



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE Day
Monday

20260504

Marshmallow myths and the waiting child

The Hindu

Perhaps, one of the world's most famous psychology experiments was run on full stomachs. But what about the child who is starving without a morsel of food?

CANDY CRUMBLES

Vaishali R. Venkat

This week, I'm taking you not to stock exchanges, banks or mutual fund houses, but to a different corner of the earth: war-torn streets. Imagine a child crying near a place where her home once stood. The roof is gone. The walls are gone. Her parents are gone. Only she remains. Now, place a marshmallow in front of the child. Tell her that if she waits for 15 more minutes, she would get one more. Ask yourself: will she wait?

Walk into a crumbling classroom in Sudan. Meet a girl who hasn't seen her home for more than two years. Will she wait to grab the second marshmallow?

Enter a ravaged shelter home in Syria, where millions of people still need humanitarian aid. You see a bony boy with torn clothes. Will he wait? Now, ask the same question to a refugee child at a camp in Jordan, in Lebanon, in Turkey, in Afghanistan or elsewhere on this earth where children wait not only for a morsel of food, but also for safety, security and a breath of peace.

Now walk into a school in Washington DC. The hallways smell of fresh paint. The heater hums in the classroom. Crayons lie scattered on the floor. Toys spill from shelves. You see a boy with a lunch box in his hands. Inside it, a sand-



wich, an apple, a chocolate bar, wafers and berries. Now, hold the marshmallow in front of him. It has now become the poorest thing of all that's inside his lunchbox. Will he wait? Not at all. He doesn't care a damn about your marshmallow.

Same marshmallow but two reactions. The children in war-ravaged areas grab it immediately. Not because they lack self-control. But because in their world, it is the only thing that is real. For them, the promises of tomorrow were shattered several times. They were genuinely starving and so grabbed the marshmallow. The boy with berries in lunchbox does not even care to look.

But there is a third category of children. In this, the child is neither the Gaza nor the Washington type. It is in the middle of us. Who is the child?

The Marshmallow Test

In the U.S., in the late 1960s, Stanford University Professor Walter Mischel set out to study one of the most fundamental questions of human behaviour: Can a child's ability to control impulses predict its future success? He placed a



marshmallow in front of almost 600 children aged 4-6. One simple offer: wait for 15 minutes to get two. His follow-up research into the same children showed those who waited grew up with better grades, careers and financial habits. From a classroom in Stanford, tumbled out an entire philosophy of wealth creation. Delay gratification. Control impulses. And over a period, every money guru found a financial sermon - Save. Wait. Resist.

'Sermon' cracked

Not everyone appreciated the sermon. In 2013, Psychology professor Celeste Kidd made a startling discovery. She found children's wait-times reflected not only self-control but also reasoned beliefs about whether waiting would ultimately pay off.

Children who lived with reliable parents viz. those who kept up promises, waited longer. Children from unstable, unpredictable environments grabbed the marshmallow immediately. Not because they lacked self-control. But because their world had taught them that waiting rarely pays off. Five years later in 2018, researchers

Tyler Watts, Greg Duncan and Haonan Quan ran the same test on a broader sample of children from diverse backgrounds. When they took into account family background, early cognitive ability and the environment at home, the advantage of waiting reduced significantly.

The child who waited wasn't more disciplined. She simply came from a more stable home with caring parents.

Recent study

And in 2024, a study published in *Child Development* followed 702 children from the age of four all the way to age 26. The conclusion was simple: Grabbing the marshmallow instantly or waiting for the second one made no reliable difference to how successful the children became in their adult life.

Three studies. One quiet verdict. It was never about self-control, but was about circumstances. The first child's circumstances forced it to grab. The marshmallow itself became irrelevant for the Washington types.

But the third child is eagerly waiting. Faithfully. Patiently. Believing every word of the sermon. Who is the child? To know the answer, and to understand what it means for your money and your future, you will have to wait for your second marshmallow.

(The writer is an NISM & CRISIL-certified Wealth Manager and certified in NISM's Research Analyst module)

Govt. issues guidelines on childhood diabetes care

New framework provides for universal screening, district-level diagnosis and free lifelong care, including insulin, regular monitoring, and emergency response under public health system

Bindu Shajan Perappadan
NEW DELHI

Integrating childhood diabetes care into the public health system, the Union Health Ministry has, for the first time, introduced a structured and standardised national framework for the screening, diagnosis, treatment and long-term management of diabetes in children.

Releasing the *Guidance Document on Diabetes Mellitus in Children* recently, the Ministry said this aims to ensure universal diabetes screening of all children in India from birth to 18 years of age.

"Suspected cases will undergo immediate blood glucose testing, followed by timely referral to district-level health facilities for confirmatory diagnosis and treatment," a senior Health Ministry official said.

He added that a key feature of the framework is the provision of a comprehensive, free-of-cost care package at public health facilities. This includes screening, diagnostic services, lifelong insulin therapy, monitoring devices such as glucometers and test strips, and regular follow-up care. The approach is designed to reduce fi-

Early intervention

The Union Health Ministry has introduced a structured and standardised national framework for the screening, diagnosis, treatment, and long-term management of diabetes in children

- Integration of childhood diabetes care in the public health system aims to ensure universal diabetes screening of all children from birth to 18 years of age



- It provides for a comprehensive, free-of-cost care package at public health facilities

■ It aims to reduce financial burden and ensure uninterrupted treatment for children diagnosed with diabetes



- The guidance document emphasises family and caregiver empowerment, providing structured training on insulin administration, blood glucose monitoring, emergency response, and daily disease management

financial burden and ensure uninterrupted treatment for children diagnosed with diabetes.

Integrated care

While the initiative positions India among a select group of countries that have integrated childhood diabetes care into the public health system, the document also introduces an integrated continuum of care, linking community-level screening with district hospital-based management and advanced care at medical colleges.

"This convergence ensures that no child is lost in

the system and that care continues seamlessly from detection to long-term follow-up," the Health Ministry noted in a release issued on Sunday.

According to the World Health Organization, diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood sugar. Hyperglycaemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious dam-

age to many of the body's systems, especially the nerves and blood vessels.

"4Ts" framework

The initiative seeks to support early detection and promote the "4Ts" awareness framework – Toilet, Thirsty, Tired, and Thinner – enabling parents, teachers and caregivers to recognise early warning signs of Type 1 diabetes.

In addition to clinical protocols, the document emphasises family and caregiver empowerment, providing structured training on insulin administration, blood glucose monitoring, emergency response and daily disease management. It also outlines evidence-based treatment guidelines, regular monitoring schedules, and protocols for preventing complications.

The initiative is expected to deliver public health benefits, including reduced mortality due to early detection, prevention of complications, and improved quality of life for affected children. Over the long term, it will contribute to lowering health-care costs and strengthening health system capacity for managing non-communicable diseases among children.

Marshmallow myths and the waiting child

The Hindu

Perhaps, one of the world's most famous psychology experiments was run on full stomachs. But what about the child who is starving without a morsel of food?

CANDY CRUMBLES

Vaishali R. Venkat

This week, I'm taking you not to stock exchanges, banks or mutual fund houses, but to a different corner of the earth: war-torn streets. Imagine a child crying near a place where her home once stood. The roof is gone. The walls are gone. Her parents are gone. Only she remains. Now, place a marshmallow in front of the child. Tell her that if she waits for 15 more minutes, she would get one more. Ask yourself: will she wait?

Walk into a crumbling classroom in Sudan. Meet a girl who hasn't seen her home for more than two years. Will she wait to grab the second marshmallow?

Enter a ravaged shelter home in Syria, where millions of people still need humanitarian aid. You see a bony boy with torn clothes. Will he wait? Now, ask the same question to a refugee child at a camp in Jordan, in Lebanon, in Turkey, in Afghanistan or elsewhere on this earth where children wait not only for a morsel of food, but also for safety, security and a breath of peace.

Now walk into a school in Washington DC. The hallways smell of fresh paint. The heater hums in the classroom. Crayons lie scattered on the floor. Toys spill from shelves. You see a boy with a lunch box in his hands. Inside it, a sand-



wich, an apple, a chocolate bar, wafers and berries. Now, hold the marshmallow in front of him. It has now become the poorest thing of all that's inside his lunchbox. Will he wait? Not at all. He doesn't care a damn about your marshmallow.

Same marshmallow but two reactions. The children in war-ravaged areas grab it immediately. Not because they lack self-control. But because in their world, it is the only thing that is real. For them, the promises of tomorrow were shattered several times. They were genuinely starving and so grabbed the marshmallow. The boy with berries in lunchbox does not even care to look.

But there is a third category of children. In this, the child is neither the Gaza nor the Washington type. It is in the middle of us. Who is the child?

The Marshmallow Test
In the U.S., in the late 1960s, Stanford University Professor Walter Mischel set out to study one of the most fundamental questions of human behaviour: Can a child's ability to control impulses predict its future success? He placed a



marshmallow in front of almost 600 children aged 4-6. One simple offer: wait for 15 minutes to get two. His follow-up research into the same children showed those who waited grew up with better grades, careers and financial habits. From a classroom in Stanford, tumbled out an entire philosophy of wealth creation. Delay gratification. Control impulses.

From a classroom in Stanford, tumbled out an entire philosophy of wealth creation. Delay gratification. Control impulses. And over a period, every money guru found a financial sermon - Save. Wait. Resist.

'Sermon' cracked

Not everyone appreciated the sermon. In 2013, Psychology professor Celeste Kidd made a startling discovery. She found children's wait-times reflected not only self-control but also reasoned beliefs about whether waiting would ultimately pay off.

Children who lived with reliable parents viz. those who kept up promises, waited longer. Children from unstable, unpredictable environments grabbed the marshmallow immediately. Not because they lacked self-control. But because their world had taught them that waiting rarely pays off. Five years later in 2018, researchers

Tyler Watts, Greg Duncan and Haonan Quan ran the same test on a broader sample of children from diverse backgrounds. When they took into account family background, early cognitive ability and the environment at home, the advantage of waiting reduced significantly.

The child who waited wasn't more disciplined. She simply came from a more stable home with caring parents.

Recent study

And in 2024, a study published in Child Development followed 702 children from the age of four all the way to age 26. The conclusion was simple: Grabbing the marshmallow instantly or waiting for the second one made no reliable difference to how successful the children became in their adult life.

Three studies. One quiet verdict. It was never about self-control, but was about circumstances. The first child's circumstances forced it to grab. The marshmallow itself became irrelevant for the Washington types.

But the third child is eagerly waiting. Faithfully. Patiently. Believing every word of the sermon. Who is the child? To know the answer, and to understand what it means for your money and your future, you will have to wait for your second marshmallow.

(The writer is an NISM & CRISIL-certified Wealth Manager and certified in NISM's Research Analyst module)

Bank Fixed Deposit Rates

Interest Rates (%)

Home Loan Interest Rates

Interest Rates (%)

Name of Lender

Loan Amount (Rs.)

स्वास्थ्य मंत्रालय ने बीमारी की जल्द पहचान और निदान के लिए अहम फैसला लिया देशभर में सभी बच्चों और किशोरों की मधुमेह जांच कराई जाएगी

निर्णय

नई दिल्ली, विशेष संवाददाता। बच्चों में मधुमेह के बढ़ते खतरे से निपटने के लिए केंद्र सरकार ने इसके प्रबंधन को लेकर एक मार्गदर्शन दस्तावेज जारी किया है। इसमें प्रावधान किया गया है कि 0-18 साल की उम्र के सभी बच्चों एवं किशोरों की मधुमेह जांच की जाएगी।

यह जांच स्कूलों और सामुदायिक सेवाओं के जरिये सुनिश्चित की जाएगी। स्वास्थ्य मंत्रालय ने राष्ट्रीय बाल स्वास्थ्य कार्यक्रम (आरबीएसके) और बच्चों में मधुमेह देखभाल को लेकर दो दस्तावेज रविवार को मीडिया से साझा किए हैं। इनमें बीमारियों की जल्दी पहचान और निदान पर ध्यान केंद्रित किया गया है। दस्तावेज में कहा गया है कि बच्चों एवं किशोरों में पहली बार मधुमेह की जांच, निदान और उपचार के दीर्घकालिक प्रबंधन के लिए यह कदम उठाया गया



निशुल्क होगी सुविधा

कार्यक्रम की प्रमुख विशेषता यह है कि सार्वजनिक स्वास्थ्य केंद्रों पर जांच, निदान और उपचार समूची प्रक्रिया निशुल्क होगी। ताकि इसका बोझ बच्चों एवं उनके परिवार पर नहीं पड़े। मार्गदर्शन दस्तावेज में एकीकृत देखभाल प्रणाली का भी उल्लेख किया गया है, जो सामुदायिक स्तर की स्क्रीनिंग को जिला अस्पताल आधारित प्रबंधन और मेडिकल कॉलेजों में उन्नत देखभाल से जोड़ती है। यह समन्वय सुनिश्चित करता है कि कोई भी बच्चा प्रणाली से वंचित न रह जाए और निदान से लेकर दीर्घकालिक अनुवर्ती कार्रवाई तक देखभाल निर्बाध रूप से जारी रहे।

रक्तचाप और मानसिक स्वास्थ्य की भी जांच

कार्यक्रम के तहत मानसिक स्वास्थ्य स्थितियों और उच्च रक्तचाप जैसी गैर-संचारी बीमारियों की जांच को भी शामिल किया है। मंत्रालय के अनुसार, उन्नत जांच टांचे का उद्देश्य बच्चों और किशोरों को प्रभावित करने वाली स्वास्थ्य स्थितियों की शीघ्र पहचान और समय पर इलाज सुनिश्चित करना है।

है। इसके साथ ही भारत दुनिया के उन चंद देशों के समूह में शामिल हो गया है जहां बच्चों एवं किशोरों में सार्वजनिक स्वास्थ्य कार्यक्रम के जरिये जांच और

उपचार की सुविधा मिलती है। दस्तावेज के अनुसार, स्कूलों एवं सामुदायिक मंचों के जरिये बच्चों की जांच की जाएगी। संदिग्ध मामलों में

बीमारी का बढ़ता खतरा

1. देश में करीब 16 फीसदी वयस्क आबादी मधुमेह या प्री मधुमेह की स्थिति में है। जबकि 10-19 साल की उम्र में 12.3 फीसदी लड़के और 8.4% लड़कियां मधुमेह से ग्रस्त हैं।
2. राष्ट्रीय परिवार कल्याण सर्वेक्षण सर्वे-5 के अनुसार पांच साल से कम उम्र के 3.4% बच्चे मोटापे की जड़ में हैं, जो मधुमेह के खतरे का भी सामना कर रहे हैं।
3. कई अनुसंधान इस ओर संकेत करते हैं कि बच्चों में जंक फूड का बढ़ता चलन, सीमित होती शारीरिक गतिविधियां, बढ़ते तनाव के कारण मधुमेह के मामले बढ़ रहे हैं।
4. चीन के बाद भारत में सबसे ज्यादा मरीज होने का अनुमान है। देश में 10 करोड़ रोगी और करीब 11 करोड़ मधुमेह के मुहाने पर।

शर्करा जांच की जाएगी। इसकी पुष्टि, निदान और उपचार के लिए जिलास्तरीय स्वास्थ्य केंद्रों में रेफर किया जाएगा।

प्रयोग... पहले... प्रयोग... प्रयोग... नॉर्थ... संगम... के... प्रीयोग... संगम... रक्षामंत्र... सुबह... समा... को... प्रस्तुत... संगम... प्रीच...

डायबिटिक बच्चों के इलाज में आर्थिक तंगी नहीं बनेगी बाधा

नई दिल्ली, प्रेटर: बचपन जब बीमारी की जकड़ में आता है, तो दर्द सिर्फ बच्चे को नहीं, पूरे परिवार को होता है। भारत में टाइप-1 डायबिटीज से जूझ रहे बच्चों और उनके अभिभावकों की इसी पीड़ा को समझते हुए केंद्र सरकार ने एक ऐतिहासिक कदम उठाया है। केंद्रीय स्वास्थ्य मंत्रालय ने 'बाल मधुमेह' की स्क्रीनिंग, निदान व उपचार के लिए एक व्यापक राष्ट्रीय ढांचा जारी किया है। यह पहल न केवल चिकित्सा जगत में एक मील का पत्थर है, बल्कि उन हजारों परिवारों के लिए उम्मीद की एक नई किरण है जो महंगे इलाज के बोझ तले दबे थे। इस नई नीति की सबसे बड़ी विशेषता यह है कि अब सरकारी स्वास्थ्य केंद्रों पर बच्चों के लिए मधुमेह का उपचार पूरी तरह से निःशुल्क होगा।

मुफ्त इलाज और 'फोर टी' का सुरक्षा कवच : इस पहल के तहत स्क्रीनिंग व डायग्नोसिस से लेकर जीवनभर चलने वाली इंसुलिन थेरेपी, ग्लूकोमीटर व टेस्ट स्ट्रिप्स

- केंद्र सरकार ने लांच किया बाल मधुमेह स्क्रीनिंग और उपचार का राष्ट्रीय ढांचा
- अब सरकारी स्वास्थ्य केंद्रों पर बच्चों के लिए मधुमेह का उपचार पूरी तरह से निःशुल्क होगा

तक सब कुछ मुफ्त प्रदान किया जाएगा। सरकार का लक्ष्य स्पष्ट है - आर्थिक तंगी किसी भी बच्चे के इलाज में बाधा नहीं बननी चाहिए। जागरूकता बढ़ाने के लिए मंत्रालय ने 'फोर टी' का मंत्र दिया है, जिससे माता-पिता और शिक्षक लक्षणों को पहचान सकें। टायलेट - सामान्य से अधिक बार पेशाब आना। थर्स्टी - बार-बार प्यास लगना। टायर्ड - हर समय थकान महसूस करना। थिनर - अचानक वजन का कम होना। इन संकेतों के आधार पर संदिग्ध मामलों की तत्काल रक्त जांच की जाएगी और जिला अस्पतालों में उनका पुख्ता इलाज शुरू होगा।

स्कूल से अस्पताल तक देखभाल का अटूट चक्र >> पेज 7

position will likely play by the same sordid rules.

The Hindu Doctors decide

Decisions to go for abortion must be guided by sound medical advice

With freedom comes great responsibility; decisions made as a consequence of any freedom must be informed by reasonable awareness of the fall out. In seemingly vesting reproductive autonomy with the woman, the Supreme Court might have edged out the essential role of a clinical review of the situation. The Court asked the Union government to amend the abortion law to remove the time limit on medical termination of unwanted pregnancies in the case of minor rape victims. The Bench of the Chief Justice of India, Surya Kant, and Justice Joymalya Bagchi made the observation while refusing to entertain a petition against an earlier Court decision allowing a 15-year-old survivor of rape to terminate the pregnancy during the 30th week. In the original judgment on the case, which was on curative appeal, the judges remarked that the right of the minor child to continue a pregnancy that is illegitimate must be considered, to safeguard a woman's right to reproductive autonomy. The Bench of Justices B.V. Nagarathna and Ujjal Bhuyan had noted that the minor had shown a clear and consistent unwillingness to continue the pregnancy. The Court cannot compel any woman, much less a minor, to complete her pregnancy if she otherwise did not intend to do so, they said. They also indicated that if the legal routes were closed, women might take the dangerous path to quacks, risking life. However, counsel for the All India Institute of Medical Sciences stoutly opposed the termination, and the curative petition; leveraging the same safety consideration. Terminating the pregnancy at an advanced stage – 30 weeks – would be inimical to the health of the teenage mother. Currently, Indian law allows for the termination of pregnancy up to 24 weeks of gestation.

The entire argument hinges on gestational age, which, as an indicator of how far along the pregnancy is, is crucial to deciding whether an abortion would be safe. Most countries that have legalised abortion restrict the period of safe abortion to 24 weeks of gestation, primarily because of the negative implications for the life and health of the mother, after that. But, central to legal abortion is a medical assessment of risks. Will a child or her parents alone, with lay knowledge, be able to make a studied assessment of such risk? While the minor expresses her desire to be rid of a forced pregnancy, it is the role of her parents and the system to provide her with safe options, within the permissible period. Making an uninformed decision at this stage could be counterproductive, if it compromises on her health or life, while allowing the right to bodily autonomy.

The semaglutide boom is here. So is self-medication

Experts caution that improper dosing and poor patient selection could turn a breakthrough drug into a health hazard

Anona Dutt

FIFTY-FIVE YEAR-OLD Gujarat resident Ravi Parikh* had heard of the weight-loss properties of semaglutide, a diabetes regulating drug with spin-off effects on obesity. While he found it difficult to take the injectable drug, he bought oral pills over-the-counter from a local pharmacy. Several months later, he decided to go to Dr Anoop Misra's clinic to get evaluated, worried about the side effects he had read about.

While undergoing tests, he was diagnosed with medullary thyroid cancer. In fact, he had a family history of this type of cancer, and, therefore, belongs to a group of patients unsuited for new-age weight loss drugs. Some animal studies have linked an increase in the risk of this type of cancer with the use of GLP-1 drugs such as semaglutide. "Those with a family history of this type of cancer should not be prescribed semaglutide — the drug comes with a warning. This is why we need to carefully select patients who are given any GLP-1 drug. It should not be prescribed by anyone other than diabetologists, internal medicine specialists, or in some cases, cardiologists. And, it should definitely not be taken without the advice of a doctor," says Dr Anoop Misra, chairman, Fortis C-Doc, Diabetes and Allied Sciences, New Delhi.

While this was a very prominent case where the patient should not have received the drug at all, Dr Misra is worried about many self-medicating, taking both oral and injectable versions on their own. This number has increased to one case every 30 days at his clinic since the injectable drug became available in India last year. "These numbers are likely to go up further with cheaper generic versions of semaglutide now available in the market," he says.

As for side effects, he has seen patients come in with gastrointestinal symptoms such as nausea or vomiting or in some cases other more severe symptoms such as pancreatic pain. "These drugs can lead to substantial weight loss and improve blood-sugar control, making them attractive options for obesity and diabetes management. But the protocol has to be customised according to the patient's profile."

Who should not take the drug?

Thyroid Cancer Risk: Individuals with a personal or family history of Medullary Thyroid Carcinoma (MTC) or Multiple Endocrine Neoplasia syndrome type 2 (MEN2) should avoid these medications.

Pregnancy and Breastfeeding: GLP-1 agonists are not safe during pregnancy (should stop two months before conception) or while breastfeeding.

Pancreatitis: A history of pancreatitis is a contraindication as these drugs can increase the risk of inflammation.

Severe Gastrointestinal Disease: Those with severe gastrointestinal issues, particularly gastroparesis (slow stomach emptying), should not use these drugs.

WHO NEEDS VIGIL
Diabetic Retinopathy: Individuals with vision damage from diabetes should consult a doctor as rapid blood sugar improvement can paradoxically worsen this condition.

Mental Health Conditions: A history of eating disorders or depression requires careful evaluation.

Kidney Impairment: People with an eGFR below 30. Patients with advanced kidney disease require monitoring because nausea, vomiting and dehydration can worsen renal function.

The correct dosage

Selecting the correct dose and scaling it up slowly is the right way to ensure weight loss drugs do their job, according to Dr V Mohan, chairperson of Dr Mohan's Diabetes Specialities Centre in Chennai. "This is the reason why the medicine should always be taken under the guidance of a doctor," he adds. The drug is meant for people with a body mass index over 30 or between 27 and 30 if they have other obesity-related conditions such as diabetes or hypertension.

The Indian Express



FROM THE
OPD

Take the case of 50 year-old Chennai resident Sangeeta* who took a very high dose for her first shot. She mistakenly dialled a high 1mg instead of 0.1mg on her pre-filled pen. She ended up in a hospital with severe vomiting, which took doctors nearly two days and several saline drips to control properly. "Most patients experience nausea and vomiting initially, some may also experience diarrhoea. But every patient reacts differently. Some experience the symptoms initially even with the smallest doses but don't experience it later with the higher doses once they have adjusted to it. Others might experience such symptoms only on higher doses and thus have to be maintained on a lower one. Some may need to continue with the lower dose longer than the recommended four weeks before scaling up or they may need to skip a week in between. This is the reason they have to be constantly followed up," says Dr Mohan.

This dose adjustment, other than selection of the patient, also plays an important role in safe use of the drug, Dr Mohan adds. "Even before the generic versions entered the market, there were some unscrupulous gym trainers, beauticians, and wellness studios who were prescribing the drug to people. That's how the trend of Mountain brides began, where women take the drug before their wedding to shed the extra kilos. While most patients experience just gastrointestinal symptoms, the drugs also have some serious side effects."

The GLP-1 drugs have been linked with an increased risk of thyroid cancer, pancreatitis, stomach paralysis and even a specific type of blindness. "The drugs have now been linked to depression. If anything happens to a person, who will take care of the symptoms, who will be responsible? If a doctor prescribes the medicine, they would be responsible for managing the side effects as well," says Dr Mohan.

Increased prescription

With cheaper generic versions costing up to 90 per cent lower than the innovator molecule, their prescription has increased. "There has certainly been an increase in prescription of the GLP-1 drugs with the generic versions becoming available and the innovators dropping prices. What this essentially means is that people, for whom the price might have been a barrier earlier, are now considering using the drugs," says Dr Ambrish Mishra, chairman and head of endocrinology and diabetes at Max Healthcare.

While he hasn't seen patients landing up with acute side effects in his clinic yet, he does see patients who have started taking the drug without consultation but later reach out to him after family or friends advise against it.

"While there are strict guidelines as to who should be prescribing the medicine, enforcing it can be a challenge. Some doctors may also prescribe it because they know if they don't, someone else will. But it should definitely be given only to those it is meant for. When appropriately prescribed and monitored, GLP-1 drugs remain safe and effective for many patients," says Dr Mishra.

*Names changed to protect privacy



DR ROMMEL TICKOO

DIRECTOR, INTERNAL MEDICINE, MAX HEALTHCARE



Sodium regulates the movement of water into and out of cells.

Why drinking water isn't enough, you need electrolytes

Drinking 5 litres of water in a day landed patient in ICU. Here's why

THIS 25-YEAR-OLD marketing executive mostly spends his day criss-crossing the city on his motorcycle, moving from one client meeting to another, braving the furnace-like midday heat. Like many young professionals, he believed he was doing the right thing by drinking water constantly. He stopped frequently to refill his bottle, consuming nearly five litres through the day. What he did not do was eat. He consumed no fruit, no electrolyte drink, no oral rehydration solution — only plain water. That proved costly.

By evening, he began to feel strangely light-headed. Nausea followed. He dismissed it as exhaustion. He pushed on, determined to finish his final appointments. Within hours, his speech became sluggish. He grew unusually drowsy and disoriented. Alarmed colleagues rushed him to our emergency department. Blood investigations revealed that his sodium level had plummeted to 124 mEq/L, far below the normal range of 135 to 145 mEq/L. The diagnosis was acute hyponatremia — a dangerous fall in blood sodium caused by excessive salt loss through sweating, worsened by overconsumption of plain water that diluted it further. His case is far from isolated. Across India, where summer temperatures are now routinely

touching 44-47 degrees Celsius, hospitals are seeing a rise in heat-related electrolyte disturbances.

Sweating is the body's primary cooling mechanism. As sweat evaporates from the skin, it dissipates heat and helps regulate body temperature. Yet sweat is not merely water. It carries with it sodium, chloride, potassium and other essential

Drinking too little water is as dangerous as drinking large amounts without electrolytes

electrolytes — charged minerals that regulate nerve impulses, muscle contractions, fluid balance and heart rhythm. Under normal conditions, these losses are modest and easily replenished through regular food and drink. But under prolonged exposure to extreme heat, particularly when coupled with physical exertion, the losses can be significant.

In India, the common advice during summer is to "drink a lot of water." But water alone cannot replace the electrolytes lost. In fact, when consumed excessively without adequate salt intake, it can dilute sodium levels in the bloodstream, creating precisely the kind of dangerous imbalance seen in the young executive's case. You need electrolyte-infused water. Sodium regulates the movement of water into and out of cells, particularly in the brain. When sodium levels drop too low, water shifts into cells, causing them to swell. In the brain, where the skull leaves no room for expansion, this swelling can rapidly become life-threatening. The earliest symptoms are often deceptively mild — headache, fatigue, dizziness, nausea and confusion. As sodium levels continue to fall, drowsiness deepens into altered consciousness. Seizures may occur. In severe cases, patients can slip into coma. What makes hyponatremia especially dangerous during Indian summers is that it often affects the young. Outdoor workers, delivery personnel, field executives, traffic police officers and construction workers are particularly vulnerable.

Then there is hypernatremia, which develops when water loss exceeds replacement. This typically occurs when someone exposed to intense heat sweats profusely but fails to drink enough fluids. As body water content drops, sodium becomes increasingly concentrated in the blood. It causes cells to shrink as water is drawn out of them. Intense thirst and dryness of the mouth progress to irritability, restlessness, muscle twitching, confusion and seizures. In severe cases, hypernatremia can cause permanent neurological damage.

Thus, summer heat presents a paradoxical challenge: drinking too little water can be dangerous but drinking large amounts of plain water without electrolyte replacement can be equally hazardous.



जब कोई न समझे समस्या, तो ऐसे समझाएं

कई बार होता है कि आप सही बात समझाने की कोशिश कर रहे होते हैं और सामने वाला बहस करने लगता है। आप जिस समस्या के बारे में समझाना चाह रहे हैं, वह उसे समझ ही नहीं पाते हैं। ऐसे में, आप एक टीम लीडर हैं, अभिभावक या दोस्त, कई बार अपना तरीका बदलना जरूरी हो जाता है।

अपनी बात को थोड़ा घुमाकर कहें

समझाने के बजाय अगर उनसे सवाल करें। जब आप सवाल पूछते हैं, तो वे अपनी सफाई देने लगते हैं, जबकि सही सवाल, उन्हें सोचने पर बाध्य करते हैं।

- सवाल तरीका: 'तुम्हें ऐसा क्यों किया था?'
- सही तरीका: 'तुम कैसे नहीं सोचेंगे कि मैं उम्मीद कर रहा हूँ?'
- सवाल तरीका: 'क्या तुम्हें इसमें कोई दिक्कत नहीं दिखती?'
- सही तरीका: 'तुम्हें क्या लगता है कि इस काम से दूसरी तरफ क्या अंतर होगा?'
- सवाल तरीका: 'अब तुम्हें इसी ठीक करना होगा?'
- सही तरीका: 'तुम समस्या सुलझाने के लिए क्या अलग कर सकते हो?'



शुरुआत वहां से करें, जहां वे हैं

● स्तर 1: जब समस्या नजर न आए - कुछ लोग सब में नहीं जानते कि वे नसली कर रहे हैं। वे कह सकते हैं, 'मुझे कोई दिक्कत नहीं लग रही।' ऐसे में उन्हें बताने के बजाय उनके दिमाग में नए विचारों के बीज बोएं।



● स्तर 2: शायद कुछ ही गलत है - कुछ लोग अपनी गलती नहीं समझ पा रहे होते, पर उन्हें लगता है कि कुछ तो गलत है। ऐसे लोगों को बदलाव के लिए तैयार होते हैं। इस स्थिति में उनके उन व खंडों को दूर करने हुए आप उन्हें भांसा जताने हुए बात करें।

बदलाव के संकेतों को पहचानें

कभी-कभी लोग खुदकर नहीं कहते कि वे अच्छी बात समझ गए हैं, लेकिन उनके कर्तव्य में छोटे-छोटे बदलाव दिखते हैं, जैसे: ● वे जवाब देने में पहले थोड़ा रुकते हैं। (कभी वे सोच रहे हैं) ● वे और सवाल पूछते हैं ● वे उस बात को बाद में खुद फिर से बताने करते हैं ● वे अपनी सफाई न देते हुए आपकी बात सुनते हैं।



आपसी भरोसा बढ़ाने की कोशिश करें

जब कोई अपनी गलती या समस्या को समझने लगे, तो उसे सराहना बहुत जरूरी है। आप कह सकते हैं, 'बुझे खुशी है कि तुम उस बारे में गहराई से सोच रहे हो।' 'मुझे पता है, तुम्हारे लिए यह कठिन है, फिर भी तुम्हें हिम्मत दिखाई।' ●



याद रखने वाली जरूरी बातें:

- कभी नहीं: किसी को अपनी गलती या समस्या को समझाने में बला लगाना है, इसलिए रुक रहें।
- रुकावट न डालें: किसी को जबरदस्ती बदलने की कोशिश न करें। उन्हें खुद से समझने का मौका दें।
- छोटे बदलावों पर नजर: खमने वाला एक टम ही पूरी तरह नहीं बदल जाता। बदलाव धीरे-धीरे आते हैं।
- अगर भी सीखते हैं: इस पूरी प्रक्रिया में, आप भी बहुत कुछ नया सीखते हैं, एक बेहतर लीडर और इंसान बनते हैं।

BECAUSE THE TRUTH
INVOLVES US ALL

On abortion, SC places the woman at the centre

THE SUPREME Court's insistence that an unwanted pregnancy cannot be imposed — least of all upon a minor — and its dismissal of a curative plea filed by the All India Institute of Medical Sciences contesting the Court's decision to allow a 15-year-old rape survivor to terminate her 30-week pregnancy, is a welcome reaffirmation of reproductive autonomy as a fundamental right grounded in dignity and bodily integrity. The apex court's framing of the issue — "unwanted pregnancies cannot be burdened on the woman", and the state must "respect a citizen's autonomy of choice" — comes at a time when abortion is increasingly being framed as a choice between competing lives, not just in India but globally. It signals that constitutional guarantees cannot be diluted by medical paternalism.

The Medical Termination of Pregnancy (MTP) Act of 1971 was, for its time, a forward-looking statute that recognised the perils of unsafe, clandestine abortions, even if it remained contingent on the consent of doctors, partners and family members. Its 2021 amendment expanded gestational limits for certain categories of vulnerable women and gave greater primacy to privacy and choice. The landmark *Xv. Principal Secretary, Health and Family Welfare Dept* (2022) verdict broadened the categories of women who fall within the Act's ambit. Yet, in recent years, this trajectory has been complicated by an increasing contestation over foetal viability, exposing tensions within a law that is still structured as an exception to criminality and still framed as conditional permission rather than an enforceable right. In October 2023, a Supreme Court bench declined to permit the termination of a 26-week pregnancy, effectively privileging foetal viability over the woman's choice. Since then, several high courts have moved in the same direction. In February 2024, a 32-week pregnant widow's plea for an abortion was also denied by the apex court on similar grounds despite compelling claims of mental distress.

In urging Parliament to revisit the statutory framework — particularly to remove gestational limits in cases involving minor survivors of rape — and in emphasising that the law must evolve to prioritise dignity, the CJI-led bench has given the issue a consequential turn. A rights-based legislative framework — one in which reproductive autonomy is the presumption and medical oversight serves as a safeguard — will not resolve every complexity. But clear statutory standards can guide doctors without displacing the primacy of the patient's informed decision, while time-bound procedures can prevent the delays that turn choices into crises. None of this will eliminate the ethical difficulty of late-term terminations, nor should it pretend to. But it would ensure that the weight of such decisions is not made heavier by the law itself.

दवा विनामलेक अनुसार याचकाकता नहीं किया जा सकता।

एम्स 1976

रीढ़ की बीमारी से पीड़ितों को नया जीवन मिल रहा

नईदिल्ली, प्रमुख संवाददाता। एम्स के डॉक्टरों ने रीढ़ की गंभीर विकृतियों से पीड़ित मरीजों की सर्जरी की तकनीक में संशोधित कर नई तकनीक विकसित की है, जिससे रीढ़ की विकृति से पीड़ित मरीजों की सर्जरी अधिक सुरक्षित हो गई है। इससे मरीजों को नई जिंदगी मिल रही है।

ऑर्थोपेडिक विभाग के प्रोफेसर डॉ. भावुक गर्ग ने बताया कि भारत में रीढ़ की विकृति से काफी संख्या में मरीज पीड़ित होते हैं। इसमें स्कोलियोसिस सहित कई बीमारियां हैं। यहां ज्यादातर मरीज काफी देर से इलाज के लिए पहुंचते हैं, जब रीढ़ की हाडूी काफी टेढ़ी

हो चुकी होती है। इस वजह से मरीज झुक जाते हैं और पीठ पर कुबड़ जैसा निकल जाता है। ऐसे मरीजों की पीवीसीआर (पोस्टेरियर वर्टिब्रल कालम रिसेक्शन) तकनीक की मदद से सर्जरी की जाती है। इसके तहत रीढ़ को दो हिस्सों में बांट देते हैं। इसमें स्पाइनल कॉर्ड बचा रह जाता है। दो हिस्सों में बांटे गए रीढ़ इंप्लांट लाकर दोबारा सीधा जोड़ दिया जाता है। इस तकनीक से सर्जरी जोखिम भरी होती है। इसमें अधिक रक्त स्राव व न्यूरो की परेशानी होने का जोखिम अधिक होता है। इसके मद्देनजर इस तकनीक में संशोधन कर इसे सुरक्षित बनाया गया।

नई सर्जिकल तकनीक से रीढ़ विकृति वाले मरीजों को फायदा

अमर उजाला ब्यूरो

नई दिल्ली। एम्स दिल्ली ने गंभीर और जटिल रीढ़ विकृति से जूझने वाले मरीजों के उपचार में सफलता हासिल की है। संस्थान के ऑर्थोपेडिक्स विभाग में प्रोफेसर भावुक गर्ग और उनकी टीम द्वारा विकसित नई सर्जिकल तकनीक को इस क्षेत्र में बड़ी उपलब्धि माना जा रहा है। जानकारी के अनुसार पिछले सात वर्षों में इस तकनीक ने उन मरीजों को नई उम्मीद दी है। जिनके लिए पहले सर्जरी बेहद जोखिम भरी मानी जाती थी। यह तकनीक पोस्टीरियर वर्टेब्रल कॉलम रिसेक्शन का संशोधित रूप है। जिसे दुनिया की सबसे जटिल स्पाइनल सर्जरी प्रक्रियाओं में गिना जाता है।

इस तकनीक को वर्ष 2020 में एक अंतरराष्ट्रीय वैज्ञानिक प्रकाशन में भी जगह मिली थी। डॉक्टरों के मुताबिक इस संशोधित प्रक्रिया में सर्जरी के अंतिम चरण तक रीढ़ की कुछ पिछली संरचनाओं को सुरक्षित रखा जाता है। जिससे ऑपरेशन के दौरान रीढ़ को अधिक स्थिरता मिलती है।



इलाज से पहले व इलाज के बाद।

14 वर्षीय बच्चे का हुआ हार्ट ट्रांसप्लांट

नई दिल्ली। राजधानी के निजी अस्पताल में 14 वर्षीय बच्चे का हार्ट ट्रांसप्लांट सफलता पूर्वक किया गया। बच्चे में भारतीय सेना में सेवारत एक कर्नल की 41 वर्षीय पत्नी का दिल धड़क रहा है। कर्नल की पत्नी को डॉक्टरों ने ब्रेन डेड घोषित कर दिया था। इसके बाद अंगदान में हार्ट को पंचकूला से निजी चार्टर विमान से दिल्ली लाया गया। इसके लिए दिल्ली एयरपोर्ट से लेकर अस्पताल तक ग्रीन कॉरिडोर बनाया गया। अस्पताल के वरिष्ठ कार्डियोथोरेसिक सर्जन डॉ. मुकेश गोयल ने कहा कि बच्चा पिछले एक साल से एंड-स्टेज हार्ट फेल्योर से जूझ रहा था। हार्ट ट्रांसप्लांट ही उसकी जान बचाने का एकमात्र विकल्प था। ब्यूरो

Vitamin D boosts chemo success

A daily vitamin D supplement may quietly supercharge chemotherapy in a small study, carried out at the Butantan School of Medicine at São Paulo State University (FMB UNESP), women who took low-dose, alongside treatment were less likely to see their cancer vessel than those who didn't. Since vitamin D also supports immune function — and many patients are deficient — it may be playing a bigger role than expected. Scientists say this affordable approach deserves investigation. Many previous studies examining vitamin D and cancer have focused on much higher doses than those used in this research.



Fish oil may be hurting your brain

Fish oil has long been praised as a brain booster, but new research suggests the story may be more complicated. Scientists from the Medical University of South Carolina found that in people with repeated mild head injuries, daily Omega-3 fatty acid in fish oil — EPA — may actually interfere with the brain's ability to repair itself. Instead of helping to repair, it appears to weaken blood vessel stability, disrupt healing signals and even cause subtle brain build-up linked to cognitive decline. These supplements are now appearing not only in capsules but also in drinks, dairy alternatives and snacks.



Why superagers beat dementia

A new group of adults over 80, known as superagers, are rewriting what we thought was possible for the aging brain. With memory abilities comparable to people decades younger, their brains either resist or withstand the damage typically linked to Alzheimer's disease. Over decades of research, scientists have noticed some lifestyle and personality traits that set superagers apart from their peers, including being highly socially engaged. Scientists at Northeastern University believe these insights could pave the way for new strategies to delay or even prevent dementia.



Polluted water riskier for children

A troubling new study from the Massachusetts Institute of Technology (MIT) reveals that a common environmental contaminant, NDMA — found in polluted water, certain medications, and even processed foods — may pose a far greater cancer risk to children than adults. In experiments with mice, young animals exposed to the chemical developed significantly more DNA damage and cancer, despite experiencing the same initial exposure as adults. The key difference lies in how rapidly children's cells divide, which turns early DNA damage into dangerous mutations much more easily.



How killer T cells destroy cancer

The body's "killer" T cells don't just attack — they strike with astonishing precision, forming a tiny, highly organized contact zone that lets them destroy dangerous cells without harming their neighbors. Now, scientists from the University of Geneva (UNIGE) and the Louisiana University Hospital (LUSHR) have managed to visualize these meetings in three dimensions under near-native conditions. They have captured this process in unprecedented detail, revealing a hidden world of molecular choreography. These insights could help refine treatments, especially in immuno-oncology.



abundant...
ped...
discov...
m...
Z...
ritual...
at...
In...
re...
st...
tion...
ive...
20...
en...
i...
code...
d...
e...
act...
ord...
sa...
com...

Dengue is spreading fast: Can science outsmart it at last?

The Indian Express

From AI-driven research to vaccines, scientists are racing to decode why dengue turns deadly

Anuradha Mascarenhas

FROM DECODING the virus cell by cell to predicting severe illness before symptoms escalate, scientists are deploying breakthrough technologies to study dengue like never before. Tools such as single-cell sequencing — akin to a microscopic detective tracking what happens inside each infected cell — and advanced protein biomarker analysis, which scans thousands of biological signals in a single blood test, are set to transform how dengue is understood, diagnosed and treated.

As climate change reshapes the global dengue landscape, COMBAT, an Indo-EU research alliance, is taking on the most complex challenges thrown up by the disease. Bringing together leading scientists from India and Europe, the initiative focuses on decoding the underlying mechanisms of dengue infection to improve vaccine development and transform treatment strategies.

The European arm of the programme is funded by the European Union's HORIZON Research and Innovation Actions while India's contribution is supported by the Department of Biotechnology under the Min-

istry of Science and Technology.

According to Prof Ujjwal Neogi, who leads the global team at Karolinska Institute, Sweden, COMBAT will help strengthen public health infrastructure and surveillance strategies to tackle the growing risk of dengue outbreaks in both endemic and non-endemic regions. The Indian arm is led by Prof Anindam Maitra, along with Dr Sagar Sengupta and Dr Anup Mazumder from IIRIC—National Institute of Biomedical Genomics (NIBMG), Kalyani. Prof Maitra explains that NIBMG studies how a person's genes influence their risk of infections and how diseases develop. "Using advanced tools, the team will try to understand why dengue becomes severe in some people by closely studying genes, body responses and biological markers," he says.

High-resolution microscopy will allow scientists to observe the virus attacking cells in real time, almost like watching a live film of infection. AI will be integrated into biological pipelines, enabling systems to learn from dengue data and rapidly adapt insights to other emerging pathogens. Researchers are also developing organ-on-chip models, which recreate miniature versions of



GETTY IMAGES

Using advanced tools, the team will try to understand why dengue becomes severe in some people



SCAN THE QR CODE TO READ MORE HEALTH SPECIAL STORIES

human organs to safely study infection without testing on people. These insights were not possible just a few years ago. Some of these technologies are also expected to be installed in Indian institutes.

Alongside research efforts, progress in vaccine development is gaining momentum. The Indian Council of Medical Research (ICMR), in collaboration with Parvata Biotech, is currently conducting a Phase III trial of Dengvaxil, a single-dose recombinant dengue vaccine. "The trial spans 20 sites across 19 states and Union Territories and has enrolled more than 10,000 participants," says Dr Naveen Kumar, Director of ICMR-NIV (National Institute of Virology) Pune. At the same time, Takeda's tetravalent dengue vaccine TAK-003, known as

Denga, has recently received clearance from the subject expert committee under the Drugs Controller General of India for use in individuals aged four to 60 years. "This vaccine represents a significant advancement, showing 84.1 percent efficacy against hospitalised dengue cases and offering protection regardless of prior dengue exposure — an advantage over earlier vaccines that required pre-screening," says Prof Neogi.

Despite these advances, developing an effective dengue vaccine remains a complex challenge. One of the biggest obstacles is antibody-dependent enhancement, a phenomenon in which antibodies from a previous dengue infection can actually worsen disease severity if a person is later infected with a different strain. This challenge is compounded by the existence of four distinct dengue serotypes, all of which circulate widely. A successful vaccine must provide long-lasting protection against all four simultaneously. Adding to the complexity is the immune system's tendency to prioritise responses to the first strain it encounters.

Together, these factors make vaccine design particularly difficult, as any imbalance in immune response could increase the risk of severe disease during subsequent infections. "The COMBAT project addresses these fundamental challenges by focusing on understanding dengue's underlying disease mechanisms and host-virus interactions," says Prof Neogi.