oxygen from Singapore by ships.

Chattogram-based steel producers Abul Khayer Group and GPH Ispat have also been producing liquid medical oxygen since last year.

"We are producing around 30 tonnes of medical oxygen a day now," Imrul Kader Bhuiyan, senior manager of Abul Khayer Group's plant, told The Daily Star yesterday.

The plant can increase its daily production to 50 tonnes in two months, he added.

GPH Ispat, on the other hand, is producing 25-30 tonnes a day. Nazmul Islam, head of GPH Ispat's oxygen plant, said the daily production capacity can be boosted to 40 tonnes.

Officials of the two companies said they were not selling directly to government hospitals yet.

Meanwhile, KSRM, another steel producer, launched a plant on July 18, capable of producing around 24,000 cubic metres of oxygen to be used in cylinders.

WASTE OF OXYGEN

"The main issue is the lack of rational use of oxygen. In the high flow nasal cannula, the amount wasted is huge," Shamiul said, adding that the government is considering the use of Continuous Positive Airway pressure (CPAP) to lower the waste.

"If we use oxygen rationally,

the pressure on the oxygen reserve will be low and the supply will be uninterrupted. The government is also encouraging the use of breathing masks to lower waste," Shamiul said.

"Besides, oxygen released in the air of a room may cause fires. We have seen such accidents in Dhaka and Tangail," he added.

Health Minister Zahid Maleque recently said that the use of CPAP can save up to 100 tonnes of liquid oxygen a day. He also urged people not to use oxygen without consulting a physician because it is risky to store oxygen cylinders at home.

Regarding the use of CPAP, Muhammad Asaduzzaman, head of the Department of Critical Care at Kuwait Bangladesh Friendship Hospital in Dhaka, said, "Doctors and nurses have to be trained to operate the equipment. When the patient's physical condition is not stable, the machines need to be adjusted from time to time. CPAP can be used, but there is no alternative to training."

A CPAP machine increases air pressure in the throat so that the airway doesn't collapse when one breathes in.

The government will set up oxygen generators at different hospitals where a central supply system is not available.

"We are going to receive 29 machines from the Global Health Fund and the authorities are purchasing another 40. But installing the machines will take time," he said.

The health officials, however, say the efforts would not bear much fruit if people do not maintain health guidelines.

Dengue may add

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reported from outside the city.

Though most of the patients, who were hospitalised, have been released, at least 460 are still undergoing treatment at hospitals in the capital, and six outside it, the DGHS data shows.

The dengue infections are further complicating the Covid situation.

In 24 hours till 8:00am yesterday, 228 people died from the novel coronavirus and 11,291 got infected.

Covid has already claimed at least 19,274 lives and infected 11,64,635 people since the first cases were reported in Bangladesh in March last year.

Prof Md Nazmul Islam, director (Communicable Disease Control) at the DGHS, yesterday called upon all not to neglect dengue and made a request for taking cautionary measures.

In a virtual health bulletin, he said the government has adequate stocks of antigen kits for testing dengue at public medical college hospitals, and district and upazila sadar hospitals.

Tests at public facilities are free now, he said, urging people to go for tests early if there are symptoms of dengue.

Dengue is a mosquito-borne viral infection causing a severe flu-like illness. It can be fatal. The Aedes aegypti mosquito is the main vector that transmits the virus.

Destroying the breeding grounds, especially places and pots with clean water, is an effective way to fight dengue, experts say.

Probe body asks

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Shah Jalal swerve as the helmsman lost control, hitting the 17th pillar of the bridge, reads the probe report that was submitted to the BIWTC chairman yesterday.

At least 20 people on board the ferry were injured. At the time, 33 vehicles and about 500 to 600 were on board the ferry, which was relaunched recently after maintenance work.

The incident could have been avoided had the master and helmsman crossed the bridge through the 12th and 13th pillar, found the committee led by SM Ashiquzzaman, general manager of commerce of BIWTC.

Citing their report, a member of the committee said there can be a repeat of the incident if ferries cross the river through the Padma bridge due to the strong current in the monsoon season.

"So, we have recommended changing locations of the present terminal to avoid crossing the bridge," he told The Daily Star wishing not to be named.

Subsequently, shifting of the Banglabazar ferry terminal to Majhikandi or the Shimulia terminal to the old Mawa terminal has been solicited.

With the view to shortening the distance, the Bangladesh Inland Water Transport Authority (BIWTA) had shifted the ferry terminal to Banglabazar last year from Kathalbari.

The ferry terminal from Mawa was shifted to Shimulia in 2016 after river erosion endangered the previous site.

The travel time will remain almost the same after the change of terminals, said the committee member.

The committee also recommended operating the ferries in between the 4th and 12th pillars of the bridge as the velocity of current is relatively low there.

It also suggested operating relatively speedy ferries amid strong current and keep the slow-speed ferries out of operation during the monsoon, when the velocity of current tends to be high.

Abdur Rahman, the acting master of the ferry, was suspended on the day of the incident, while Saiful Islam, the helmsman of the ferry, was suspended yesterday after receiving the report, BIWTC Chairman Syed Md Tajul Islam told The Daily Star.

Departmental action would be taken against the two following due procedure, he said.

The committee has given several recommendations and those have been forwarded to the shipping ministry and the authorities concerned for implementation, Islam added.

Shafiqul Islam, project director of the Padma Multipurpose Bridge, told The Daily Star after the incident on Friday that no damage was apparently done to the pillar, but the officials were investigating.

But three days earlier, another ferry had hit another pillar of the bridge, which damaged the ferry.

Two similar incidents within a space of three days centring the long-cherished bridge that is being constructed at a cost of Tk 30,000 crore created huge discussion in social media and top government officials visited the spot on Saturday.

Meanwhile, Road Transport and Bridges Minister Obaidul Quader yesterday said the collision by the ferry did not cause any damage to the pillar, reports BSS.

Whether the collision was an accident or it is carried out as part of a purpose-oriented conspiracy is being looked into.

The weight of the ferry that hit the pillar was 1,284 tonnes. But as per the design of Padma bridge, every pillar can withstand a brunt of a 4,000 tonne-vessel going at 30 nautical miles speed, the minister added.

The 6.15-kilometre-long bridge is expected to be open to traffic in June next year.