DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE Day

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How AI can be optimised for better healthcare

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Modern medicine has built an extraordinary depth of knowledge. However, how much of that knowledge can reach the patient who needs it now? The answer has traditionally depended on the number and distribution of trained clinicians, the institutions in which they work, and the systems that connect them to patients. All three are difficult to expand quickly. For India, which is still expanding its healthcare capacity while its disease burden becomes more complex, the question of how far health expertise can reach is particularly consequential.

Here, Artificial Intelligence (AI) introduces a new dimension. It offers a way of taking the accumulated knowledge and making more of it available at the point of care. The change is visible across major health systems. In January 2025, the U.S. Food and Drug Administration (FDA) said it had authorised more than 1,000 AI-enabled medical devices. These include tools used in radiology, cardiology, and other areas of diagnosis. In the U.K., the NHS issued a guidance in April 2025 for the use of AI-enabled ambient scribing. By January 2026, the country was developing a national programme to support wider adoption, with early evidence suggesting that the technology could give doctors up to a quarter more time with their patients.

These examples point to a wider change. AI is moving out of innovation teams and into consultations, diagnostic workflows, and hospital operations. The real work now lies in making it dependable enough for routine use.

The economic benefits

India has its own set of challenges. Specialist care remains concentrated in larger cities, while chronic conditions require patients to be monitored over many years. Hospitals are also managing rising volumes without being able to increase clinical capacity at the same pace.

An AI tool that helps prioritise a radiology scan, alerts a care team to a deteriorating patient or supports a physician handling a complex case in a smaller city can make existing capacity work more efficiently.

The country has already built much of the digital foundation required for this shift. By May 2026, more than 100 crore health records had been linked to the Ayushman Bharat Health Accounts, twice the number recorded in February 2025. A July 2026 government update reported that the Ayushman Bharat Digital Mission (ABDM) Scan and Share service had reduced outpatient registration waits at participating hospitals from around an hour to between two and five minutes. These improvements did not require a dramatic reinvention. It came from removing friction from a familiar hospital process. AI can extend the same principle to appointment scheduling, clinical documentation, claims, inventory planning, and discharge management. Each task takes time away from care if handled poorly.

Additionally, the financial benefits from using AI is becoming harder for healthcare providers to ignore. A January 2026 McKinsey analysis estimated that applying AI across healthcare revenue-cycle operations could reduce the cost to collect by 30% to 60%. For hospitals, these gains can free resources for clinical teams, equipment and capacity. They can also reduce administrative work that contributes to staff fatigue.

There is yet another part related to the business side that receives less attention. AI can help providers offer services that were previously difficult to deliver at scale. Remote monitoring can extend care beyond discharge. Risk-based preventive programmes can identify people who need attention before symptoms become severe. Virtual specialist support can connect smaller hospitals with expertise located elsewhere. Diagnostics can be taken closer to communities, while hospitals maintain an ongoing relationship with patients managing diabetes, cardiac disease or cancer.

A January 2026 McKinsey analysis estimated that applying AI across healthcare revenue-cycle operations could reduce the cost to collect by 30% to 60%

Judicious use

These models create revenue, but their value does not come from selling more technology. It comes from reaching patients earlier and avoiding preventable deterioration. This is also where restraint matters. A system that performs well in one hospital or population may not work equally well across India's States, disease patterns, and care settings. Clinical validation, representative data, and human oversight also need to be seriously considered. The FDA's September 2025 call for better methods to evaluate AI-enabled devices in real-world settings reflects a concern that every health system will have to confront. The tools' performance at launch does not guarantee performance over time.

Healthcare does not need AI everywhere. It needs it where delays can be reduced, clinicians can make better-informed decisions, and more patients can receive appropriate care. As India marks another year of Independence, there is a larger dimension to this conversation. The economic strength of a nation ultimately rests on the capabilities of its people. Healthcare therefore belongs within the architecture of economic development. India has built considerable physical and digital infrastructure over the decades; the next phase of development will depend increasingly on the health, longevity and productivity of its population. AI can contribute by making expertise widely available and by shifting healthcare towards earlier detection and continuous management.

The economic return on AI in healthcare will be measured not by the number of systems deployed, but by the number of lives touched and its impact on human life and happiness.

Girls conditioned from childhood to take up domestic burden

The time women spend on housework begins to rise around the age of 10 and reaches a peak of nearly 460 minutes a day around age 30

DATA POINT

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In a recent interaction with women aspiring to become entrepreneurs in rural Haryana, it was found that other than social and cultural norms, the biggest practical problem constraining the women's ability to do more paid work was that a large share of their time was tied up in cooking and completing household chores. Strikingly, their daughters, rather than their sons, were already sharing this burden by helping them in the kitchen and other chores. The next generation, it seemed, is already learning to reproduce the gender gap in invisible, unpaid work.

India's Time Use Survey (2025) highlights that the division of labour that emerges in adulthood begins much earlier, through childhood conditioning. What starts in childhood widens with age, reaching its peak in the prime working years (Chart 1).

The time women spend on housework begins to rise around the age of 10 and continues through the late teens and twenties, reaching a peak of nearly 460 minutes (7.5 hours +) a day around age 30. The male curve, however, never crosses 65 minutes at any age between six and 75. Adolescence, in this sense, is not separate from adulthood; it is when the adult pattern begins to take shape (Chart 1). Data shows that at age six, Indian boys and girls spend almost the same amount of time on domestic and care work at about five minutes a day (Chart 2). Their trajectories remain relatively close through early childhood. Thereafter, however, they diverge sharply.

Around age 10, the girls' curve begins to pull away. Girls spend about 15 minutes a day on domestic and care work at age 10, 75 minutes at 15, and around 130 minutes by age 17. Boys, meanwhile, move from roughly five minutes at age six to only about 17 minutes by the end of childhood. The result is a dramatic widening of the gender gap. The girl-to-boy ratio in unpaid work rises from 1.6 among children aged 6-9, to 4.5 among those aged 10-14, and to 7.5 among adolescents aged 15-17.

Little control over time

The cost is leisure. Between ages six and 17, girls' housework rises by roughly 124 minutes a day, while their leisure time falls by around 115 minutes. For boys, the decline in leisure is much smaller but the time they spend on housework changes relatively little.

This matters because the cost of girls' domestic work is often framed primarily as a trade-off with schooling and education. But data shows that girls, in fact, are spending slightly more time on learning than boys at most ages. They, therefore, remain in school but still pay a substantial price in leisure time that could be spent on sport, friendships, rest, exploration and simply having discretionary control over their own time. These are not economically irrelevant activities. They are part of how children build confidence, social networks, physical capability and even a sense of agency, all of which influence their ability to build career trajectories later in life (Chart 2).

Cooking lies at the centre of this divergence (Chart 3). Among adolescents aged 15-17 years, 42.4% of girls report cooking, compared with only 2.9% of boys. Girls in this age group spend close to an hour cooking, while boys spend just two minutes. Cleaning and laundry also become increasingly gendered, with wide gaps in both participation and time spent. The only tasks where adolescent boys match or exceed girls are farm work and shopping; activities that are more outward-facing (the field and market), rather than inward-facing into the kitchen.

Between childhood and adulthood, therefore, girls are being trained for the household while boys are being trained for the world outside. This helps explain why childhood conditioning can later appear as an 'efficient' gendered allocation of household work.

One of the clearest manifestations of these gendered expectations is women's absence from the labour force. In the 2025 PLFS, childcare and domestic responsibilities were the single most-cited reason women gave for staying out of the labour force, reported by 52.5% of urban women and 40% of rural women, compared with less than 1% of men.

Most policy interventions address women's unpaid work in adulthood through childcare, community kitchens, safe mobility infrastructure, flexible work and social protection, among others. But the Time Use Survey suggests that policy must also start much earlier, by addressing the unequal assignment of domestic work between boys and girls.

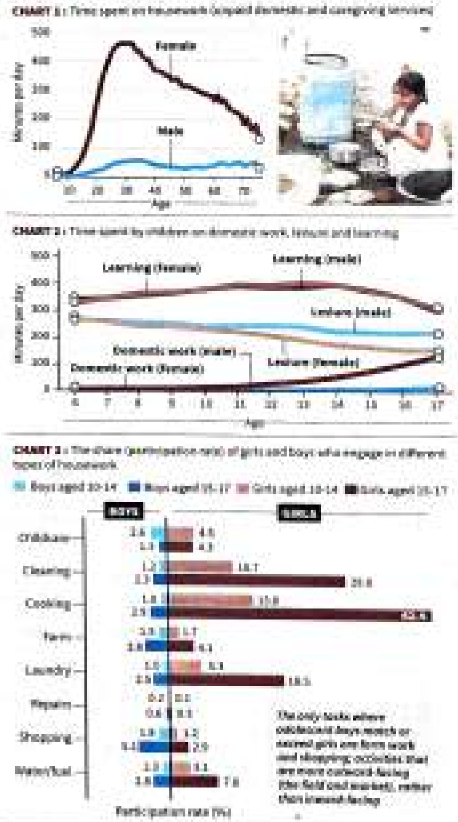
The objective is not to remove domestic work from children's lives, but to remove its gender assignment. Schools can help by giving every child, boy or girl, equal opportunities to learn practical life skills, from cooking and home management to stitching, carpentry and financial management.

India has invested heavily in keeping girls in school and improving their educational outcomes, but equal attention must be paid to what happens to their time outside school. Otherwise, by the time young women enter the labour market, years of gendered conditioning and unpaid work may already have narrowed their choices. If we want a different workforce tomorrow, we may need to start by giving boys and girls a different childhood today.

Authors work at the Indian Council for Research on International Economic Relations (ICRIER). Views expressed are personal

Disproportionate burden

The data for the charts were sourced from India's Time Use Survey (2025) and the Ministry of Statistics and Program Implementation (MoSPI)



FROM THE ARCHIVES

The Hindu.

FIFTY YEARS AGO AUGUST 17, 1976

Water supplies dry up in U.K.

London, August 16: The possibility that Britain, an island normally drenched by Atlantic rains, may have to import drinking water is now being seriously studied by planners, according to informed sources.

With no sign of a let-up in the country's worst drought since 1727 when records started officials recognise that such drastic action as importing water by ship from Scandinavia and distributing it by tanker lorries may become necessary.

Water supplies are rapidly drying up and a million homes in South Wales already have water cut off at night. From next month, people in parts of Western England will have to queue at stand-pipes for supplies.

Strict rationing starts in the Channel Island of Jersey to-day and has been in force in neighbouring Guernsey Island since a state of emergency was declared in June. Without such measures water would run out in six weeks.

After revelling in an untypically dry and glorious summer, Britons are now waking up to the prospect that if the rains stay away through the autumn they could be in for a winter of hardship with food and industrial production hit.

All 10 water authorities in England and Wales have promptly told the Government that they will be applying to use powers made available under the Drought Act. Three authorities covering North East, South, West and the whole of Wales are demanding the right to cut off water to homes whenever they wish.

A HUNDRED YEARS AGO AUGUST 17, 1926

Manchester cotton trade

London, August 16: The Federation of Master Cotton Spinners Association has inaugurated a scheme for the protection of American Spinning Section of the trade from undercut selling. "Basic prices" which are in effect minimum prices, are fixed for a standard quality of American cotton and beams. Salesmen of the Manchester Exchange representing firms producing these yarns have been instructed to quote prices coinciding with the Federation's list. The elimination of cheap sellers seems only a matter of time if the Federation members stand together. The Federation and Non-Federation concerns have promised loyal support.

A DOSE OF TRUST

In February, India rolled out a critical public health initiative aiming to vaccinate adolescent girls against cervical cancer. Progress has been uneven so far. **VIDHEESHA KUNTAMALLA** made a spot check at Delhi government schools across the Capital.

THE FIRST student in Sarvodaya Kanya Vidyalaya in South Delhi's Fatehpur Beri to take the HPV vaccine was made class monitor.

It was an unusual reward for taking an injection. [illegible]

1.15 CRORE

PM Narendra Modi launched a nationwide free HPV vaccination programme, targeting about 1.15 crore annually in February. By June, nearly 50 lakh were vaccinated.

[illegible]

Response on the ground

[illegible]

The bottlenecks

[illegible]

The stakeholders

[illegible]

• Timeline

[illegible]

• The numbers: Cervical cancer's burden

Year	India: Estimated cases	India: Deaths	Delhi: Estimated incidence	Delhi: Estimated mortality
2019	–	32,246	–	–
2020	–	33,095	–	–
2021	77,000	33,938	900	426
2022	77,435	34,806	767	414
2023	77,659	35,691	781	408
2024	[illegible]	–	778	387
2025	[illegible]	–	800	[illegible]

• Estimated cervical cancer deaths, 2025

INTERPRETATIONS OF MALADY

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H1N1 or flu: Fever is done but why does weakness remain?

Fatigue, body ache or a return of fever after an illness may be part of recovery

A PATIENT RECENTLY came to the clinic after recovering from a viral fever. The fever had settled, the initial tests were no longer concerning and he had started going back to work. But he was still feeling unusually tired. On some days, he felt almost normal. On others, even routine activity left him exhausted. A few days later, he developed body ache and a mild fever again. His immediate concern was that the first infection had returned.

This is a situation that can be confusing for patients, particularly during the monsoon, when dengue, chikungunya, influenza, H1N1 and other infectious microbes can circulate at the same time. The symptoms can overlap and recovery is not always a straight line.

Fever is one of the most visible signs of an infection, so people often use it as a measure of recovery. Once the temperature becomes normal, they expect their energy to return as well. But the body may take longer to recover. During an infection, a person may eat less, lose fluids, sleep poorly and remain physically inactive for several days. The immune response to the infection also takes time to settle. As a result, weakness, poor appetite, body ache and reduced stamina may continue even after the fever has gone. This does not mean that the infection is still active. A negative test is reassuring, but it is not a measure of how quickly the body has regained its strength.

Why then do some patients feel better and then worse again? One reason is that people often return to their routine too quickly. After several days of illness, a person may feel better for a day or two and resume full working hours, exercise or travel. The following day, the fatigue may become much more pronounced.

GETTY IMAGES

A person recovering from one viral infection can still be exposed to another. Somebody may be diagnosed with viral fever and later test positive for dengue

This can feel like a relapse but sometimes it is simply the result of doing more than the body is ready for. A gradual return to activity is therefore important. Strenuous exercise should not be resumed simply because the fever has disappeared.

Many are not aware a new infection is possible. This is where overlapping infections become important. A person recovering from one viral infection can still be exposed to another infection. Seasonal infections may produce similar early symptoms such as fever, body ache, headache and fatigue. It can, therefore, be difficult to determine from symptoms alone whether someone is still recovering or has developed another illness. Government guidance also notes that one infection does not necessarily exclude another, and co-infections can occur.

For example, a patient may recover from influenza, return to work and then develop fever again after a fresh exposure. Another person may initially be diagnosed with a viral fever and later test positive for dengue. These situations need clinical assessment rather than assuming that every recurrence of weakness is simply "post-viral fatigue."

There is another reason why a returning patient should not simply be reassured because the fever has come down. In dengue, the period when the fever starts settling can be important. The critical phase generally occurs around this time in patients who develop complications. Warning signs include persistent vomiting, severe abdominal pain, bleeding, increasing drowsiness, difficulty breathing, restlessness or reduced urine output. These symptoms require prompt medical evaluation.

Platelet count is also not the only measure of recovery in dengue. Hydration, blood pressure, haematocrit (percentage of your blood that is made up of red blood cells and is evidence of plasma leakage) and the patient's overall clinical condition are important in deciding how the illness is progressing.

If there is no evidence of a continuing or new infection, the focus is usually on recovery. Adequate sleep, regular, balanced meals, sufficient fluids and gradual physical activity are important. It is also important not to start antibiotics simply because fatigue continues. Antibiotics do not treat viral infections. Steroids and other medicines should similarly not be taken without a clear medical reason. Most people improve gradually. But persistent or worsening symptoms deserve reassessment. A returning fever, breathlessness, chest discomfort, repeated vomiting, fainting, confusion, reduced urine output or a significant deterioration in general health should not be dismissed as weakness after a viral infection.

Kidney transplant, low cost and high access: Doctor who treats – and teaches

With subsidised dialysis, crowdfunding and a push for early screening, the Chennai nephrologist is tackling fund barriers and offering accessible therapy

Arun Janardharan

ARUN JANARDHARAN

Dr Georgi Abraham with his honours and testimonials at his terrace museum

LOOKING AT Chandran driving an auto rickshaw in Chennai, one would not know that he had a kidney transplant over a decade ago. Or that he had no money for the surgery although his wife had volunteered to be a donor. That's when Dr Georgi Abraham turned to crowdfunding so that the procedure could be done. Today, Chandran lives to see his son excel at his job.

"Ever since then, I realised that transplant is often a question of money before medicine," says Dr Abraham, the veteran nephrologist who is now working actively through his foundation (Tamilnad Kidney Research or TANKER, Chennai) to make transplants accessible to patients with kidney failure. "The medicine has advanced dramatically. Donor-recipient matching is better, screening is more sophisticated and newer anti-rejection drugs have helped transplanted kidneys survive longer. But for a poor patient, the path from dialysis to transplantation can still depend on whether a family can assemble enough money to cross the distance between having a donor and reaching an operating table," he says.

He is building a low-cost, high-access transplant-care model built around reducing the biggest recurring costs through subsidies, expanding the donor pool by efficiently recovering kidneys from deceased donors and ensuring post-surgery care as anti-rejection medicines are expensive but ensure the transplants last longer. On average, a kidney from a living donor functions for 15 to 20+ years, while a deceased donor kidney lasts 10 to 15 years with the right follow-ups. "Many organ recipients abandon this stage because of high costs," says Dr Abraham. "Immediately after the transplantation, the cost of anti-rejection medication, depending upon the match between the donor and the recipient, could be as high as Rs 20,000 or Rs 25,000 a month to as low as Rs 10,000 a month," he says. That expenditure generally declines over time as the amount of immunosuppression required decreases.

He is working with the Madras Medical Mission to provide free or subsidised HLA (human leukocyte antigen) testing — this assesses donor-recipient compatibility — for economically disadvantaged transplant patients. Such testing can cost up to ₹40,000. The approach is to reduce the financial barriers at every stage of transplantation — from subsidising dialysis and helping patients pay for the transplant to making essential post-transplant medicines and tests more affordable. "If some assistance can be given for post-discharge compliance, then, like Chandran, a patient can meet the cost of medication from their own earnings. Since Chandran's transplant has lasted, his requirement for anti-rejection drugs is relatively low now," he adds.

Dr Abraham has already worked on reducing dialysis costs by pioneering peritoneal dialysis, a home-based treatment for kidney failure. It uses the lining of the abdomen (the peritoneum) and a special cleansing fluid to filter waste and extra fluid from your blood. One of his patients, Shanti Raj Mohan, lived with kidney failure and dialysis for 23 years. "Shanti taught me that you could be a very purpose-driven person despite having kidney failure," says Dr Abraham, who has provided more than 9.04 lakh free or subsidised dialysis sessions to 3,376 patients. The foundation currently provides close to 10,000 dialysis sessions a month through 36 centres, with most treatments offered free through a combination of government health insurance, civic bodies and private donors.

In the early 1990s, obtaining the dialysis fluid was difficult. "Initially it was a Herculean task because the government did not permit import of dialysis fluid to India until 1994," Dr Abraham says. That changed when the fluid was placed under open general licensing in 1994. India now has domestic manufacturers supplying peritoneal dialysis fluid across the country. Yet Dr Abraham says the treatment remains underused. "The reluctance is because of logistical and reimbursement problems," he says.

These days he is busy with a more elementary question, why wait for the kidneys to fail? A question that has fuelled his campaign for targeted kidney screening through primary health centres across panchayats in India, using simple creatinine, urine and blood-pressure tests. The goal is to identify chronic kidney disease among high-risk populations before irreversible damage sets in. His proposed screening model is strikingly simple: a creatinine blood test, a urine examination and a blood-pressure measurement. Those who should be prioritised, he says, include people with diabetes, hypertension or heart disease, those with a family history of kidney disease, people who have previously suffered acute kidney injury, those using alternative medicines and people above 45.

"A simple blood test to measure creatinine, using a strip with a meter, and a simple urine test can identify most of the time whether you have kidney disease or not," says Dr Abraham. The urgency is considerable. He cites a 2016 publication in *The Lancet* that estimated the prevalence of chronic kidney disease in India at about 17.2 per cent. Even a relatively small failure to detect disease early can translate into an enormous number of people eventually reaching advanced kidney failure.

"Over 46 years, kidney care in the country has changed. Today, people in their 60s, 70s, 80s and even 90s undergo dialysis. Kidney transplantation has become safer because of better donor-recipient matching, improved screening and newer anti-rejection medicines. Patients who once might have been considered too old for aggressive treatment can now be kept alive for years," he says. Yet India has not built an equally ambitious preventive screening infrastructure so that people don't reach that stage. Transplantation, for one, cannot solve the problem at population scale. There will never be enough donor kidneys for everyone who needs one. "We cannot provide transplants to all the patients who are on dialysis. This will never happen in any part of the world," says Dr Abraham.

Besides, India now has roughly 3,300 kidney specialists, according to Abraham, compared with a very small pool two decades ago. He hopes that number can rise to 10,000 within another decade. "During a recent visit to AIIMS in New Delhi, I had watched a colleague facing a clinic load of more than 100 patients. To get every detail from each takes time," he says.

That gap is one reason Abraham believes screening cannot remain confined to specialist centres. If kidney disease can be identified earlier at the primary-care level, some patients can be monitored and treated before they reach the point where dialysis becomes inevitable, he reasons. He is also wary of assuming that India can simply import its understanding of kidney disease from Western countries. His own team recently examined lipid profiles of 1,000 dialysis patients and found differences from patterns described in developed countries. "We need to have a strong platform for research to deal with our own diseases, our own disease patterns and how to treat them cost effectively," Dr Abraham says.

He is equally cautious about another common assumption: that India is witnessing a distinct epidemic of kidney disease among the young. What has changed, he argues, is visibility. India's population has expanded, diagnostic methods have improved, kidney biopsies and imaging are more accessible, patients are more aware and the number of trained nephrologists has risen substantially. "The challenge now is to ensure that greater visibility comes early enough to make a difference," he says.

SCAN THE QR CODE TO WATCH THE VIDEO

LIFE positive

• A MODEL THAT WORKS

Dr Georgi Abraham's outreach programmes are a combination of education, interaction, screening, counselling and referral.

CHILDREN'S WORKSHOP

AT HIS kidney workshops as part of his Catch 'em Young project, children are told how their two kidneys act like tiny strainers that clean the blood and turn extra water and waste into pee. "We explain that when the kidneys get hurt, it is like their filter getting clogged. Then we focus on how taking care of their bodies helps the filters stay clean and strong rather than focussing on scary sickness. We show them how drinking plain water helps flush the system like washing out a dirty cup. We explain how too much salt or packaged junk food makes the kidneys work overtime, while fresh fruits and vegetables give them an easy job. We remind them not to hold their pee for too long so that they can avoid infection," says a volunteer. "There is a tendency among very young people to have high blood pressure in the country," says Dr Abraham, recommending annual blood pressure checks for children from age three.

AWARENESS TALKS

THIS INVOLVES helping people understand the connection between diabetes, high blood pressure, obesity, smoking, unhealthy diets and kidney disease. "Kidney awareness should begin with routine blood pressure and blood sugar monitoring. Systolic blood pressure — the top reading — should generally be kept around 120 mmHg, while people with diabetes should monitor HbA1c (the average blood sugar count of three months). It is normally below 5.6 per cent but ideally should remain below 6.5 per cent in diabetics, and below 7.1 per cent in older diabetics," says Dr Abraham.

BUILDING A SCIENTIFIC TEMPERAMENT

HE WARNS against unnecessary antibiotics, painkillers and unmonitored Ayurveda, Siddha or homeopathic medicines because of damaging effects on the kidneys. Since the kidneys filter waste from the blood, they are highly exposed to concentrated toxins present in unregulated supplements. This damage can manifest as acute kidney injury (AKI), chronic kidney disease (CKD), kidney stones, or complete renal failure.

BASIC HEALTH SCREENING

DEPENDING ON the programme, this can include blood pressure measurement, BMI assessment and urine testing. Some camps may add blood tests such as blood glucose, creatinine or imaging when medically appropriate to eliminate risks.

• UNDERSTANDING THE KIDNEYS' LINK WITH OTHER ORGANS

Ozempic reveals craving centre

OZEMPIC-LIKE drugs appear to weaken cravings in brain's hunger — they may also reduce cravings for alcohol and other addictive substances. Scientists are now analysing data of how the latest version, a brain receptor that helps connect memories and surroundings with rewarding experiences. Packed with GLP-1 receptors, it may act as a crucial component between thinking about a reward and feeling compelled to pursue it. The discovery could open new approaches to treating addiction as well as obesity. GLP-1 activation directly in the brain's hypothalamus has previously been shown to reduce food craving in mice.

Keratin for regrowing bone

KERATIN EXTRACTED from sheep's wool helped damaged bone regenerate in animals, producing tissue that was more organised and structurally similar to healthy bone than tissue grown with conventional collagen scaffolds. The discovery by King's College London could turn an animal or allotment-industry-processing waste material for regenerative medicines. It is a naturally derived material and so when discarded as waste by the farming industry, giving it potentially both renewable and scalable resource. Collagen membranes can contract more bone overall but the new method can scaffolds is slower to secure.

Blood test as health radar

US LAB RESEARCHERS have created a single, widely-available blood test that showed promise in early studies by detecting several types of cancer. Multiple liver diseases and signs of organ problems at the same time. The approach works by scanning fragments of DNA that circulate naturally in the bloodstream. Since cells release DNA into the blood, these fragments can contain molecular clues about the health of many different organs. The test could eventually provide a more affordable way to detect diseases earlier while changing doctors a broader picture of a person's health.

Fruit juice lowers depression

A DAILY GLASS of 100 per cent fruit juice or a smoothie may help improve more than just brain power. In a small four-week trial, participants who added one to a healthier diet showed significant lower depression scores, hinting that a simple dietary change could also support mental well-being. Researchers at Newcastle University evaluated changes in mood using validated questionnaires that measure symptoms of anxiety and depression. Participants who consumed fruit juice and smoothies alongside whole fruit had lower depression scores than the control group.

Why we repeat decisions

WHY DO we keep making the same choices even when better options are available? Researchers found that simply repeating a decision can reshape what we prefer, creating familiar choices no feel better than alternatives, instead of weighing every option from scratch, the brain often remembers what it chose before and repeats it. That shortcut may help explain many everyday habits and surprisingly influential decisions. The results of a study by TU Dresden University show the pattern could influence shopping decisions, habits, and recurring routines.

IITs go beyond BTech, expand their academic brand: Surge in mid-career courses

Pallavi Smart
Mumbai, 16 Oct 19

FROM SHORT-TERM certificates to master's degrees, Indian Institutes of Technology (IITs) are increasingly turning their academic brand and industry links toward a domain once associated more with Indian Institutes of Management (IIMs): executive programmes.

The shift has been driven by rising demand for upskilling, growing acceptance of online and hybrid learning after the pandemic, expanding industry partnerships — and the fact that, unlike government-subsidised BTech programmes, these courses pay for themselves through fees.

The trend is clearest at the first-generation IITs, which have expanded their offerings in emerging technology domains over the past four to five years. Almost all IITs now run full-fledged master's programmes and postgraduate diploma courses in hybrid mode, letting working professionals pursue an IIT qualification without leaving their jobs.

PAGE 1 | anchor

Artificial intelligence, machine learning and data science dominate demand among working professionals. Nine IITs are also introducing specialised programmes in electric vehicles, semiconductor technology, quantum computing, sustainability, robotics, cyber security and communication technology (see chart).

• EXECUTIVE EDUCATION AT THE SEVEN FIRST-GENERATION IITs

IIT KHARAGPUR
- At least 10 full PG or master's programmes, short-term courses
- AI, cybersecurity, marketing technology, applied data science

IIT BOMBAY
- Four 1-YR diplomas, short-term courses
- AI and ML, e-mobility, design thinking, computer science engineering

IIT KANPUR
- At least one full PG or master's programmes, short-term courses
- Construction engineering, wireless networks, electronics, smart grid, Azad ML, economics, data analytics

IIT MADRAS
- At least 20 full PG or master's programmes, short-term courses
- AI, EVs, sustainability, manufacturing, digital transformation, supply chain, finance

IIT DELHI
- At least five full PG or master's programmes, short-term courses
- EV technology, advanced communication engineering, quantum AI ecosystem

IIT GUWAHATI
- At least three full PG or master's programmes, plus short-term courses
- Robotics and AI, water resources management, data science, semiconductors

IIT ROORKEE
- No full degree programmes. Short-term courses and PG certification in emerging tech, hardware and IT, sustainability

Before 2020, executive education at many IITs largely meant short-duration workshops or customised training runs on campus for sponsoring organisations. Today, many IITs offer fully online or hybrid postgraduate degrees that professionals can pursue while working.

Take IIT Madras, which now offers more than 20 executive programmes. A foundational programme in electric vehicles has expanded into a bouquet of courses covering battery technologies, power electronics, software-defined vehicles and electric vehicle engineering. The institute has similarly expanded its offerings in sustainability, construction technology and manufacturing analytics.

IIT Bombay has offered executive programmes for years but has seen a surge in demand recently. Participation fell to 1,465 across 46 programmes in 2020, from 2,749 across 95 programmes in 2018. By 2025, it had climbed to nearly 20,000 across 130 programmes.

At IIT Kanpur, the shift has been more recent and particularly pronounced in postgraduate education. The institute offered no online executive postgraduate degrees before 2020, but launched its first four under the eMasters initiative in 2022. It now offers nine — seven MTechs, one MS(R) and one PG Diploma — apart from short-term courses.

"Every IIT has limited classroom space. That's online learning is the future. Through digital education, we can reach many more learners without compromising on quality," Prof Manindra Agrawal of IIT Kanpur said.

He pointed to the institute's flagship online MTech in Flood and Water Resources Management, which a cohort of 66 last year and more than 330 others already made this year, including professionals sponsored by the Assam government. These offers refer to the number of candidates expressing interest. It has been done which the institute

CONTINUED ON PAGE 2

New Delhi

PANEL REPORT HIGHLIGHTS CRITICAL ISSUES

In Private Healthcare's Rise, Price Points Are a Big Pain

Better public infra, specialists needed to improve state facilities as pvt hospitals are unaffordable

Alenjith K Johny & Vikas Dandekar

Bengaluru | Mumbai: Fix hospital room charges at the average tariffs of three-star hotels in metro cities, a parliamentary committee on health and family welfare recently said as part of its 361-page report on the affordability and accessibility of healthcare in India.

The panel, while acknowledging the wide variation in hospital charges across the country, stressed the need for better public health infrastructure, capping fees, and strengthening the cadre of medical specialists.

The report, in short, captures the mood of millions of Indians who often face financial distress for treatment at quality private healthcare, which has emerged as a crucial industry over the decades as the state-aided facilities remained relative stragglers or inaccessible.

Top private-sector hospital chains such as Apollo and Max Healthcare have, however, argued that blanket price caps on beds may stifle growth and investments.

The reasons for those views are not hard to find. In about three years, nearly 60 hospital-linked private equity deals have been signed for eye-popping values of ₹49,000 crore. Back in 1983, that would have been unthinkable. That year, Prathap Reddy, founder of Apollo Hospitals chain, came back to India from US and set up the first corporate hospital in Chennai 1983.

THE PIONEER

Reddy broke much more than new ground. Doctors practised mostly through small clinics or as clusters of specialists. Privately-run hospitals were unknown as hospitals were not classified as an industry. For Dr Reddy, it was a battle to change the legislation.

His objective was clear—widen access and affordability of quality healthcare. The young cardiologist pushed hard for a multi-specialty hospital—all under one roof—to cater to the mounting demand.

Apollo's scale-up success saw an avalanche of doctor-led hospitals across large cities and towns. According to the latest National Sample Survey data private hospitals account for nearly 58% of hospitalisations in rural India and 64.6% in urban centres.

Care First

Investors poured **₹49,000 crore** into hospital-linked deals recently

Private healthcare providers conduct nearly **70%** of surgeries now

Rising bed revenues reflect hospitals' stronger pricing power

PE investors influence pricing, technology, staffing, expansion decisions

"Most healthcare providers have become national providers. Demand-supply gap right from the time that Apollo became a corporate hospital chain, and many others came in, was built around the fact that India's public healthcare can only grow at a certain pace," says Vishal Bali, executive chairman of healthcare platform Asia Healthcare Holding (AHH).

For dozens of marquee global investors like AHH, India has turned into an irresistible hunting ground for healthcare enterprises. To name a few, Blackstone, KKR, Carlyle and TPG, have struck deals at valuations to salivate for.

Bhanu Prakash Kalmath SJ, healthcare partner at Grant Thornton says post-Covid, patients are prioritising quality of care and health outcomes.

"Private healthcare accounts for nearly 70% of surgeries in the country, while public healthcare has not been able to keep pace with the requirements of the larger population," he adds.

PE POWER PLAY

Currently, PE investors or global investment companies hold majority ownerships in top-tier hospital groups like Manipal Health, Sahyadri Hospital (via the deal with Manipal), Healthcare Global (HCG), Baby Memorial Hospital (BMH), and Star Hospitals, via private equity funds such as Temasek and KKR. The race for quicker and better returns has, however, made healthcare unaffordable to most of the population, aggravated by lack of insurance coverage, as highlighted by the parliamentary committee report.

This trend coincided with a steady rise in average revenue per bed (ARPOB) for hospitals, a key metric that reflects strong growth of hospitals. According to Grant Thornton data, the industry average ARPOB of six major hospitals, including Max and Apollo, rose 11% to ₹56,520 in FY25 from ₹50,821 in FY23.

For higher RoIs, health experts say PE investors are unsparing and influence decisions in key management operations: how much to pay doctors, what technology should be deployed, what rates to be charged to patients, and where to invest for future expansions. As financial investors, the plans revolve around achieving a certain multiple and pass on the ownership to the next strategic or financial investor or seek a full or partial exit via a public listing.

Amid the churn, Temasek-controlled Manipal Hospitals stands as an example of that phenomena. It was recently listed but over the years, Manipal had changed multiple hands. It was first targeted by TPG in 2015, followed by the National Investment and Infrastructure Fund (NIIF). Temasek then bought out NIIF and part of TPG's stake in 2023 for full control.

PUBLIC LISTINGS

There are similar examples. Max Healthcare listed in 2020 following a corporate restructuring, with KKR holding nearly 32% stake. Fortis's ownership contest played out after its original listing, culminating in IHH Healthcare's 2018 acquisition. Narayana Hrudayalaya's pre-IPO PE investors held a minority stake and partially exited at its 2015 bi listing.

From six until 2010, India currently has 16-17 listed hospitals or healthcare companies.

CHINESE CARMAKERS CAPTURED 9% OF THE EU MARKET OVER FIRST FIVE MONTHS OF 2026

INTERPRETATIONS OF MALADY

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H1N1 or flu: Fever is done but why does weakness remain?

Fatigue, body ache or a return of fever after an illness may be part of recovery

A PATIENT RECENTLY came to the clinic after recovering from a viral fever. The fever had settled, the initial tests were no longer concerning and he had started going back to work. But he was still feeling unusually tired. On some days, he felt almost normal. On others, even routine activity left him exhausted. A few days later, he developed body ache and a mild fever again. His immediate concern was that the first infection had returned.

This is a situation that can be confusing for patients, particularly during the monsoon, when dengue, chikungunya, influenza, H1N1 and other infectious microbes can circulate at the same time. The symptoms can overlap and recovery is not always a straight line.

Fever is one of the most visible signs of an infection, so people often use it as a measure of recovery. Once the temperature becomes normal, they expect their energy to return as well. But the body may take longer to recover. During an infection, a person may eat less, lose fluids, sleep poorly and remain physically inactive for several days. The immune response to the infection also takes time to settle. As a result, weakness, poor appetite, body ache and reduced stamina may continue even after the fever has gone. This does not mean that the infection is still active. A negative test is reassuring, but it is not a measure of how quickly the body has regained its strength.

Why then do some patients feel better and then worse again? One reason is that people often return to their routine too quickly. After several days of illness, a person may feel better for a day or two and resume full working hours, exercise or travel. The following day, the fatigue may become much more pronounced.

GETTY IMAGES

A person recovering from one viral infection can still be exposed to another. Somebody may be diagnosed with viral fever and later test positive for dengue

This can feel like a relapse but sometimes it is simply the result of doing more than the body is ready for. A gradual return to activity is therefore important. Strenuous exercise should not be resumed simply because the fever has disappeared.

Many are not [illegible] a new infection is possible. This is where overlapping infections become important. A person recovering from one viral infection can still be exposed to another infection. Seasonal infections may produce similar early symptoms such as fever, body ache, headache and fatigue. It can, therefore, be difficult to determine from symptoms alone whether someone is still recovering or has developed another illness. Government guidance also notes that one infection does not necessarily exclude another, and co-infections can occur.

For example, a patient may recover from influenza, return to work and then develop fever again after a fresh exposure. Another person may initially be diagnosed with a viral fever and later test positive for dengue. These situations need clinical assessment rather than assuming that every recurrence of weakness is simply "post-viral fatigue."

There is another reason why a returning patient should not simply be reassured because the fever has come down. In dengue, the period when the fever starts settling can be important. The critical phase generally occurs around this time in patients who develop complications. Warning signs include persistent vomiting, severe abdominal pain, bleeding, increasing drowsiness, difficulty breathing, restlessness or reduced urine output. These symptoms require prompt medical evaluation.

Platelet count is also not the only measure of recovery in dengue. Hydration, blood pressure, haematocrit (percentage of your blood that is made up of red blood cells and is evidence of plasma leakage) and the patient's overall clinical condition are important in deciding how the illness is progressing.

If there is no evidence of a continuing or new infection, the focus is usually on recovery. Adequate sleep, regular, balanced meals, sufficient fluids and gradual physical activity are important. It is also important not to start antibiotics simply because fatigue continues. Antibiotics do not treat viral infections. Steroids and other medicines should similarly not be taken without a clear medical reason. Most people improve gradually. But persistent or worsening symptoms deserve reassessment. A returning fever, breathlessness, chest discomfort, repeated vomiting, fainting, confusion, reduced urine output or a significant deterioration in general health should not be dismissed as weakness after a viral infection.

Kidney transplant, low cost and high access: Doctor who treats – and teaches

With subsidised dialysis, crowdfunding and a push for early screening, the Chennai nephrologist is tackling fund barriers and offering accessible therapy

Arun Janardharan

ARUN JANARDHARAN

Dr Georgi Abraham with his honours and testimonials at his terrace museum

LOOKING AT Chandran driving an auto rickshaw in Chennai, one would not know that he had a kidney transplant over a decade ago. Or that he had no money for the surgery although his wife had volunteered to be a donor. That's when Dr Georgi Abraham turned to crowdfunding so that the procedure could be done. Today, Chandran lives to see his son excel at his job.

"Ever since then, I realised that transplant is often a question of money before medicine," says Dr Abraham, the veteran nephrologist who is now working actively through his foundation (Tamilnad Kidney Research or TANKER, Chennai) to make transplants accessible to patients with kidney failure. "The medicine has advanced dramatically. Donor-recipient matching is better, screening is more sophisticated and newer anti-rejection drugs have helped transplanted kidneys survive longer. But for a poor patient, the path from dialysis to transplantation can still depend on whether a family can assemble enough money to cross the distance between having a donor and reaching an operating table," he says.

He is building a low-cost, high-access transplant-care model built around reducing the biggest recurring costs through subsidies, expanding the donor pool by efficiently recovering kidneys from deceased donors and ensuring post-surgery care as anti-rejection medicines are expensive but ensure the transplants last longer. On average, a kidney from a living donor functions for 15 to 20+ years, while a deceased donor kidney lasts 10 to 15 years with the right follow-ups. "Many organ recipients abandon this stage because of high costs," says Dr Abraham. "Immediately after the transplantation, the cost of anti-rejection medication, depending upon the match between the donor and the recipient, could be as high as Rs 20,000 or Rs 25,000 a month to as low as Rs 10,000 a month," he says. That expenditure generally declines over time as the amount of immunosuppression required decreases.

He is working with the Madras Medical Mission to provide free or subsidised HLA (human leukocyte antigen) testing — this assesses donor-recipient compatibility — for economically disadvantaged transplant patients. Such testing can cost up to ₹40,000. The approach is to reduce the financial barriers at every stage of transplantation — from subsidising dialysis and helping patients pay for the transplant to making essential post-transplant medicines and tests more affordable. "If some assistance can be given for post-discharge compliance, then, like Chandran, a patient can meet the cost of medication from their own earnings. Since Chandran's transplant has lasted, his requirement for anti-rejection drugs is relatively low now," he adds.

Dr Abraham has already worked on reducing dialysis costs by pioneering peritoneal dialysis, a home-based treatment for kidney failure. It uses the lining of the abdomen (the peritoneum) and a special cleansing fluid to filter waste and extra fluid from your blood. One of his patients, Shanti Raj Mohan, lived with kidney failure and dialysis for 23 years. "Shanti taught me that you could be a very purpose-driven person despite having kidney failure," says Dr Abraham, who has provided more than 9.04 lakh free or subsidised dialysis sessions to 3,376 patients. The foundation currently provides close to 10,000 dialysis sessions a month through 36 centres, with most treatments offered free through a combination of government health insurance, civic bodies and private donors.

In the early 1990s, obtaining the dialysis fluid was difficult. "Initially it was a Herculean task because the government did not permit import of dialysis fluid to India until 1994," Dr Abraham says. That changed when the fluid was placed under open general licensing in 1994. India now has domestic manufacturers supplying peritoneal dialysis fluid across the country. Yet Dr Abraham says the treatment remains underused. "The reluctance is because of logistical and reimbursement problems," he says.

These days he is busy with a more elementary question, why wait for the kidneys to fail? A question that has fuelled his campaign for targeted kidney screening through primary health centres across panchayats in India, using simple creatinine, urine and blood-pressure tests. The goal is to identify chronic kidney disease among high-risk populations before irreversible damage sets in. His proposed screening model is strikingly simple: a creatinine blood test, a urine examination and a blood-pressure measurement. Those who should be prioritised, he says, include people with diabetes, hypertension or heart disease, those with a family history of kidney disease, people who have previously suffered acute kidney injury, those using alternative medicines and people above 45.

"A simple blood test to measure creatinine, using a strip with a meter, and a simple urine test can identify most of the time whether you have kidney disease or not," says Dr Abraham. The urgency is considerable. He cites a 2016 publication in *The Lancet* that estimated the prevalence of chronic kidney disease in India at about 17.2 per cent. Even a relatively small failure to detect disease early can translate into an enormous number of people eventually reaching advanced kidney failure.

"Over 46 years, kidney care in the country has changed. Today, people in their 60s, 70s, 80s and even 90s undergo dialysis. Kidney transplantation has become safer because of better donor-recipient matching, improved screening and newer anti-rejection medicines. Patients who once might have been considered too old for aggressive treatment can now be kept alive for years," he says. Yet India has not built an equally ambitious preventive screening infrastructure so that people don't reach that stage. Transplantation, for one, cannot solve the problem at population scale. There will never be enough donor kidneys for everyone who needs one. "We cannot provide transplants to all the patients who are on dialysis. This will never happen in any part of the world," says Dr Abraham.

Besides, India now has roughly 3,300 kidney specialists, according to Abraham, compared with a very small pool two decades ago. He hopes that number can rise to 10,000 within another decade. "During a recent visit to AIIMS in New Delhi, I had watched a colleague facing a clinic load of more than 100 patients. To get every detail from each takes time," he says.

That gap is one reason Abraham believes screening cannot remain confined to specialist centres. If kidney disease can be identified earlier at the primary-care level, some patients can be monitored and treated before they reach the point where dialysis becomes inevitable, he reasons. He is also wary of assuming that India can simply import its understanding of kidney disease from Western countries. His own team recently examined lipid profiles of 1,000 dialysis patients and found differences from patterns described in developed countries. "We need to have a strong platform for research to deal with our own diseases, our own disease patterns and how to treat them cost effectively," Dr Abraham says.

He is equally cautious about another common assumption: that India is witnessing a distinct epidemic of kidney disease among the young. What has changed, he argues, is visibility. India's population has expanded, diagnostic methods have improved, kidney biopsies and imaging are more accessible, patients are more aware and the number of trained nephrologists has risen substantially. "The challenge now is to ensure that greater visibility comes early enough to make a difference," he says.

SCAN THE QR CODE TO WATCH THE VIDEO

LIFE positive

• A MODEL THAT WORKS

Dr Georgi Abraham's outreach programmes are a combination of education, interaction, screening, counselling and referral.

CHILDREN'S WORKSHOP

AT HIS kidney workshops as part of his Catch 'em Young project, children are told how their two kidneys act like tiny strainers that clean the blood and turn extra water and waste into pee. "We explain that when the kidneys get hurt, it is like their filter getting clogged. Then we focus on how taking care of their bodies helps the filters stay clean and strong rather than focussing on scary sickness. We show them how drinking plain water helps flush the system like washing out a dirty cup. We explain how too much salt or packaged junk food makes the kidneys work overtime, while fresh fruits and vegetables give them an easy job. We remind them not to hold their pee for too long so that they can avoid infection," says a volunteer. "There is a tendency among very young people to have high blood pressure in the country," says Dr Abraham, recommending annual blood pressure checks for children from age three.

AWARENESS TALKS

THIS INVOLVES helping people understand the connection between diabetes, high blood pressure, obesity, smoking, unhealthy diets and kidney disease. "Kidney awareness should begin with routine blood pressure and blood sugar monitoring. Systolic blood pressure — the top reading — should generally be kept around 120 mmHg, while people with diabetes should monitor HbA1c (the average blood sugar count of three months). It is normally below 5.6 per cent but ideally should remain below 6.5 per cent in diabetics, and below 7.1 per cent in older diabetics," says Dr Abraham.

BUILDING A SCIENTIFIC TEMPERAMENT

HE WARNS against unnecessary antibiotics, painkillers and unmonitored Ayurveda, Siddha or homeopathic medicines because of damaging effects on the kidneys. Since the kidneys filter waste from the blood, they are highly exposed to concentrated toxins present in unregulated supplements. This damage can manifest as acute kidney injury (AKI), chronic kidney disease (CKD), kidney stones, or complete renal failure.

BASIC HEALTH SCREENING

DEPENDING ON the programme, this can include blood pressure measurement, BMI assessment and urine testing. Some camps may add blood tests such as blood glucose, creatinine or imaging when medically appropriate to eliminate risks.

• UNDERSTANDING THE KIDNEYS' LINK WITH OTHER ORGANS

Public Education Needs Public Money

Students protesting in Ranchi, and before that in Delhi and other parts of the country, demanding accountability are highlighting a deeper malaise: education is not receiving the resources it deserves. The data bears them out. Unesco's assessment of progress towards SDG 4 shows that India's public spending on education has remained stuck at around 4.1% of GDP over the past decade — barely above the UN benchmark of 4% and well short of the 6% target successive governments have repeatedly pledged to achieve. Education's share of total public expenditure stands at 14.2%, below the recommended benchmark of 15%, and down from 15.7% in 2015.

Rollout of Sarva Shiksha Abhiyan and infrastructure required under Right to Education Act lifted public spending in the early 2000s. Once that phase ended, states took on a larger share of funding, much of which is now consumed by salaries rather than quality improvements. Chronic underfunding, combined with private schools' English-medium appeal and lower teacher absenteeism, hastened the shift to private education. Today, nearly 40% of students attend private unaided schools while declining enrolment has forced the closure or merger of thousands of government schools.

India needs to spend more on education to improve the quality of existing state schools. This will require GoI, states and local governments to work in unison, translating the vision of National Education Policy (NEP) 2020 into reality through higher public spending, stronger accountability, better teacher training, focus on learning outcomes and greater investment in innovation. Spending more on education is an investment in long-term growth, one that only the public exchequer can finance with the patience it demands.

हिंदूराव, दयानंद हॉस्पिटल में CCU की तैयारी

हेल्थ विभाग के सूत्रों ने बताया, फाइल अप्रूवल के लिए दिल्ली सरकार के पास भेजी गई है

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मरीजों को होगा फायदा, इमरजेंसी में दूसरी जगह रेफर करने की नहीं होगी जरूरत

■ नई दिल्ली: एमसीडी अपने स्वामी दयानंद हॉस्पिटल और हिंदूराव हॉस्पिटल में क्रिटिकल केयर यूनिट (CCU) तैयार करने की योजना बना रही है। दोनों अस्पतालों में सीसीयू शुरू होने से गंभीर मरीजों के इलाज की सुविधा मजबूत होगी और इमरजेंसी सेवाओं में भी बड़ा सुधार होने की उम्मीद है। इमरजेंसी की स्थिति में मरीजों को किसी दूसरे हॉस्पिटल रेफर करने की भी जरूरत नहीं पड़ेगा। हेल्थ विभाग के सूत्रों ने बताया कि फाइल अप्रूवल के लिए दिल्ली सरकार के पास भेजी गई है।

एमसीडी के अधिकारियों ने बताया कि स्वामी दयानंद हॉस्पिटल में 100 बेड और हिंदूराव हॉस्पिटल में 50 बेड की क्षमता वाला सीसीयू बनाने की योजना है। दोनों हॉस्पिटल में सीसीयू बनने के बाद मरीज की न केवल 24 घंटे निगरानी की जा सकेगी, बल्कि किसी भी इमरजेंसी की स्थिति में तुरंत ऑपरेशन भी किया जा सकेगा। दोनों हॉस्पिटल में आईसीयू बेड्स की संख्या बढ़ाई जाएगी। स्वामी दयानंद के गायनी विभाग की इमरजेंसी की काफी खराब है। ऐसे में जिन महिलाओं की डिलीवरी ऑपरेशन से हुई है, उन्हें काफी दिक्कतों का सामना करना पड़ता है। दयानंद हॉस्पिटल मे आईसीयू में मात्र 7 बेड हैं। CCU बनने के बाद आईसीयू में बेड्स की संख्या बढ़कर 20 हो जाएगी।

CCU बनने से ये सुविधाएं

- हार्ट रेट, ब्लड प्रेशर, ऑक्सीजन लेवल, सांस की गति और ईसीजी की निगरानी
- गंभीर मरीज को सांस लेने में सहायता देने के लिए वेंटिलेटर की सुविधा
- मरीज को सांस लेने में दिक्कत हो रही है तो उसके लिए ऑक्सीजन की सुविधा
- मरीज को अचानक हार्ट से संबंधित कोई परेशानी होती है तो उसके लिए तुरंत इलाज की सुविधा मिलेगी
- नियमित ईसीजी की सुविधा मिलेगी
- जरूरी दवाएं और फ्लूइड्स नियंत्रित मात्रा में देने की सुविधा
- कार्डियक अरेस्ट, शॉक और अन्य गंभीर स्थितियों में इस्तेमाल होने वाली दवाइयां उपलब्ध होंगी
- गंभीर मरीज की स्थिति के अनुसार बेड पर ही जांच आदि की सुविधा उपलब्ध होगी

वायरस से लड़ने का रहस्य उजागर, नई दवाओं के विकास की बढ़ी उम्मीद

जागरण विशेष आइसर के विज्ञानियों ने खोजी एंटीवायरल रक्षा प्रणाली की कड़ी, वायरस के खिलाफ शरीर की प्राकृतिक सुरक्षा प्रणाली का खुला राज

जयवर्धन • संवाददाता

भोपाल: भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान (आइसर) के विज्ञानियों ने शरीर की एंटीवायरल रक्षा प्रणाली से जुड़ी एक महत्वपूर्ण वैज्ञानिक गुत्थी सुलझाई है। शोध में पता चला है कि वायरस के संक्रमण के दौरान शरीर की कोशिकाएं अपनी प्राकृतिक सुरक्षा प्रणाली को किस प्रकार सक्रिय करती हैं। इसमें यह भी पता चला कि इस प्रक्रिया में एचईआरसी-5 नामक एंजाइम की केंद्रीय भूमिका होती है। विज्ञानियों का मानना है कि यह खोज भविष्य में वायरल संक्रमण, प्रतिरक्षा संबंधी बीमारियों और अन्य जटिल रोगों के लिए अधिक प्रभावी दवाओं और उपचार पद्धतियों के विकास का आधार बन सकती है। आइसर के जैव विज्ञान विभाग के विज्ञानी डा. अतुल कुमार के नेतृत्व में प्रीतिरंजन, गतीश्वा, दीपेन रंजन, मोहिनी और भाग्यश्री शोधार्थियों ने मिलकर यह शोध किया है। इस शोध को प्रतिष्ठित अंतरराष्ट्रीय वैज्ञानिक पत्रिका सेल रिपोर्ट्स में प्रकाशित किया गया है। यह उपलब्धि आणविक जीव विज्ञान और प्रतिरक्षा विज्ञान के क्षेत्र में भारत के लिए महत्वपूर्ण मानी जा रही है।

आगे की पंक्ति में शोधार्थी मोहिनी सेरावत, श्वेता बर्मोहत, भाग्यश्री और पीछे दीपेरंजन व प्रीतिरंजन। (कार से दास) • संस्था

डा. कुमार ने बताया कि शोध में यह पता चला है कि जब कोई वायरस शरीर पर हमला करता है तो कोशिकाएं आइएसजी-15 नामक विशेष प्रोटीन का निर्माण करती हैं। यह प्रोटीन शरीर की प्राकृतिक एंटीवायरल प्रतिरोधक क्षमता को मजबूत करने में अहम भूमिका निभाता है। इस पूरी प्रक्रिया को वैज्ञानिक भाषा में आइएसजीलेशन कहा जाता है। विज्ञानियों ने पाया कि मानव शरीर में मौजूद सैकड़ों समान एंजाइमों के बीच केवल एचईआरसी-5 ही ऐसा एंजाइम है, जो आइएसजी-15 प्रोटीन को सही लक्ष्य तक पहुंचाकर वायरस के खिलाफ प्रतिरक्षा प्रणाली को प्रभावी ढंग से सक्रिय करता है। यही विशेषता इसे अन्य एंजाइमों से अलग बनाती है।

विशेष आणविक संरचना से करता है सटीक पहचान: शोध में सामने आया कि एचईआरसी-5 की एक विशिष्ट आणविक संरचना (मॉलिक्यूलर आर्किटेक्चर) होती है। इसी कारण यह आइएसजी-15 प्रोटीन को सटीक पहचान कर उसे आवश्यक स्थान तक पहुंचाने में सक्षम होता है। यह प्रक्रिया वायरस से संक्रमित कोशिकाओं की सुरक्षा बढ़ाने में महत्वपूर्ण भूमिका निभाती है। विज्ञानियों का कहना है कि इस तंत्र को समझने से यह स्पष्ट हुआ है कि शरीर संक्रमण के दौरान अलग-अलग आणविक संकेतों को पहचान कैसे करता है और किस तरह सही समय पर प्रतिरक्षा प्रतिक्रिया शुरू करता है।

सूजन संबंधी विकारों और अन्य जटिल रोगों के उपचार की बढ़ी उम्मीद: विज्ञानियों का मानना है कि यह खोज केवल वायरस संक्रमण तक सीमित नहीं है। इससे प्रतिरक्षा तंत्र से जुड़ी बीमारियों, सूजन संबंधी विकारों और अन्य जटिल रोगों के उपचार के लिए भी नई दवाओं के विकास का रास्ता खुल सकता है। विज्ञानियों का मानना है कि यदि इस तकनीक का सफलतापूर्वक चिकित्सकीय उपयोग किया गया तो भविष्य में एंटीवायरल और इम्यूनोलॉजिकल थेरेपी के क्षेत्र में महत्वपूर्ण बदलाव देखने को मिल सकते हैं।

अतिरिक्त सामग्री पढ़ने के लिए स्कैन करें।

> वायरस के से बचाने के लिए यह आइएसजी-15 प्रोटीन बहुत सहायक है। मानव शरीर में 600 प्रकार के प्रोटीन है। आइएसजी-15 प्रोटीन की एक्टिविटी बढ़ाकर वायरस संक्रमण को रोका जा सकता है। इस प्रोटीन को सही लक्ष्य तक पहुंचाकर वायरस के खिलाफ प्रतिरक्षा प्रणाली को प्रभावी किया जा सकता है।
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> - डा. अतुल कुमार, विज्ञानी जैव विज्ञान विभाग,आइसर

कोशिकाओं की मशीनरी को बदला

डा. कुमार ने बताया कि शोध की सबसे उत्तेजनापूर्ण उपलब्धि यह रही कि विज्ञानियों ने कोशिकाओं की आणविक मशीनरी में सफलतापूर्वक बदलाव भी किया। उन्होंने एक ऐसे एंजाइम, जो सामान्यतः आइएसजी-15 से जुड़ा कार्य करता है, उसे यूबिक्विटिन से संबंधित कार्य करने योग्य बनाया। वहीं यूबिक्विटिन से जुड़े एंजाइम को आइएसजी-15 से संबंधित कार्य करने में सक्षम बनाया गया। यह प्रयोग दर्शाता है कि भविष्य में विज्ञानी कोशिकाओं के भीतर होने वाली सूक्ष्म जैविक प्रक्रियाओं को नियंत्रित कर सकेंगे। इससे रोगों के अमूल्य लक्षित (टार्गेट) उपचार विकसित करने की दिशा में नई संभावनाएं खुल सकती हैं।

लाल किले से पीएम मोदी के एलान के बाद बड़े सुधार की चल रही हैं तैयारी

छोटे शहरों में जेईई, नीट, सीयूईटी के मुफ्त कोचिंग सेंटर खोलेगी सरकार

अमर उजाला ब्यूरो

नई दिल्ली। प्रधानमंत्री नरेंद्र मोदी ने लाल किले से छात्रों को जो मुफ्त कोचिंग सुविधा देने का एलान किया है, उसके लिए सरकार बड़े स्तर पर सुधार करने जा रही है। अब कमजोर वर्ग के बच्चों को गुणवत्ता युक्त मुफ्त कोचिंग देने के लिए पिछड़े व छोटे शहरों में फ्री कोचिंग सेंटर बनेंगे। सरकार दूरदराज इलाकों के छात्रों पर फोकस करते हुए जल्द ही हितधारकों के साथ बैठक के बाद रोडमैप तैयार करेगी।

इस बारे में सरकार का पायलट प्रोजेक्ट साथी पहले ही सफल हो चुका है और इसमें 21 लाख से अधिक बच्चे मुफ्त कोचिंग ले चुके हैं। इन बच्चों ने आईआईटी, एम्स समेत दिग्गज संस्थानों के विशेषज्ञों से ऑनलाइन जेईई, नीट, सीयूईटी, बैंक, एसएससी, क्लैट, बोर्ड परीक्षाओं की 13 भारतीय भाषाओं में कोचिंग ली है। तैयारी के बाद सेल्फ असेसमेंट का मौका भी मिलता है।

पंजाब, हरियाणा समेत सात राज्य साथी पोर्टल से जुड़े पायलट प्रोजेक्ट में 21 लाख बच्चे ले चुके हैं कोचिंग

पंजाब, हरियाणा, जम्मू-कश्मीर समेत सात राज्य साथी पोर्टल से जुड़ चुके हैं, जबकि उत्तर प्रदेश, उत्तराखंड, हिमाचल, दिल्ली, झारखंड समेत अन्य राज्य जल्द जुड़ेंगे।

■ **सीनियर छात्र करेंगे मदद :** आईआईटी और एम्स के सीनियर छात्र मेंटर बनकर तैयारी में मदद करेंगे। कोई भी लाइव सत्र में व्यक्तिगत मार्गदर्शन के साथ सलाह ले सकता है। इसमें प्रश्नों को हल करने, समझ बढ़ाने के आधार पर प्रतिदिन काम होगा। साथी पोर्टल राष्ट्रीय शिक्षा नीति 2020 के तहत बनाया गया है।

मॉक टेस्ट किए गए हैं तैयार : साथी पोर्टल पर कक्षा 11वीं व 12वीं के लिए विशेषज्ञों ने मॉक टेस्ट तैयार किए हैं। क्यूआर कोड स्कैनिंग आधारित इंटरैक्शन एप तैयार किया है। 45 दिन का क्रैश कोर्स भी होगा। तैयारी के बाद सेल्फ असेसमेंट का मौका भी मिलेगा। एआई आधारित मूल्यांकन से सीखने की प्रगति ट्रैक होगी। एनसीईआरटी वीडियो समाधान, लाइव कक्षाएं, एनसीईआरटी पाठ्यक्रम पर आधारित पुस्तकों से सिखाया जाएगा।

पंचायतों की लेंगे मदद, सरकारी स्कूलों पर फोकस

शिक्षा विभाग के एक वरिष्ठ अधिकारी ने बताया, फ्री कोचिंग में भौगोलिक आधार, आर्थिक रूप कमजोर वर्ग, ग्रामीण व दूरदराज के छात्रों को ध्यान में रखकर गुणवत्ता युक्त फ्री कोचिंग का रोडमैप बनेगा। सरकारी स्कूलों के छात्रों को जोड़ने पर फोकस होगा। पंचायतों की भी मदद ली जाएगी।

लाखों सवाल-जवाब, हजारों घंटे के वीडियो लेक्चर

साथी पोर्टल में लाखों प्रश्न-उत्तर के साथ हजारों घंटे के वीडियो लेक्चर का बैंक बना है। छात्र अपनी सुविधा से कभी भी नीट, जेईई, दसवीं व 12वीं बोर्ड परीक्षा, क्लैट, सीयूईटी, एसएससी, बैंकिंग समेत अन्य परीक्षाओं की ऑनलाइन और टीवी दोनों माध्यम में तैयारी कर सकते हैं। इसमें एंड्रॉइड व आईओएस के अलावा सात डीटीएच चैनल भी हैं।

■ 58 से 60 हजार करोड़ का है कोचिंग बाजार

एक सामान्य आकलन के अनुसार देश में निजी कोचिंग का बाजार करीब 58,000 से 60,000 करोड़ का है। सरकार की तैयारी सही से परवान चढ़ गई तो आम भारतीय परिवारों के इस मद में होने वाले खर्च की बचत होने लगेगी। इससे देश की अर्थव्यवस्था में भी सुधार आ जाएगा। यही नहीं, निजी संस्थानों में पढ़ाई को लेकर बनाए जाने वाला दबाव भी घटेगा।

विमान का 90 दिन का रिकॉर्ड खंगाल रहीं एजेंसियां

एनटीए फिर संकट में...यूजीसी-नेट की तीन विषयों की परीक्षा रद्द, सितंबर में दोबारा पेपर

अमर उजाला ब्यूरो

नई दिल्ली। नेशनल टेस्टिंग एजेंसी (एनटीए) ने यूजीसी नेट जून-2026 के तीन विषयों अंग्रेजी, कॉमर्स और सोशियोलॉजी की परीक्षा रद्द कर दी है। सोशियोलॉजी पेपर गूगल ट्रांसलेट एवं ऑउट ऑफ सिलेब्स था, जबकि अंग्रेजी और कॉमर्स के पेपर में 2024 की परीक्षा वाले कई प्रश्न पूछे गए थे।

विवाद के बाद एनटीए ने जांच के लिए कमेटी गठित की थी। कमेटी की रिपोर्ट के आधार पर एनटीए ने तीनों विषयों की परीक्षा रद्द करने का फैसला किया है। अब अंग्रेजी की परीक्षा 9 सितंबर को पहली शिफ्ट में सुबह 9 से 12 बजे तक होगी, जबकि उसी दिन दूसरी शिफ्ट में दोपहर 3 से शाम 6 बजे तक कॉमर्स का पेपर होगा। सोशियोलॉजी की परीक्षा 10 सितंबर को पहली शिफ्ट में सुबह 9 से दोपहर 12 बजे तक होगी। एनटीए ने यह भी कहा, पीएचडी के दाखिले में देरी नहीं होगी, क्योंकि 84 विषयों का रिजल्ट समय पर जारी कर दिया जाएगा।

84 विषयों की प्रोविजनल आंसर-की जारी

एनटीए ने यूजीसी-नेट जून, 2026 परीक्षा के 84 विषयों की प्रोविजनल आंसर-की जारी कर दी है। आंसर-की वेबसाइट ugcnet.nta.nic.in पर जारी की गई है। उम्मीदवार आंसर की देखने के बाद 18 अगस्त रात 11:59 बजे तक प्रति प्रश्न 200 रुपये शुल्क देकर ऑनलाइन आपत्ति दर्ज करा सकते हैं।

बंगाल : तृणमूल दफ्तर में लटका मिला पूर्व डिप्टी स्पीकर का शव

सुसाइड नोट में लिखा-राजनीति में आकर भूल की

कोलकाता। प. बंगाल विधानसभा के पूर्व उपाध्यक्ष और पांच बार विधायक रहे आशीष बनर्जी का शव रविवार सुबह बीरभूम के रामपुरहाट स्थित तृणमूल कांग्रेस कार्यालय में फंदे से लटका मिला।

पुलिस का कहना है कि सुसाइड नोट में आशीष ने लिखा कि वह पार्टी के सभी गलत कामों को हमेशा स्वीकार नहीं कर पाते थे, पर विरोध नहीं कर सके। यह भी लिखा कि उन्होंने कभी भ्रष्टाचार नहीं किया। किसी काम के बदले पैसे नहीं लिए। राजनीति में आकर भूल की।' सुसाइड नोट में परिवार को राजनीति से दूर रहने की सलाह भी दी है। सीएम शुभेंदु अधिकारी ने कहा कि मामले की निष्पक्ष जांच होगी। ब्यूरो >> भ्रष्टाचार के आरोपों ने ली जान : पेज 12

आशीष बनर्जी।

15 लाख घूस लेते इंजीनियर गिरफ्तार

नई दिल्ली। सीबीआई ने 15 लाख रुपये की रिश्वत लेने के आरोप में दक्षिण मध्य रेलवे के वरिष्ठ सेक्शन इंजीनियर बापिराजू और निर्माण कंपनी के प्रबंध निदेशक के बेटे श्रीचंद को गिरफ्तार किया है। आरोप है कि 179.50 करोड़ रुपये के सिग्नलिंग प्रोजेक्ट को समय से पहले पूरा करने पर मिलने वाले करीब 7 करोड़ रुपये के बोनस को मंजूरी दिलाने के लिए फाइल में हेरफेर की गई। सीबीआई ने बापिराजू को श्रीचंद से रिश्वत लेते रंगेहाथ पकड़ा। एजेंसी

ाओं में एआई की दुनिया
करने की पूर्ण क्षमता हो।

हंट का अभियान के तहत 5 से 15 वर्ष के बच्चों की खेल प्रतिभा को निखारा जाएगा।

व सॉफ्ट पावर आदि को सप्तधारा में रखा गया है।

नवसलियों का समर्थन करते हैं, भारतीय संविधान को नकारते हैं।

सेहत से खिलवाड़...रेलवे स्टेशनों के पानी में मिला ई-कोलाई बैक्टीरिया

कैग की रिपोर्ट : 16 जोन में 512 स्टेशनों में से 458 पर यात्री सुविधाओं की कमी

नई दिल्ली। देश के कई बड़े रेलवे स्टेशनों के वाटर कूलर के पानी में ई-कोलाई बैक्टीरिया मिला है। यह बैक्टीरिया इंसान के मल में पाया जाता है और पानी के दूषित होने का संकेत माना जाता है। इससे रेलवे की साफ-सफाई और यात्रियों को सुरक्षित पानी उपलब्ध कराने के दावों पर सवाल उठ रहे हैं। रेलवे स्टेशनों के दूषित पानी का खुलासा नियंत्रक एवं महालेखा परीक्षक (कैग) की ताजा रिपोर्ट में हुआ है। यह रिपोर्ट 12 अगस्त को संसद में पेश की गई थी।

कैग ने बताया कि रेल मंत्रालय ने यात्रियों की सुविधाओं के लिए कई मानक तय किए हैं, लेकिन रेलवे के कई जोन इनका सही तरीके से पालन नहीं कर रहे हैं। जांच में दूषित पानी के साथ-साथ शौचालयों की खराब और गंदी स्थिति भी सामने आई। जांच के दौरान दक्षिणी रेलवे के कोयंबटूर और पलक्कड़, दक्षिण मध्य रेलवे के हैदराबाद, मध्य रेलवे के छत्रपति-शिवाजी महाराज टर्मिनस, भिवंडी रोड, कल्याण और लोनावला व पूर्वी रेलवे के मधुपुर स्टेशन के वाटर कूलर से पानी के नमूने लिए गए। सभी जगहों के पानी में ई-कोलाई बैक्टीरिया मिला। चिंता की बात यह है कि 2022-23 में आठ जोन के करीब 49 स्टेशनों और 2023-24 में 56 स्टेशनों के पानी में भी यह बैक्टीरिया पाया गया था। एजेंसी

बड़े स्टेशन भी जरूरी सुविधाओं में पीछे

रेलवे बोर्ड ने अप्रैल 2018 में निर्देश दिए थे कि 31 अगस्त 2018 तक सभी स्टेशनों पर जरूरी यात्री सुविधाएं उपलब्ध कराई जाएं। लेकिन कैग की रिपोर्ट में सामने आया कि एनएसजी-1 श्रेणी के कई बड़े और प्रमुख स्टेशन भी इन सुविधाओं में पीछे हैं। इनमें नई दिल्ली, मुंबई का सीएसएमटी, हावड़ा, सियालदह और मुंबई सेंट्रल जैसे स्टेशन शामिल हैं। इन स्टेशनों पर यूरिनल, शौचालय, कूड़ेदान, पानी के नल और दिशा बताने वाले बोर्ड जैसी जरूरी सुविधाओं की कमी पाई गई।

89% रेलवे स्टेशनों पर जरूरी सुविधाएं उपलब्ध नहीं

कैग ने 16 रेलवे जोन के 512 गैर-उपनगरीय स्टेशनों की जांच की। इसमें सामने आया कि 458 स्टेशन यानी करीब 89 फीसदी तय न्यूनतम सुविधाओं के मानकों पर खरे नहीं उतरे।

- कई बड़े स्टेशनों पर यात्रियों के लिए पीने का पानी, बैठने की जगह, शौचालय, पंखे, छतरी और इलेक्ट्रॉनिक सूचना बोर्ड जैसी जरूरी सुविधाएं या तो नहीं थीं या जरूरत के मुकाबले बहुत कम थीं।

59 स्टेशनों पर पानी में बैक्टीरिया संबंधी जांच तक नहीं

जांच में कई स्टेशनों के पीने के पानी की गुणवत्ता भी खराब मिली। कोयंबटूर, पलक्कडट, हैदराबाद, छत्रपति शिवाजी महाराज टर्मिनस, कल्याण, लोनावला और मधुपुर समेत कई स्टेशनों के वाटर कूलर के पानी में ई-कोलाई बैक्टीरिया पाया गया।

- छह रेलवे जोन के 59 स्टेशनों पर पानी की बैक्टीरिया संबंधी जांच तक नहीं की गई। कैग ने रेलवे को सभी स्टेशनों पर पानी की गुणवत्ता की नियमित और व्यापक जांच कराने तथा तय नियमों का सख्ती से पालन सुनिश्चित करने की सलाह दी है।

रेल मंत्री ने दिए सुरक्षित पेयजल उपलब्ध कराने के आदेश

कैग रिपोर्ट सामने आने के बाद रेल मंत्री अश्विनी वैष्णव ने देश भर के रेलवे स्टेशनों पर सुरक्षित पेयजल पानी सुनिश्चित करने के लिए तुरंत कदम उठाने के आदेश दिए। रेल मंत्रालय की ओर से रविवार को जारी एक विज्ञप्ति के मुताबिक, वैष्णव ने वरिष्ठ अधिकारियों के साथ पूरे दिन समीक्षा की और कई उपाय करने के आदेश दिए, जिनमें पानी को फिल्टर करने वाली प्रणाली लगाना, पानी की टंकियां बदलना और पानी की गुणवत्ता की नियमित जांच शामिल है।

नहीं 30%

जानी चाहिए। इन टीम के साथ मंत्रालयों की सोशल मीडिया टीमें नियमित रूप से

(पीआईबी) की फैक्ट चेक इकाई के साथ समन्वय करेगी। ब्यूरो

जगहों पर पहुंचाया गया। भूकंप और भूस्खलन की वजह से बंद हो गईं और 1,300 से अधिक घरों को नुकसान पहुंचा है।

ताजी हवा, सेहतमंद खाना और अपना शौक जिंदा रखना...110 वर्ष की बुजुर्ग ने खोला लंबी उम्र का राज

लंदन में रहने वाली सुपरसेंटेनेरियन कैथरीन हेजेस बागवानी व खबरें पढ़कर बिताती हैं अपना दिन

लंदन। अगर आपको 110 वर्ष के किसी बुजुर्ग से रूबरू कराया जाए तो मन में सबसे पहला सवाल क्या उठेगा? जाहिर है, आखिर इनकी लंबी उम्र का राज क्या है। लोग सुपरसेंटेनेरियन यानी 110 की उम्र तक कैसे पहुंचते हैं, यह तो आज भी वैज्ञानिकों के लिए शोध का विषय बना हुआ है। लेकिन कुछ ही समय पहले 110 वर्ष की उम्र पूरी करने वाले बुजुर्गों के क्लब में शामिल हुईं कैथरीन हेजेस ढेर सारी शुद्ध हवा, अच्छे खाने और अपने शौक को जिंदा बनाए रखने को अपनी लंबी उम्र का राज बताती हैं।

कैथरीन का जन्म 8 जुलाई 1916 को आयरलैंड के काउंटी लिमरिक में हुआ था। 1944 में 28 वर्ष की उम्र में दुनिया घूमने निकलीं कैथरीन जब इंग्लैंड के चर्चशायर पहुंचीं तो यह जगह इतनी पसंद आई कि उन्होंने यहीं बसने का फैसला कर लिया।

यहीं उनकी मुलाकात लेस्ली विलियम हेजेस से हुई, जो फ्रेट ट्रांसपोर्ट मैनेजर थे। फिर दोनों ने शादी कर ली। कैथरीन पेशे से एक नवालीफाइड बुककीपर थीं और स्थानीय सरकार के कामकाज से जुड़ी रहीं हैं। डेलीमेल की रिपोर्ट के मुताबिक, 16 वर्ष पहले उनके पति का निधन हो चुका है और फिलहाल वह हैमशायर के एक केयर होम में रहती हैं। यहीं पर पिछले महीने उनका 110वां जन्मदिन मनाया गया। कैथरीन ने अपना जन्मदिन अपने पसंदीदा गमले में लगे पेरूवियन लिली के पौधे के पास बैठकर बिताया। कैथरीन हमेशा सक्रिय रही हैं और उन्हें खुली हवा में रहना बहुत पसंद है। वह बताती हैं कि उन्हें हमेशा घर का अच्छा खाना पसंद रहा है। उन्हें घुड़दौड़ देखने का भी शौक है, जब पति जीवित थे तो दोनों साथ में टीवी पर रेस देखते थे। कैथरीन आज भी ग्रैंड नेशनल घुड़दौड़ देखती हैं और केयर होम के स्टाफ को बताती हैं कि किस घोड़े के जीतने की संभावना सबसे ज्यादा है। एजेंसी

एथेल कैटरहम सबसे उम्रदराज महिला

अगर दुनिया में अभी जीवित सबसे उम्रदराज इंसान की बात करें तो वह रिकॉर्ड एथेल कैटरहम के नाम पर है। वह इसी हफ्ते अपना 117वां जन्मदिन मनाने जा रही है। इंग्लैंड के सरे स्थित एक केयर होम में रहने वाली एथेल को बिंगो खेलना और योग करना पसंद रहा है। ड्राइविंग की शौकीन एथेल 97 वर्ष की उम्र तक आराम से गाड़ी चलाती थीं।

200-300
के करीब लोग ही हैं दुनिया में इस वक्त सुपरसेंटेनेरियन क्लब में

100
वर्ष तक जीने वाले 1000 लोगों में एक व्यक्ति ही 110 वर्ष तक जीता है

जीन का सही संयोजन जरूरी

बोस्टन यूनिवर्सिटी के रिसर्च एक्सपर्ट डॉ. टॉम पर्ल्स के मुताबिक, 110 साल से ज्यादा जीने वाले लोग दुर्लभ होते हैं। शरीर में लगभग 200 ऐसे जीन होते हैं जो उम्र पर असर डालते हैं, और इनका सही संयोजन ही इंसान को सुपरसेंटेनेरियन के पार पहुंचाता है।

- 73.8 वर्ष होती है लोगों की औसत आयु।

मानसिक सक्रियता जगाती है रुचि

दिनचर्या के बारे में कैथरीन ने कहा कि वह सुबह आराम से समय बिताती हैं और धूप में बैठकर अखबार पढ़ती हैं। इसके बाद स्टाफ की मदद से अपने पौधों को देखभाल करती हैं और फिर कमरे में जाकर टीवी देखते हुए रात का खाना खाती है। उनका कहना है, अखबार न केवल दुनिया की खबरों से जोड़े रखता है, बल्कि उनके दिमाग को भी सक्रिय रखता है।

फैसला : अंग्रेजी-वाणिज्य, समाजशास्त्र के प्रश्नपत्रों में पाई गईं त्रुटियां

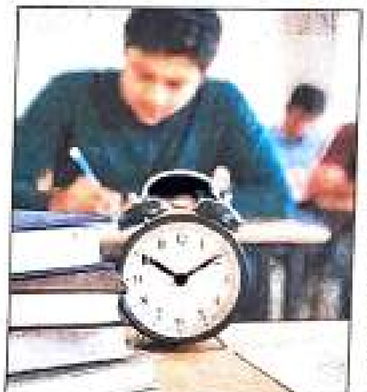
नेट के तीन विषयों की परीक्षा दोबारा होगी

नई दिल्ली, एजेंसी। राष्ट्रीय परीक्षा एजेंसी (एनटीए) ने रविवार को जून में आयोजित यूजीसी-नेट 2026 के तीन विषयों अंग्रेजी, कॉमर्स और समाजशास्त्र की परीक्षा दोबारा कराने की घोषणा की। एनटीए ने इन विषयों के प्रश्नपत्रों में त्रुटियों की शिकायत मिलने के बाद यह फैसला लिया है।

एनटीए ने यूजीसी-नेट का आयोजन 22 से 30 जून के बीच कराया था। 87 विषयों में यह परीक्षा कराई गई थी। यह परीक्षा जूनियर रिसर्च फेलोशिप (जेआरएफ), सहायक प्रोफेसर पद के लिए पात्रता और पीएचडी कार्यक्रमों में प्रवेश के लिए आयोजित की जाती है। परीक्षा के बाद अंग्रेजी, कॉमर्स और समाजशास्त्र के प्रश्नपत्रों में कई गलतियों को लेकर अभ्यर्थियों ने शिकायतें दर्ज कराई थीं।

अंतरिम आंसर-की जारी: इससे पहले दिन में एनटीए ने यूजीसी-नेट जून 2026 परीक्षा के 87 में से 84 विषयों के लिए अंतरिम आंसर-की जारी की थी। अंग्रेजी, कॉमर्स और समाजशास्त्र की आंसर-की जारी नहीं की गई थी। आंसर-की पर 18 अगस्त तक आपत्तियां दर्ज कराई जा सकेंगी। एजेंसी ने 'एक्स' पर एक पोस्ट में आंसर-की जारी करने की जानकारी साझा की थी।

आपत्ति दर्ज कराने के लिए शुल्क देना होगा: बताया गया है कि 16 अगस्त से 18 अगस्त की रात 11:59 बजे तक आधिकारिक वेबसाइट पर आपत्तियां दर्ज कराने का मौका मिलेगा। एजेंसी ने बताया कि 84 विषयों के लिए उम्मीदवारों को आपत्ति दर्ज कराने के लिए हर सवाल पर 200 रुपये शुल्क देना होगा। यह शुल्क भी 18 अगस्त रात 11:59 बजे तक ही जमा करें।



एनटीए ने जांच के लिए समिति का किया था गठन

तीनों विषयों के प्रश्नपत्रों में त्रुटियों की शिकायतों के बाद एनटीए ने जांच समिति बनाई थी। समिति ने तथ्यात्मक, छपाई, अनुवाद, व्याकरण और भाषा संबंधी कई गलतियां पाई। कई पुराने सवाल भी दोहराए गए थे। समिति ने निष्पक्ष और त्रुटि-मुक्त परीक्षा के लिए दोबारा परीक्षा कराने की सिफारिश की।

बाकी विषयों के नतीजों पर असर नहीं

एनटीए ने बताया कि 84 अन्य विषयों के नतीजे तय कार्यक्रम के मुताबिक ही जारी होंगे। इन तीन विषयों की पुनर्परीक्षा की वजह से मुख्य परिणाम की घोषणा में कोई देरी नहीं की जाएगी।

लगातार विवादों में एनटीए

एनटीए पिछले कुछ समय से लगातार विवादों में रहा है। इसी साल तीन मई को हुई नीट-यूजी परीक्षा का भी पेपर लीक हो गया था, जिसके बाद एजेंसी ने 21 जून को पुनर्परीक्षा कराया था। 2024 में भी नीट का पेपर लीक हुआ था। 2022-23 में आयोजित कॉमन यूनिवर्सिटी एंट्रेंस टेस्ट (सीयूईटी) के दौरान भी कई केंद्रों पर तकनीकी समस्याएं आई थीं।

कांग्रेस ने निशाना साधा

कांग्रेस ने यूजीसी-नेट के तीन विषयों की दोबारा परीक्षा कराने को लेकर केंद्र सरकार और एनटीए पर निशाना साधा है। कांग्रेस प्रवक्ता पवन खेड़ा ने 'एक्स' पर लिखा, 'बदनाम एनटीए एक बार फिर जांच के दायरे में है। उम्मीद करते हैं कि राम मंदिर से जुड़े चंदा चोरी कांड की तरह इस बार भी छोटे लेवल के लोगों को राजनीतिक जवाबदेही से बचाने के लिए दबाव नहीं डाला जाएगा।'

समय पर जारी होंगे नतीजे: एनटीए ने कहा कि जिन 84 विषयों के लिए चुनौती दिए गए प्रश्नों की उत्तर कुंजी रविवार को जारी की गई है, उनके नतीजे तय समय-सारणी के अनुसार घोषित किए जाएंगे।

84 विषयों के लिए यूजीसी-नेट आंसर की एनटीए ने जारी की है

18 अगस्त तक आपत्तियां दर्ज कराई जा सकेंगी-आंसर-की पर

दोबारा परीक्षा का शुल्क नहीं लिया जाएगा

एनटीए ने बताया कि अंग्रेजी की परीक्षा नौ सितंबर को सुबह नौ बजे से दोपहर 12 बजे तक होगी। कॉमर्स का पेपर उसी दिन दोपहर तीन बजे से शाम छह बजे तक कराया जाएगा। समाजशास्त्र की परीक्षा 10 सितंबर को सुबह नौ बजे से दोपहर 12 बजे तक होगी। दोबारा परीक्षा के लिए छात्रों से कोई नई फीस नहीं ली जाएगी।

वेबसाइट पर दी जाएगी केंद्रों की जानकारी

एनटीए के अनुसार, अभ्यर्थियों को परीक्षा केंद्र, शहर और एडमिट कार्ड से जुड़ी जानकारी अलग से आधिकारिक वेबसाइट पर दी जाएगी।

आधिकारिक जानकारी पर ही विश्वास करें: एजेंसी ने अभ्यर्थियों से अपील की है कि वे सिर्फ एनटीए की आधिकारिक वेबसाइट और अधिकृत सोशल मीडिया हैंडल पर आने वाली जानकारियों पर ही विश्वास करें।

एम्स निदेशक पद के लिए 65 ने पेश की दावेदारी

नईदिल्ली, प्रमुख संवाददाता। एम्स के नए निदेशक के लिए 65 वरिष्ठ डॉक्टरों ने दावेदारी पेश की है। इसमें 36 एम्स के प्रोफेसर व 29 दूसरे चिकित्सा संस्थानों के डॉक्टर शामिल हैं।

खास बात यह कि इस बार एम्स के प्रोफेसर स्तर के आठ महिला डॉक्टरों ने निदेशक पद के लिए आवेदन कर दावेदारी पेश की है। इसलिए एम्स के निदेशक की नियुक्ति प्रक्रिया पर संस्थान के सभी डॉक्टरों व कर्मचारियों की नजरें टिकी हुई हैं। एम्स में अब तक कुल 17 निदेशक हुए हैं। इसमें से सिर्फ एक महिला डॉ. स्नेह भार्गव शामिल रही

■ संस्थान के 36 और बाहर के 29 डॉक्टरों ने किया है आवेदन

हैं। वह वर्ष 1984-1990 के बीच एम्स की निदेशक थीं। इस वर्ष पहली बार दिल्ली में मौजूद तीनों बड़े केंद्रीय चिकित्सा संस्थानों सफदरजंग, आरएमएल व लेडी हार्डिंग मेडिकल कॉलेज की निदेशक महिला डॉक्टर बनाई गई हैं। ऐसे में इस बात की चर्चा है कि एम्स की कमान भी महिला डॉक्टर को मिल सकती है। यही वजह है कि महिला डॉक्टरों ने भी आवेदन किए हैं।

मास्टर प्लान 2047

योजनाबद्ध तरीके से प्रवासियों-

उम्मीद : मच्छर का डंक ही मलेरिया से रक्षा करेगा

ऑस्ट्रेलिया में स्वास्थ्य वैज्ञानिकों ने किया अहम विश्लेषण

सेहत

सिडनी, एजेंसी। मच्छर के काटने से आमतौर पर मलेरिया जैसी गंभीर बीमारी का खतरा बना रहता है। लेकिन ऑस्ट्रेलिया के वैज्ञानिकों ने एक ऐसा तरीका खोजने की कोशिश की है, जिसमें मलेरिया वाले मच्छर का काटना शरीर को मलेरिया से लड़ने के लिए तैयार करने में मदद कर सकता है।

वाल्टर एंड एलिजा हॉल इंस्टीट्यूट ऑफ मेडिकल रिसर्च के वैज्ञानिकों ने एक प्रयोग में मलेरिया के परजीवी को बीमारी फैलाने से पहले ही रोक दिया। इसके लिए उन्होंने एक खास मलेरिया-रोधी दवा का इस्तेमाल किया। दरअसल, जब संक्रमित मच्छर किसी व्यक्ति को काटता है तो वह मलेरिया परजीवी शरीर में पहुंचाता है। ये परजीवी सबसे पहले लिवर में जाते हैं। वहां वे कुछ समय तक विकसित और अपनी संख्या बढ़ाते हैं। इसके बाद वे खून में पहुंचते हैं और मलेरिया के लक्षण पैदा कर सकते हैं। वैज्ञानिकों ने इसी प्रक्रिया के खास चरण को निशाना बनाया। उन्होंने मच्छर के जरिये शरीर में पहुंचे परजीवी के साथ प्रयोगात्मक एंटी-मलेरियल दवाओं का इस्तेमाल किया। ये दवाएं परजीवी के लिए जरूरी प्रोटीन को रोकती हैं। इससे वह खून में पहुंचकर बीमारी फैलाने की स्थिति में नहीं पहुंच सका। दूसरी ओर, शरीर की रोग प्रतिरोधक क्षमता को परजीवी को पहचानने और उससे लड़ने के लिए तैयार होने का मौका मिल गया।

37 देशों ने एक हजार से भी कम मामलों की रिपोर्ट दी, जो नियंत्रण के प्रयास दर्शाता है

2030 तक का लक्ष्य

- वर्ष 2026 तक दुनिया के 47 देश मलेरिया मुक्त घोषित हो चुके हैं।
- भारत में 2023 से 2025 के बीच मलेरिया के मामलों में 80.5 फीसदी कमी आई है।
- 2024 में मलेरिया से छह लाख मौतें हुईं, यह आंकड़ा 2023 के मुकाबले थोड़ा ज्यादा रहा।
- भारत मलेरिया खत्म करने की दिशा में आगे बढ़ रहा है, देश ने 2030 तक का लक्ष्य रखा है।

स्रोत : विश्व स्वास्थ्य संगठन

'बूस्टर' की तरह काम करेगा मच्छर

शुरुआती इलाज के बाद मलेरिया वाले मच्छर के काटने से शरीर की बीमारी से लड़ने की क्षमता और मजबूत हो सकती है। इसे वैज्ञानिक 'वैक्सीन और बूस्टर' जैसा तरीका मान रहे हैं, यानी पहले दवा की मदद से शरीर को मलेरिया के परजीवी की पहचान कराई जाए और बाद में सुरक्षित तरीके से इम्यूनिटी को और मजबूत किया जाए। हालांकि, इसका मतलब यह नहीं है कि लोग जानबूझकर मलेरिया वाले मच्छरों से खुद को कटवाएं। ऐसा करना खतरनाक हो सकता है।