

# Airborne transmissions could be the next new battle

NO STRINGS ATTACHED



AASHA MEHREEN AMIN

**T**HE latest report in *The Lancet*, one of the most well-known international medical journals, on how Covid-19 spreads, is a real shocker. It challenges many of the measures countries are taking to stop the spread of infections.

Now it's not just people sneezing or coughing without masks and thus throwing virus-carrying droplets on surfaces that should worry us, but whether someone carrying the virus including the asymptomatic, has been exhaling, speaking, singing or shouting in a closed space that you happen to walk into. *The Lancet* report by six experts, says that there is ample evidence to suggest that the SARS Cov 2 is an airborne pathogen that could stay infectious in the atmosphere as aerosols for up to three hours since emission from a carrier. The report's writers have said that 33 percent to 59 percent of all coronavirus cases can be attributed to the asymptomatic or pre-symptomatic transmission without the infected person coughing or sneezing (*Business Today*, India, April 23).

There is worse news. The pathogen has been detected in air filters and building ducts in hospitals with Covid-19 patients in them which corroborates the aerosol theory.

The writers of the report say this could explain the unprecedented spread of infections in many apparently "controlled" situations—such as persons quarantining in hotels in adjacent rooms getting infected without even meeting each other. The report findings include cases of hospital staff becoming infected despite wearing PPE and all other protective gear that should protect them from pathogen containing droplets. Because it's in the air! And it is spreading faster indoors than outdoors according to this report.

This horrifying scenario that was being speculated by researchers as far back as last year and that the world decided to ignore, could change the way we are trying to stay safe. The writers of the report—scientists from the US, UK and Canada say that indoor transmissions are more common especially in poorly ventilated areas. They suggest opening the windows and making sure indoor spaces

are well ventilated, going outside as much as possible—getting some sun and fresh air.

One cannot help but think of the tiny back to back rooms in our slums inhabited by whole families, the hostels for students and working professionals, many apartment buildings, even offices where windows cannot be opened—all potential welcoming hosts to the virus.

*The Lancet* Covid-19 Commission's India Task Force, while not supporting blanket lockdowns, has recommended a two month ban on all indoor public gatherings to break the chain of transmission. India is seeing

There are just too many people everywhere—inside and outside. Which is why it is so difficult to enforce health protocols like social distancing. As we have seen, despite the strong directives for public transport to keep spaces between passenger seats, it has been virtually impossible to maintain, because there are too many people waiting for too few vehicles—and they have to go to work to feed themselves. So they rush in, shoving aside any attempts to keep them out. The same is true for indoor kitchen markets that have poor ventilation and are usually teeming

the fight against the virus is proving with economic survival and hunger on one side and death from the virus on the other.

So what can we realistically do? Since SARS Cov 2 and its innumerable variants will continue to ravage humankind the only thing we can do is listen to the science and try our best to follow its advice. The primary line of defence against this invisible enemy is the body's own defence system. Thus building the body's immunity should be the number one priority. Doctors recommend eating freshly cooked food as opposed to processed food that contain high levels of preservatives and are low on nutrition and anti-oxidants. Losing excess weight is also beneficial as individuals who are overweight or obese are at risk of developing severe conditions if infected. We need regular exercise at least 30 minutes of it, say doctors, seven to eight hours of sleep, some sun exposure if possible and consume Vitamin C and D rich foods or failing that, supplements to boost immunity. Such guidelines, need to be made more public and not restricted to the privileged sections.

The conclusion of the *Lancet* report, that the pathogen could be airborne, demands that policymakers take urgent steps. In addition to getting more ICU beds and central oxygen supply systems in public hospitals which are acutely inadequate or non-existent—proper ventilation systems have to be installed (systems used in hospitals in other countries

can be used as models) and existing air ducts and vents have to be regularly cleaned, filters replaced and touch points sanitised. Private hospitals that actually have the money to do this have to invest in cleaning up the air ducts and vents. This applies to shopping malls, hotels and office buildings.

As vaccines seem to be another important protective measure despite some reservations regarding their efficacy in fighting new variants, the desired goal of 70 percent of the population being vaccinated has to be achieved within the stipulated time—by making registration accessible to everyone. This means sourcing the vaccine from other countries (that will actually deliver on their commitments) as well as getting the formula to manufacture locally—both of which seem to be underway but should have been started many months ago. Testing and contact tracing has to be ramped up drastically to get the real picture and to isolate and treat if necessary, those who are positive and prevent them from spreading the infection. This requires testing to be affordable if not free for low-income groups.

There has to be more investment in research to find out more about the pathogen that is constantly mutating. We have dedicated scientists and graduates who are already researching the virus—these are the people who need to be supported by government and private enterprises. We also need more data on why there is less spread of the virus (till now) in the villages—could it be because people are mostly outside and also get a lot of sun exposure? Or because they are physically active and eat little but fresh food? All this requires a dramatic increase in the government's health budget as well as its commitment to combat the virus rationally and with foresight.

*The Lancet* report has given the challenge of fighting this battle a new spin—one that has revealed the added vulnerabilities of our hospitals, offices, homes and other indoor spaces in our crowded cities. It also reiterates the cost of large gatherings especially in indoor settings that must be stopped for now. We must devote all our energies and resources to reduce these vulnerabilities in order to fight a virus that seems to be viciously outwitting every new effort to contain it.

Aasha Mehreen Amin is Head of Editorial and Opinion, Senior Deputy Editor, *The Daily Star*.



Hospital employees in Wuhan, China seal an airvent to prevent possible airborne transmission of the new coronavirus.

PHOTO: AFP

an unprecedented surge in infections and deaths with daily infection rates over 3 lakhs and daily deaths over 2,000 on April 22. The Task Force has attributed the surge to mass gatherings such as religious festivals, political events like the state elections, weddings and sport events (*India Today*, April 17). The Commission has recommended a ban on indoor gatherings larger than 10 people, a closure of cinemas and stadiums.

So what about us? For a city with 21.7 million people—this latest explanation for the speed of transmission points to just how precariously we exist because we have allowed such untenable population densities in our cities.

with people. In those situations, wearing masks seems the only doable precautionary measure which still exposes people to airborne transmission.

The government has imposed lockdowns which may stop some people from crowding the streets, but will it stop the spread indoors? How many people have windows to open? Where is the fresh air? How can we go outside to open spaces? There are no open spaces in Dhaka only spaces filled with people.

Now that the government has announced that shops and malls are allowed to open from today, what is going to happen if people rush in for Eid shopping?

Thus, yet again we see how complex

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## Saving the future through sustainable development

QUAZI TAFSIRUL ISLAM

**W**E are running out of many essential resources needed to support life on this planet. Many valuable resources like Antimony, Lead and Indium used in renewable energy solutions are forecasted to run out by 2030. Many other minerals or metals we mine or extract will be on the verge of complete depletion in another decade or two. A report published in March 2021 titled "Global Trends 2040" by the US National Intelligence Council also identifies climate change and the chain events of climate change to be significant challenges for the next two decades.

Bangladesh is on a growth streak. In the past few years, we have claimed and achieved steady growth but with such fast growth comes great responsibility. The development we seek to achieve comes at a cost. Bangladesh is unique to have realised the cost of development, as we remain extremely vulnerable to climate change and its impacts. As we are also one of the most densely populated nations on the planet, we must pay attention to using the natural resources that we have so far taken for granted. 160 million residents of this nation have a responsibility, the responsibility to ensure sustainable development, which means we shall meet our own needs without compromising or ignoring the needs of future generations.

The conventional profit-driven business model has changed in many aspects in the past decades. The triple bottom line concept insists that businesses should be concerned about profit, planet and people. Sustainability should be prioritised in the environmental, economic and social fronts. That is, achieving economic growth through optimum use of resources without compromising standards on decision criteria that might put our planet and its future at risk. This means we need to consume natural resources at



A man on a boat collects plastic materials from dirty water in Dhaka, Bangladesh, April 17, 2019.

PHOTO: REUTERS

a sustainable rate—a rate which will allow our planet to heal itself and replenish the resources without creating a shortage. This means that businesses need to address and be considerate of our overall social wellbeing.

In 2015, the United Nations also identified a set of 17 goals that are to be met by 2030 that oversees the overall wellbeing of people, community and the planet and drives us all towards a sustainable future. As Bangladesh graduates from the LDC status, we need to engage in certain activities to acknowledge and address many of the challenges of becoming a consumer

economy. There has been a strong correlation between consumption and the creation of waste, especially plastic waste. In Dhaka, the plastic footprint per person per year is above 20kg. This volume is expected to grow further as consumers have more expendable income. Nevertheless, this is only one challenge associated with growth in the arena of sustainable development.

Organisations need to step up and make changes as well. Many of the renowned global restaurant chains that operate in our neighboring countries act in a much more responsible manner when packaging their food, avoiding plastic

and replacing them with wood, bamboo shoot, or paper alternatives. However, that is not how they operate in Bangladesh. Every small step counts. Businesses need to start with small steps to gradually raise awareness among people and finally create a scenario where consumers are responsible and other stakeholders, including the government, are motivated to take necessary steps to address the relevant issues.

Our people have historically not been very responsible when it comes to these issues. Consumers need to be made aware of the challenges of tomorrow and the price to be paid by our future generations. Universities, colleges and schools can play a major role in educating young people on the importance of sustainability.

Many requirements, regulations, and legislation that are in place in the European Union are not in place in our country yet. While not all of those green markers are feasible in an economy like ours, small-scale accountability mechanisms for businesses should be in place. Introducing organisations to the idea of extended producer responsibility, where businesses are held responsible for the disposal of post-consumer products or waste materials, can create new avenues—and it has proven to be quite successful in curbing plastic waste. This can gradually change the mindset among decision-makers on the business side as well.

While there is no common consensus on whether we are past the point of no return to acting responsibly to replenish the earth's resources, global climate changes and fluctuations are evidence that we are not very far either. The sooner these ideas are incorporated in the decision-making processes of consumers, businesses, and legislators, the better chances we will have to have a future worth saving.

Quazi Tafsirul Islam is Researcher, Lecturer of Strategy, Management & HR, Department of Management, School of Business & Economics, North South University.

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**QUOTABLE Quote**

**KARL BARTH**  
Swiss theologian (1886—1968)

*Joy is the simplest form of gratitude.*

**CROSSWORD BY THOMAS JOSEPH**

**ACROSS**

- 1 Oboists' needs
- 6 Striped grazer
- 11 Baffled
- 12 Bring to bear
- 13 Deadly
- 14 Throe
- 15 Completely
- 17 Reservoir maker
- 19 Wall climber
- 20 Vacuum's lack
- 23 Pal of George and Jerry
- 25 Undiluted
- 26 Setter's siblings
- 28 Good pair
- 29 Made over
- 30 "For sure!"
- 31 Vase item
- 32 Got together

**DOWN**

- 1 Brit. fliers
- 2 H lookalike
- 3 Rough guesses
- 4 College head
- 5 Soup cracker
- 6 Full of flavor
- 7 Trade show
- 8 Arthur of "Maude"
- 9 Reading and

others: Abbr. 10 Cash dispenser 16 Invade 17 Hold up 18 Tea party crasher 20 Mechanizes 21 Peace goddess 22 Bowler's button 24 "a deal!" 25 Spot to jot 27 Busybody 31 Store patron 33 Appropriate 34 Dance party 35 Keg need 36 Need to pay 37 Braille bit 39 Hot blood 40 TV's "Science Guy" Bill

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**FRIDAY'S ANSWERS**

S	C	I	F	I	R	A	D	I	O
T	O	N	I	C	R	A	D	I	O
A	R	O	S	E	O	D	I	S	T
M	O	R	T	C	A	S	T	L	E
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T	R	E	E	I	A	G	O		
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**BEETLE BAILEY** BY MORT WALKER

**BABY BLUES** BY KIRKMAN & SCOTT