

AI stethoscope detects heart issues in seconds and analyse subtle differences that the human ear cannot detect

STAR HEALTH DESK

Doctors have developed an artificial intelligence (AI)-led stethoscope that can detect three serious heart conditions in just 15 seconds, The Guardian reported.

The new device, created by researchers at Imperial College London and Imperial College Healthcare NHS Trust, is able to identify heart failure, atrial fibrillation (abnormal heart rhythm), and heart valve disease almost instantly.

Unlike the traditional stethoscope, invented in 1816, this upgraded version records both heart sounds and electrical signals, which are then analysed by AI algorithms through cloud technology.

According to the report, a trial involving about 12,000 UK patients showed remarkable results. Those examined with the device were twice as likely to be diagnosed with heart failure, three times more likely to be diagnosed with atrial fibrillation, and nearly twice as likely to be diagnosed with valve disease compared with standard checks.

The device, manufactured by California-based Eko Health, replaces the traditional chest piece with a device around the size of a playing card and connects to smartphones to transmit results. It uses a microphone to analyse subtle differences in heartbeat and blood flow that the human ear cannot detect.

It takes an ECG (electrocardiogram), recording electrical signals from the heart, and sends the information to the cloud to be analysed by AI trained on data from tens of thousands of patients.

Experts believe it could reduce hospital admissions by enabling earlier diagnosis in community clinics.

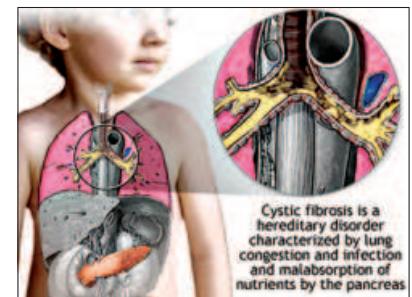
DR RAHAT BIN HABIB &
PROF DR ARM LUTHFUL KABIR

Every year on 8 September, the world observes Cystic Fibrosis (CF) Day to raise awareness, share experiences, and call for better care for people living with this chronic genetic disease.

CF affects the lungs, digestive system, and other organs by producing thick, sticky mucus that blocks airways and ducts, leading to repeated lung infections, poor absorption of nutrients, and gradual respiratory decline.

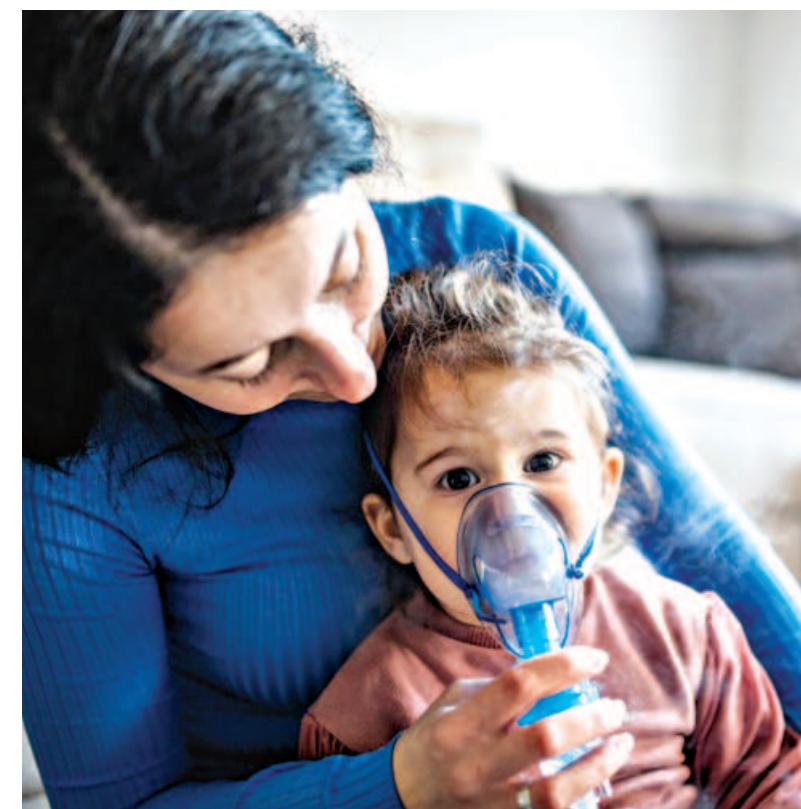
Globally, more than 162,000 people in 94 countries live with CF, but about 35% remain undiagnosed. In developed countries, advances in screening, specialist care, and CFTR modulator therapies have extended life expectancy beyond 45 years. In Bangladesh, CF is still under-recognised and often mistaken for asthma, tuberculosis, chronic bronchitis and recurrent pneumonia.

A landmark study in Bangladesh by Prof Luthful Kabir and colleagues,



using an indigenously developed sweat test, provided the first large-scale insight into the disease in children.

Among 95 suspected cases, symptoms began at an average of 16.9



months, yet diagnosis was delayed for years. Every child had a chronic wet cough, 90.5% had breathing difficulties, and many showed digital clubbing, chest crackles, or thick sputum.

Lung scans revealed bronchiectasis in 60% and pan-sinusitis in 89%, while 37% had signs of malabsorption and 87% were severely underweight. Our experience from more than 300 cases confirms CF exists in Bangladeshi children across all ethnic groups.

Unfortunately, many still believe it is a Western and Caucasian disease, leading to years of misdiagnosis and maltreatment. Globally, treatments

like Trikafta and gene therapy are changing lives, but in Bangladesh, these medicines are not easy to obtain.

On CF Day 2025, we must act—through awareness, early screening, a national registry, and better treatment access—so that no child suffers from this disease when it can be easily diagnosed.

The writers are Assistant Professor (Paediatrics) at Saeed Sayed Nazrul Islam Medical College, Kishoreganj, Bangladesh, and Professor & Head (Paediatrics) at Ad-Din Medical College, Mogbazar, Dhaka, Bangladesh, respectively. Email: ssmcdmc@gmail.com



STOP BULLYING
No one heals by wounding others

AYANA FARUK PURNOTA

Bullying is a negative behaviour that harms individuals physically or psychologically. It includes hurting, intimidating, or dominating someone perceived as weaker. Bullying can occur anywhere—schools, playgrounds, neighbourhoods, or online—but is most common in schools.

Forms of bullying include:

1. Physical – Aggressive violence for no reason.
2. Verbal – Hurtful speech that leaves the victim distressed.
3. Social – Spreading lies or rumours to ruin reputations.
4. Cyber – Online harassment through digital platforms.
5. Sexual – Unwanted explicit behaviour.
6. Racial – Offensive remarks about race, religion, or nationality.
7. Disability – Mocking physical or mental conditions.

Research shows about 20% of students aged 12–18 are bullied—often unreported. Boys face more physical bullying; girls face more social bullying. In the Philippines, the rate is 65%. Victims may suffer from isolation, depression, anxiety, poor sleep, or loss of interest.

Why do people bully? They may have been victims themselves, acting out of pride, fear, or jealousy.

What can we do? Tell a trusted adult, avoid unsafe areas, use helplines, think before posting online, and stand up for others. Resolve conflicts peacefully.

Role of elders: Listen, support, monitor friendships, and encourage hobbies. Schools must enforce anti-bullying rules and train staff to respond appropriately.

Let us choose kindness and create a safe, respectful world for all.

The writer is a health activist.

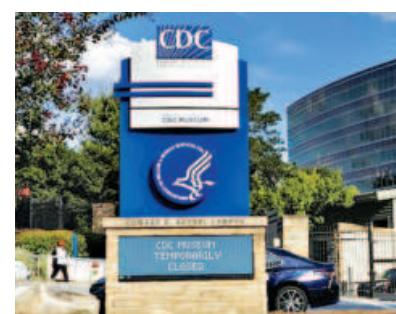
WHO urged protection of CDC's public health excellence

STAR HEALTH REPORT

The World Health Organisation (WHO) called for the protection of the U.S. Centres for Disease Control and Prevention (CDC), emphasising its vital role in global public health.

"No institution is perfect, and continued improvements are always needed to make sure the latest science and evidence is applied to emerging challenges in real time, but the work of the US CDC has been invaluable and must be protected," WHO Director-General Tedros Adhanom Ghebreyesus stated in a post on X (formerly Twitter).

His remarks came amid leadership changes at the CDC and rising concerns that decisions by U.S. Health Secretary Robert F Kennedy Jr could jeopardise public health in the country. Ghebreyesus did not



The Center for Disease Control and Prevention (CDC) main campus in Atlanta, Georgia, U.S.

comment on those concerns or echo calls for Kennedy's resignation.

Instead, he highlighted how the CDC's longstanding reputation as a "centre of excellence" had inspired countries worldwide to adopt its

best practices.

He noted that the WHO's long-term collaboration with the CDC had allowed both U.S. citizens and global communities to benefit from cutting-edge American science, while also giving the U.S. access to crucial global health data, alerts, experience, and guidance.

Ghebreyesus's comments underscored the need to shield scientific institutions from political interference and ensure they continue to serve public health interests effectively.

The Trump administration has been critical of the WHO for its handling of COVID 19, with Kennedy dismissing the organisation as "morbidity."

In January, Trump ordered the United States to leave the WHO.

Source: World Health Organisation

WORLD PHYSIOTHERAPY DAY 2025

The role of physiotherapy and physical activity in healthy ageing

DR M EASIN ALI

Every year, on 8 September, World Physiotherapy Day is observed globally. The aim is to raise awareness about the importance of physiotherapy, highlight the contributions of physiotherapists, and promote its positive effects on physical, mental, and social well-being.

The theme for 2025 – "The role of physiotherapy and physical activity in healthy ageing: preventing frailty and falls" – emphasises the health challenges of ageing and the critical role physiotherapy plays in addressing them.

With increasing age, physical strength, muscle performance, bone density, and balance tend to decline, leading to:

- Muscle weakness – making daily tasks harder
- Bone fragility – raising risk of



falls and fractures

- Reduced balance – a major risk for injury
- Chronic illnesses – arthritis, diabetes, and hypertension become more prevalent

About 30–40% of people over 65 experience at least one fall annually. These can cause serious injuries, loss of independence, and social isolation.

Physiotherapy is vital not just for rehabilitation but also for prevention. It supports healthy, active ageing and helps maintain independence.

Physical activity benefits not only muscles and bones, but also mental alertness and social interaction. A physiotherapist-guided exercise plan ensures safe and effective outcomes.

Prevention is better than cure. To age healthily, exercise daily, eat a balanced diet, get adequate rest, have regular check-ups, and follow

physiotherapist-recommended routines.

Older adults carry wisdom and tradition. Keeping them healthy benefits families and society. Physiotherapy helps them remain active, independent, and valuable contributors to their communities.

Access to physiotherapy remains limited, especially in rural areas. Solutions include awareness campaigns to educate families and communities, training more physiotherapists, and community programmes offering regular physical activity and therapy services.

Physiotherapy ensures physical ability, mental well-being, and social participation for older adults. It must be integrated into mainstream healthcare. With regular physical activity and physiotherapy, our elders can enjoy active, independent, and fulfilling lives.

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Expanding financial access to empower small entrepreneurs

The Daily Start (TDS): How have NRBC's financial products supported small entrepreneurs, particularly women and rural business owners, in accessing credit and building resilience?

Dr. Md Touhidul Alam Khan (DMTAK): NRBC Bank is committed to promoting financial inclusion by offering collateral-free microloans that are easily accessible to rural and women entrepreneurs. Since March 2021, we have disbursed approximately BDT 1,500 crore to over 52,500 entrepreneurs. Our NRBC "Sukhi Bangla" product enables new and unbanked entrepreneurs to open accounts with as little as BDT 10 to BDT 100, with minimal documentation requirements.

In remote regions such as chars and haors, we provide loans up to BDT 50,000 at an interest rate of 7 percent, mainly targeting women, without the need for collateral. Additionally, in partnership with the Jayeeta Foundation, we offer women entrepreneurs access to loans up to BDT 50 lakh at a 5 percent interest rate.

TDS: What innovative financial tools or partnerships have emerged to expand inclusion and affordability in underserved markets?

DMTAK: To reach marginalised groups in remote areas, NRBC Bank has launched Sub-Branch Banking, leveraging technology to deliver comprehensive banking services at lower costs. Our Planet App has further simplified banking, allowing customers to perform transactions from the comfort of their homes. This innovative approach helps eliminate barriers and encourages greater participation in the formal financial system.

We have also formed strategic partnerships and developed products to promote financial inclusion with some organisations to support marginalized communities through increased

financial access, market linkages, and digital village initiatives. Our participation in the 'Banker-SME Women Entrepreneurs Fair' increased visibility for women-led businesses. Additionally, we introduced nano-credit and app-based services to make banking more affordable for low-income users, extending financial access to areas that were previously excluded from formal finance.



Dr. Md Touhidul Alam Khan, FCMA
Managing Director and CEO, NRBC Bank PLC

TDS: How do you evaluate the success of your financial inclusion initiatives and what metrics guide future investment and outreach?

DMTAK: We measure our success by the number of entrepreneurs supported, the volume of loans disbursed, the geographic spread of our services, and the affordability of our financial products. Recognition also contributes to our assessment. For instance, NRBC Bank was named the Fastest Growing Microfinance Bank in 2022 by 'Global Economics' in the UK.

This content has been published under 'Catalyzing Markets' – a media campaign jointly initiated by iDE and The Daily Star. This interview is conducted by Md. Zahidur Rabbi

iDE, a global nonprofit organisation in 12 countries since 1984, drives poverty reduction through market-driven solutions in Bangladesh, scaling agriculture, WASH, climate resilience, clean energy, and women's empowerment.