Traditional medicinal practices

GCTM aims to improve quality of traditional medicinal practices: WHO regional director
Prime Minister Narendra Modi along with World Health Organization (WHO) Director-General Dr Tedros Ghebreyesus will perform the ground-breaking ceremony of the facility in (The Tribune: 20220418)


The WHO Global Centre for Traditional Medicine, set to come up in Gujarat, aims at improving the quality and safety of traditional medicinal practices by developing a cohesive approach to healthcare, said the world body’s Regional Director Dr Poonam Khetrapal Singh.

The objective is also to develop a mechanism that allows access to such traditional medicinal practices and protects such knowledge, she said.

Prime Minister Narendra Modi along with World Health Organization (WHO) Director-General Dr Tedros Ghebreyesus will perform the ground-breaking ceremony of the facility in Jamnagar on April 19.

It would be the first global outpost centre for traditional medicine and define the issues that countries face in regulating, integrating and positioning traditional medicine.

Asked why the need for establishing the WHO Global Centre for Traditional Medicine (GCTM) has been felt now, Dr Singh told PTI that nearly 80 per cent of people in 170 of 194 WHO member countries use traditional medicines and indigenous therapies.
For many, traditional medicines are the first port of call for treatment, said the regional director of WHO South-East Asia Region.

“Many of their governments have requested WHO’s support in creating a body of reliable evidence and data on traditional medicines practices and products,” she said.

According to her, the Covid pandemic has further impacted health systems in the world and all countries need to mobilise all available resources to recover, fill gaps in health coverage and accelerate progress toward health goals.

“Consumer expectations for healthcare are rising while costs are soaring. Therefore, integrating traditional medicine into the public healthcare delivery system becomes an obvious and pressing need.

“Although traditional medicines have been around for millennia, they lack robust evidence, data and a standard framework, preventing their integration into mainstream healthcare delivery system. As a result, millions of accredited traditional medicine workers, facilities, expenditures and products are still not fully accounted for,” Dr Singh said.

The GCTM, with its global reach, will be a game-changer by focusing on four strategic areas of work. These are evidence and learning; data and analytics; sustainability and equity; and innovation and technology, she stated.

“It will help harness the power of traditional medicine to advance the Sustainable Development Goal 3 target of ensuring the health and promoting wellbeing for all at all ages.” Asked what other areas will it contribute to, Dr Singh said traditional medicine is a part of the growing trillion-dollar global health, wellness, beauty and pharmaceutical industries.

Many countries have well-established systems of traditional medicine. Supporting the member states in developing a safe, effective and organised traditional medicine will enable the medical system to tap into and fully realise its potential and attract people from other countries who seek such care, she said.

“Traditional medicines also represent a vibrant and expanding part of healthcare. There has been rapid modernisation in the ways traditional medicine is being studied.

“Artificial intelligence is now used to map evidence and trends in traditional medicine and to screen natural products for pharmacokinetic properties,” Dr Singh told PTI.

This has opened up new possibilities for learning, research, application and delivery of traditional medicines and therapies, she noted.

“Over 40 per cent of pharmaceuticals are tracing their origins to traditional medicine. One of the key areas of focus for the GCTM is equity and sustainability.

“The centre will, with a developed standard common tool, assist in preserving and protecting the sources of traditional knowledge and nurture the source of traditional medicines with respect for local heritage, resources and rights as its guiding principle,” Dr Singh said.
She stressed that traditional medicine can also help address the growing burden of non-communicable diseases and mental illnesses through its integrated and complementary use with the allopathic system.

Dr Singh told PTI that the biggest challenges facing the integration of traditional medicines into the mainstream healthcare delivery system are ensuring its safety, and efficacy and standardizing and developing traditional medicines as evidence-based medicine.

“For this, we need evidence and data to inform on policies and standards regulatory frameworks to ensure safe, cost-effective, and equitable use.

“The healthcare system has also not been able to fully integrate millions of traditional medicine workers, accredited courses, health facilities and expenditures preventing us from fully realizing the potential of traditional medicines,” she said.

Dr Singh stressed the need for developing a cohesive and integrative approach that allows governments, healthcare practitioners and consumers to access traditional medicine services in a safe, cost-efficient and effective manner.

She also emphasised developing a mechanism to preserve and protect traditional medical knowledge, to guarantee and improve the quality and safety of traditional medicine and practices.

**Crore Hypertension**

**Over 17.93 crore hypertension screenings done at 1,17,440 AB-HWCs as on March 31: Health Ministry**

Union Health Minister Mansukh Mandaviya advised states to extensively carry out screening for tuberculosis, cervical cancer, diabetes and oral cancer during these health melas (The Tribune: 20220418)

Over 17.93 crore hypertension screenings have been done as on March 31 at 1,17,440 Ayushman Bharat-Health and Wellness Centres (AB-HWCs) operationalised across the country, according to government data.

Also, around 15 crore diabetes screenings for 30 plus age-group individuals have been done at these health and wellness centres which cumulatively saw 85.63 crore footfall, according to a report on AB-HWCs released by Union Health Minister Mansukh Mandaviya on Saturday.

It said over 1.02 crore wellness sessions have been held at 1,17,440 centres as on March 31. Besides, 2.34 crore teleconsultations were conducted through HCWs e-Sanjeevani portal.
The Union government is committed to the establishment of 1,50,000 AB-HWCs by December 2022, Mandaviya said. He chaired the 4th anniversary celebrations of Ayushman Bharat-Health and Wellness Centres (AB-HWCs) through a video conference on Saturday with more than 1 lakh AB-HWCs, state health ministers, senior officials of all states and UTs, healthcare workers from various hospitals and development partners.

Teleconsultation service e-Sanjeevani is providing affordable and accessible healthcare as envisioned by the prime minister, he said.

“People in many states have been quick to recognise the benefits of e-sanjeevani and this has led to an encouraging trend of widespread rapid adoption of this digital modality of seeking health services. Patients consult with doctors and specialists on a daily basis using this innovative digital medium to seek health services,” Mandaviya said.

Teleconsultation services are very crucial for people in remote areas and are helpful in making healthcare services accessible for all. States and UTs should mobilise all stakeholders in providing services at the spokes and efficiently connecting them with the hubs, the minister stressed.

He advised the states and the UTs to promptly and proactively spread awareness regarding AB-HWCs health melas which will be organised under ‘Azadi Ka Amrit Mahotsav’ (AKAM) from April 18-22 in addition to the Yoga sessions to be held on April 17 at all HWCs so that citizens can actively participate in these health melas and become aware of the services being provided in their regions.

He also advised states to extensively carry out screening for tuberculosis, cervical cancer, diabetes and oral cancer during these health melas.

**Eye problems, dementia**

**Eye problems, dementia common post Covid recovery**

Breathlessness, muscle weakness, weight loss, concentration issues and disturbed sleep cycle other symptoms (The Tribune: 20220418)


Breathlessness, eye problems, muscle weakness, dementia, weight loss, concentration issues and disturbed sleep cycle have been commonly observed among people months after recovery from coronavirus infection, healthcare specialists said.
They said that even though cases of Covid were plateauing in India, many instances of long Covid were being observed with varied symptoms.

Covid-19 impact

Long Covid also has an impact on the neurological system, kidneys, gastrointestinal tract and neuromuscular and musculoskeletal systems. — Dr Rakesh Pandit, Doctor in Delhi

There is no definitive number of long Covid patients officially. But according to the World Health Organisation (WHO), current evidence suggests approximately 10-20 per cent of people experience a variety of mid and long-term effects after they recover from the initial infection.

It is usually seen three months from the onset of Covid infection and lasts for at least two months.

India has recorded the second-highest number of Covid cases after the US. In India, 4,30,40,947 people contracted the infection and 5,21,747 people lost their lives due to the disease.

Dr Rakesh Pandit, senior consultant and head of the department of internal medicine at Aakash Healthcare, Dwarka, said the age group of 25 to 50 years has been hit hardest by long Covid.

“The lungs of those who were on Non-Invasive Ventilation or ventilator assistance during the Covid waves are now showing permanent damage. Long Covid also has an impact on the neurological system, kidneys, gastrointestinal tract, and neuromuscular and musculoskeletal systems,” he said.

The doctor said progressive dyspnea, a condition characterised by breathlessness, is one of the most typical symptoms of long Covid. —

**Long Covid: Breathlessness, eye problem, muscle weakness, dementia**

Long Covid: Breathlessness, eye problem, muscle weakness, dementia most common symptoms, say docs

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(The Tribune: 20220418)

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The doctor said progressive dyspnea, a condition characterised by breathlessness, is one of the most typical symptoms of long Covid.

“Acute respiratory distress syndrome is another serious symptom, and some people have been discovered to have lasting lung damage. Musculoskeletal weakness and proximal muscle weakness have also been reported.

“Some of them have also had dementia, memory loss, and hair loss. The texture of the skin has also deteriorated in some people. Weight loss of 15-20 kg has also been reported in some patients. Some have lost their appetite and are unable to regain it,” Dr Pandit said.

Pandit said some of his patients have also experienced eye problems.

Dr Vikas Maurya, the head of the department and director of pulmonology at Fortis Hospital in Delhi’s Shalimar Bagh said long-Covid symptoms seen in patients include increased heart rate, loss of smell and taste, depression and anxiety, fever, dizziness while standing, and worsening of these symptoms after physical or mental activity.

“These symptoms are severe in patients with comorbidities and the elderly. Patients who had mild Covid can exhibit these symptoms as well. It is important to rule out other causes and symptoms before diagnosing it as long-Covid,” he said.
Given the recent spurt in Covid cases reported in some states, Dr Maurya stressed the importance of forming a post-Covid clinic/long-Covid clinic, in hospitals because many patients may require multi-speciality treatment.

The clinic should include cardiologists, neurologists, pulmonologists and ENT specialists, among others, he said.

“Pulmonologists have a comparatively bigger role in treating these patients because most Covid cases have lung involvement. These specialities under one roof will help patients get better and more effective treatment,” Dr Maurya said.

“We have also seen patients come in with stroke and other cardiac issues. These patients must consult doctors who have been treating them and are aware of their medical condition.”

These symptoms can affect patients both physically and mentally as well. So, it becomes important that they are treated in a systematic and better way, Dr Maurya added.

Dr Shuchin Bajaj, Founder Director, of Ujala Cygnus Group of Hospitals, said, “The main treatment for a lot of long-Covid symptoms that we have seen is supportive.”

“We don’t have any specific treatment for long Covid. Supportive and symptomatic treatment in the form of painkillers or multi-vitamins, rehabilitation therapy, yoga, physical therapy are some of the things that we try and many have been successful,” he added.

Dr Sushila Kataria, Senior Director, Internal Medicine at Medanta Hospital in Gurgaon said the only way to deal with long Covid is through paced and regular exercise, a nutritious diet, an activity that calms the mind.

“Also go back to your primary doctor and keep consulting him on what can be done. As of now, there are only a few patients coming in with tiredness and lethargy. One or two patients a day come in with these complaints which form 15 per cent of my patient load. Typically long Covid patients tend to start feeling better after six months. But this depends on the individual,” the doctor said.

**Vaccine**

**India’s ‘warm’ vaccine candidate effective against Delta, Omicron variants in mice**

The vaccine candidate can be stored at 37 degrees Celsius for four weeks and at 100 degrees Celsius for up to (The Tribune: 20220418)

India’s ‘warm’ vaccine candidate effective against Delta, Omicron variants in mice
Photo for representational purpose only. iStock

A heat-stable COVID-19 vaccine that is being developed in India and does not need cold chain storage has generated strong antibody response against coronavirus variants, including Delta and Omicron, according to a study on mice.

The vaccine candidate, by the Indian Institute of Science (IISc) in Bengaluru and biotech start-up company Mynvax, uses a part of the viral spike protein called the receptor-binding domain (RBD), which allows the virus to connect with the host cell to infect it.

The team, including researchers from Australia’s Commonwealth Scientific and Industrial Research Organisation (CSIRO), noted that most vaccines require refrigeration to remain effective. The heat-tolerant COVID-19 vaccine candidate can be stored at 37 degrees Celsius for four weeks and at 100 degrees Celsius for up to 90 minutes.

In comparison, the Oxford-AstraZeneca vaccine, known as Covishield in India, must be kept between 2-8 degrees Celsius and the Pfizer preventive requires specialised cold storage at minus 70 degrees Celsius.

The latest study, published recently in the journal Viruses, assessed vaccinated mice sera (blood samples) for efficacy against key coronavirus variants, including Delta and Omicron.

The study found that mice immunised with different formulations of the vaccine elicit high titres (unit to measure amount or concentration) of antibodies that neutralise SARS-CoV-2 variants VIC31 (reference strain), Delta and Omicron variants of coronavirus.

Compared to VIC31, there was an average 14.4-fold reduction in neutralisation against the Omicron variant for one formulation of the Mynvax vaccine and a 16.5-fold reduction for another formulation.

The corresponding values for reduction in neutralisation against Delta variant were 2.5 and 3, according to the researchers.

"The average 14.4- or 16.5-fold reduction in neutralisation against Omicron BA.1.1 for the monomeric and trimeric formulations, respectively, compares favourably with equivalent reductions observed with leading COVID-19 vaccines," the authors of the study noted.

“Our findings suggest that monomeric formulations are suitable for upcoming Phase I human clinical trials and that there is potential for increasing the efficacy with vaccine matching to improve the responses against emerging variants,” they wrote in the journal.

Monomeric and trimeric formulations refer to different shapes and combinations that can be used to develop the vaccine.

CSIRO’s evaluation of the different Mynvax formulations will support the selection of the most suitable candidate and dosage for planned human clinical trials in India.
The heat tolerance of the vaccine and its ability to withstand transient thermal shocks is particularly promising to address the vaccine inequity that affects most low- and lower-middle-income countries, the researchers added.

Over 10 billion doses of COVID-19 vaccines have been administered globally and 51 countries have reached more than 70 per cent of their population. However, this is only 11 per cent in low-income countries.

**Precaution dose of Covid vaccines**

**Complacency responsible for low uptake of precaution dose of Covid vaccines: Experts**

AIIMS chief Dr Randeep Guleria says people have become complacent due to declining Covid-19 cases (The Tribune: 20220418)


Complacency responsible for low uptake of precaution dose of Covid vaccines: Experts

Photo for representational purpose only. PTI file

Public complacency owing to the waning of the pandemic coupled with the nine-month gap between the second and the precaution dose are major reasons for the low uptake of booster shots of COVID-19 vaccines in the 18-59 age group, experts said on Thursday.

AIIMS Chief Dr Randeep Guleria said unlike in the past, people have less fear of the disease now and due to declining COVID-19 cases, they have become complacent.

He, however, cautioned available scientific data suggest that immunity wanes with time and especially those with comorbidities in any age group are vulnerable to more severe disease.

“But Covid has not gone anywhere and new variants may emerge anytime. Also, we know that with time our immunity wanes and those with comorbidities in any age group especially are vulnerable to develop a more severe disease.

“Therefore, people who are eligible for the precaution dose should take it as it will maintain a good level of protection against any new variant that may emerge,” Guleria told PTI.
Around 16,352 precautionary doses were administered in the 18-59 age group on Wednesday in private centres across the country. A total 62,683 precaution doses have been given to people in this age group so far.

Dr Neeraj Nischal, Additional Professor in the Department of Medicine at AIIMS, said the Covid threat will persist for some more time and citizens should take full advantage of the robust vaccination programme that is in place.

“Because of the wide and highly paced vaccination drive, the Omicron wave did not trouble us as the previous two waves did,” he said, underlining it’s important that whoever is eligible for the precaution dose, especially the elderly and those having comorbidities should not be lax and take the shot.

Also, one should not forget that removing fines on those not following Covid appropriate behaviour like masking does not mean it is not important. Everybody should voluntarily follow Covid appropriate behaviour as a responsibility towards society, he said.

“I would like to reiterate the phrase ‘No one is safe until we are all safe’, which means if the pandemic is raging in any part of the world, no country can be 100 per cent safe due to possibility of new variants coming up. So, we cannot afford to lower our guard at any cost,” Nischal said.

Dr Pragya Yadav, a senior scientist at the National Institute of Virology (NIV), Pune told PTI that studies by ICMR and other international research institutions have shown antibody level wanes after a certain a period following the primary vaccination with two doses, and therefore a precaution dose would help maintain elevated immune response and give protection against any emerging variants.

“So people, as a responsibility to maintain the normalcy in the situation, should come forward and take the third shot and also follow mask and hand hygiene till we are out of pandemic,” she noted.

Some experts said the nine month gap is also responsible for fewer people turning up for the precaution dose.

“The gap between the second and the precaution dose should have been around six months. The precaution dose is important as the antibody levels start reducing after a period of four-five months, and it is at the minimum after nine months of either last dose or natural infection.

“So we do not especially have to wait for antibody levels to reduce to minimum, and precaution dose could have possibly been given little earlier than that,” Dr Ravi Shekhar Jha, additional director of Pulmonology at the Fortis Hospital said.

He also pointed out the lack of general awareness in both rural and urban areas about precaution doses which is one of the reasons for the low uptake.

According to Apollo Hospitals authorities, they have been receiving many enquiriies on the eligibility for the precaution dose.
“With 7.03 crore second doses having been administered as of 9th July 2021, it is these individuals who are now eligible and need to be addressed as a priority for the precaution doses,” Dr Sangita Reddy, joint managing director Apollo Hospitals group said.

A booster shot as a precautionary dose helps increase protection against COVID-19 when protection from the initial vaccine dose wanes over a period of time. The booster dose adds a layer of protection for those who are fully vaccinated, and is especially beneficial for those who have a compromised immune system and existing comorbidities, Reddy said.

The success of the COVID-19 vaccination programme played a major role in enabling India to overcome the pandemic impact, she said.

“Taking the precaution dose will help ensure that the recovery of our lives and the economy that has begun will continue unhampered with our immune systems ready for any new challenge from the novel coronavirus,” she said.

India rolled out precaution dose of COVID-19 vaccines for all people aged above 18 years at private centres on Sunday. Those who have completed nine months after the second shot are eligible for it.

E-cigs

E-cigs using synthetic nicotine come under FDA oversight
Under a law taking effect Thursday, the Food and Drug Administration can regulate e-cigarettes and similar products that use synthetic nicotine (The Tribune: 20220418)


E-cigs using synthetic nicotine come under FDA oversight
Photo for representational purpose only.

U.S. regulators will soon begin cracking down on vaping companies using a now-closed loophole, including a line of fruit-flavoured e-cigarettes that have become teenagers’ top choice.

Under a law taking effect Thursday, the Food and Drug Administration can regulate e-cigarettes and similar products that use synthetic nicotine.

The action targets Puff Bar and several other vaping companies that recently switched their formulas to laboratory-made nicotine to skirt FDA oversight.
The change “allows FDA to protect the public health from the harms of tobacco products, regardless of the source of nicotine,” the agency said in a statement Wednesday.

Companies must register with the FDA and submit their products for review within 30 days.

Puff Bar did not immediately respond to a request for comment Thursday.

The FDA’s action does not automatically ban Puff Bar and similar products. Instead it brings them under the same regulatory scheme as older e-cigarettes that derived their nicotine from tobacco.

“The synthetic nicotine products do not necessarily just disappear on their own,” Robin Koval, chief executive of the Truth Initiative, an advocacy group that runs anti-tobacco ads.

“The FDA will have to decide how they want to enforce the law and hopefully they will.” The FDA has been reviewing applications for an array of vaping devices, formulas and flavours — rejecting more than 1 million, usually because of their potential appeal to youngsters.

Anti-tobacco advocates hope the agency will quickly do the same for any applications submitted by Puff Bar and other manufacturers.

Nicotine, the chemical the makes smoking and vaping addictive, occurs naturally in tobacco plants.

The 2009 law that first gave the FDA oversight of cigarettes and related products only referred to tobacco-based nicotine.

That left an opening for artificial nicotine, which is being used in e-cigarette liquids, nicotine pouches and other products.

Last month, Congress passed language clarifying that the FDA can regulate any form of nicotine, regardless of the source.

After appearing in 2019, Puff Bar has grown to become the most popular e-cigarette among teenagers, by far, sold in flavours like blueberry, strawberry banana and mango.

Under FDA pressure, the company said it was halting sales in 2020, pulling its disposable vaping devices out of convenience stores, gas stations and vape shops.

Last February, the company announced a “fresh launch” of its colourful devices using synthetic nicotine.

In marketing language, the company said its products “do not contain tobacco or anything derived from tobacco.” That put Puff Bar in a legal gray area, because federal, state and local restrictions nearly always apply to tobacco-based products, not nicotine itself.

Stanford researchers last year found synthetic nicotine products for sale via online platforms that prohibit tobacco sales, such as Amazon, eBay and Target.
Under the new law, synthetic nicotine will be subject to the same federal age limit and sales restrictions as other tobacco products.

Using synthetic nicotine is not a new idea.

Tobacco companies experimented with chemically derived nicotine as early as the 1960s, but deemed it too expensive for mass production.

Manufacturing advances in recent years finally made it a viable alternative to tobacco-derived nicotine.

A large government survey last year showed Puff Bar had leapfrogged over better-known brands to become the top choice among high schoolers who vape.

Juul — which is widely blamed for initially sparking the teen vaping trend — was the fourth most popular brand.

In 2020, the FDA restricted flavours in cartridge-based e-cigarettes like Juul to just menthol and tobacco, which are generally preferred by adults. But the flavour ban didn’t apply to disposable e-cigarettes like Puff Bar and other types of vaping devices.

Anti-tobacco groups worry that the FDA is always one or two steps behind whichever products are making inroads among kids.

“The lesson we can all take away from this is that when the FDA’s actions are incomplete and happen after the fact — which has often been the case with e-cigarettes — you will always be playing whack-a-mole and catch-up,” said Koval. AP

INDIA’S EXTREME POVERTY

INDIA’S EXTREME POVERTY DOWN TO 10.2%: WORLD BANK RESEARCH (Hindustan Times:20220418)

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=184ed2a4572&imageview=0

Extreme poverty in India was 12.3 percentage points lower in 2019 compared with 2011, as poverty headcount rate declined from 22.5% in 2011 to 10.2% in 2019, with a comparatively sharper decline in rural areas, a working paper of the World Bank policy research said.

The findings came close on the heels of a working paper published by the International Monetary Fund (IMF) saying India has almost eradicated extreme poverty and brought down consumption inequality to its lowest levels in 40 years through state-funded food hand outs. HT reported it on April 7.
Poverty reduction was higher in rural areas compared with urban India as rural poverty declined from 26.3% in 2011 to 11.6% in 2019, while in urban areas the decline was from 14.2% to 6.3% in the corresponding period, the World Bank paper said.

“Rural and urban poverty dropped by 14.7 and 7.9 percentage points during 2011-2019,” said the working paper titled Poverty in India Has Declined over the Last Decade But Not As Much As Previously Thought.

Smallholder farmers have experienced higher income growth, according to the study. FULL REPORT ON P13

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**Tredition Medicine**

**WHO chief to begin Gujarat visit today (Hindustan Times:20220418)**

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=184639d4a50&imageview=0

Director-General of the World Health Organization (WHO), Tedros Ghebreyesus, will be on a three-day visit to Gujarat starting Monday, during which he would take part in a few events along with Prime Minister Narendra Modi, officials said. Ghebreyesus will reach Rajkot on April 18, where he will stay overnight before joining PM Modi on Tuesday in Jamnagar for the foundation stone-laying programme of WHO Global Centre for Traditional Medicine (GCTM), Rajkot Collector Arun Mahesh Babu said on Sunday. GCTM will be the first and only global outpost centre for traditional medicine across the world, he said. On Wednesday, Ghebreyesus will be in Gandhinagar, where PM Modi is scheduled to inaugurate the Global AYUSH Investment and Innovation Summit. The three-day Summit will have around 90 eminent speakers and 100 exhibitors, officials said. P9

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**Pollution**

**Yamuna pollution levels bounce past limit again (Hindustan Times:20220418)**

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=184afeb905e&imageview=0

Pollution levels in the Yamuna river continued to fluctuate over the weekend, impacting operations at two key water treatment plants in the Capital, officials of the Delhi Jal Board (DJB) said on Sunday. The Delhi water utility has, as a result, asked Haryana to increase the water flow at two canals in the city to flush pollutants out.
Ammonia levels in the Yamuna on Thursday were five times above the maximum treatable limit of 0.9ppm. After easing up on Friday, pollution started rising again on Saturday, forcing DJB to issue an SOS.

A communication sent by the water utility to Haryana on Saturday night said ammonia levels in the Wazirabad pond were as high as 7.5ppm, resulting in reduced water production at the Wazirabad and Chandrawal treatment plants.

The two plants together serve the national capital with roughly a quarter of its daily water supply.

The city’s estimated daily water demand is 1,380 MGD (million gallons per day) The Chandrawal treatment plant supplies Delhi 100MGD of potable water a day, while the Wazirabad one supplies 134 MGD water.

The Saturday letter said the reduced water production could lead to a crisis in parts of Delhi, including areas under the New Delhi Municipal Council (NDMC), which administers the city’s major institutional and diplomatic areas.

“As you are aware, since it is the festive season of Ramzan and Hanuman Jayanti, in addition to the critical summer season, it is essential to maintain uninterrupted water supply in Delhi. The discharge of pollution in highly undesirable as raw water is used for drinking after treatment,” the communication said.

A senior DJB official said ammonia levels reduced on Sunday, but remained well above the treatable limit.

“Ammonia levels reduced to 3.5ppm, but this is still three or four times above the treatable limit of 0.9 ppm. Water production at affected plants has increased, but is hovering around 75% of capacity,” the official said.

Sachin Kumar, a resident of Block H in west Delhi’s Karampura, said the area has not received regular water supply since Friday.

“Can’t they at least tell us when we will be able to get normal water supply,” Kumar asked.

Abhishek Sahai from Rajendra Nagar said residents of the area have been short of water for three days now.

“We have been facing water supply issues for the past three days. DJB should solve this issue as soon as possible,” he added.

The water utility has also urged the Haryana government to increase and maintain the flow in Delhi Sub Branch canal and Munak Canal to tide over the current situation.

“Haryana has been requested to increase the flow in CLC canal from 569 cusecs to 683 cusecs and at the DSB canal from 330 cusecs to 385 cusecs,” the official said.
An official from the Haryana State Pollution Control Board said regular action is being taken to check the discharge of industrial units. “We will keep checking the river standards and will take action if anyone is found releasing untreated effluents,” the official said.

Covid Spred (The Asian Age:20220418)

‘Covid spread’ increased by 500% in last 15 days: Survey

The number of people in Delhi-NCR reporting someone getting Covid in their close social network has risen by 500% in the last 15 days, a survey has claimed.

Around 19 per cent residents of Delhi-NCR responding to a survey revealed they have one or more individuals in their close network who has had Covid in the last 15 days.

The ‘Covid network prevalence’ marks an over 500 per cent increase in the last 15 days, said LocalCircles, the firm that conducted the survey.

The survey received inputs from 11,743 residents located in all districts of Delhi and NCR, the firm said.

It asked the respondents: “How many individuals (including children) do you have in your close social network (family, friends, neighbours, colleagues) in Delhi-NCR that have had COVID in the last 15 days?”

In response, the majority of the respondents, 70 per cent, said: “No one in the last 15 days”. An 11 per cent said “1 or 2”, eight per cent said “3-5”, and another 11 per cent “couldn’t say”.

The similar question the firm asked on April 2 had found that only three per cent residents had someone in their close social network who were infected with Covid in the last 15 days. The survey results come as Delhi witnesses a sudden surge.

People should get tested, wearing mask must: Docs

New Delhi, April 17: With the Covid-19 positivity rate in Delhi breaching the five per cent mark again, doctors on Sunday said people developing coronavirus-like symptoms should get themselves tested and authorities should make the wearing of masks mandatory to help check the spread of infection.

Doctors at leading government and private hospitals emphasised that there was a need to increase testing in the wake of the spike in cases, even as they said that “no drastic restrictions” were needed as of now. “People who are developing symptoms are not going for COVID-19 test, largely. Now with a surge in cases and the positivity rate beyond five per cent again, I would urge people to go for testing if they are having symptoms,” Dr Ritu Saxena, who heads the emergency department at the Delhi government’s largest facility and a key COVID-19 hospital here, said.

“Even those going for home isolation should go for testing,” said a senior doctor at LNJP Hospital.

Dr Saurabh Chatterjee, senior consultant, internal medicine, at the Apollo hospital noted that hospitalisation is still less, but bated for ‘logical’ and ‘stringent’ measures to check the spread of the infections.

“Given the situation in Delhi, the DDMA meeting should have been held a bit earlier. Also, the mask mandate needs to be brought back,” he said.

With the climbing positivity rate, the right move would be to take “logical, stringent measures,” he added.

The Delhi government had on April 2 stopped the imposition of fines for not wearing masks.

As the DDMA meeting is scheduled to be held on April 20, “we can expect some sort of restrictions possibly, given the surge in cases and mounting positivity rate”, she said.

“We have 250 beds reserved for Covid-19 patients, and depending on the situation, the entire facility again can be reserved for them. Currently, five patients are in the ICU, but none are on ventilator,” she said.

Dr Saurabh Chatterjee, senior consultant, internal medicine, at the Apollo hospital noted that hospitalisation is still less, but bated for “logical” and “stringent” measures to check the spread of the infections.

“Given the situation in Delhi, the DDMA meeting should have been held a bit earlier. Also, the mask mandate needs to be brought back,” he said.

With the climbing positivity rate, the right move would be to take “logical, stringent measures,” he added.

— PTI
Covid Risk (The Asian Age:20220418)


Cardic Issue (The Asian Age:20220418)

Warning signs from the body should never be ignored

People are often caught unawares by heart attacks and other cardiac issues. What they don’t realise is that these are not sudden occurrences. The body issues at least one warning of an impending or developing heart issue, which people tend to ignore.

**PREVENTIVE METHODS**

*“You should get BP, cholesterol and sugar levels checked every five years after 35 and every year after 40 if there is any family history of heart issues or you notice subtle symptoms. Eat healthy and nutritious food, don’t smoke, exercise regularly and reduce stress in life,” says Rajeev Menon*

**15 SIGNS OF UNDERLYING HEART ISSUES**

- Chest pain or discomfort
- Can include a gripping pain or pressure on the chest, tightness, squeezing sensation or heaviness
- Pain radiating to the shoulders, neck, jaw or back
- Palpitations or arrhythmia
- Irregular or missed heartbeats
- Very fast or slow beats
- Breathlessness or unusual shortness of breath
- Swelling of the feet
- Sudden nausea
- Nausea or vomiting
- Extreme weakness or fatigue
- Stomach pain
- Dizziness or light-headedness
- Unusual sweating
- Pain radiating from chest to the neck, left arm, back or stomach
- Jaw pain and dental pain
- Persistent coughing with frothy sputum
- Feeling of anxiety or panic attack
- Sleep apnoea and sleep disorders, including snoring, disturbed and interrupted sleep

**DO’S AND DON’TS IN RELATION TO VARIOUS HEART ISSUES**

- Do seek immediate medical attention if you suspect a heart attack
- Do chew a small tablet of aspirin or nitroglycerin
- Do not chew something else in case of angina pain or suspecting stroke
- Do call an ambulance if needed
- Do lie down
- Do avoid tight-fitting clothing
- Do use CPR or heart massage in case of a cardiac arrest

The safest way to take the patient to the hospital is in an ambulance. Don’t use public transport or try to drive yourself there.

- Don’t smoke
- Don’t eat if you suspect a heart attack
- Do call emergency services
- Do not refuse hospital admission when advised.
World Voice Day 2022

World Voice Day 2022: Expert on how to prevent voice-related medical issues
"Causes of voice problems vary from simple to complex medical conditions which can be treated with simple medications, speech and swallow therapy or surgical intervention," said Dr Smita Nagaonkar, consultant and section co-ordinator, ENT, Sir H N Reliance Foundation Hospital and Research Centre (The Indian Express:20220418)


Avoid speaking or singing when your voice is hoarse or tired (Source: Unsplash)
Every year April 16 is celebrated as World Voice Day to raise awareness on the importance of voice in people’s lives. Voice, in simple words, is a mode of communication through which we, as human beings, can express our emotions, thoughts, and intellect in spoken words. Dr Smita Nagaonkar, consultant and section co-ordinator, ENT, Sir H N Reliance Foundation Hospital and Research Centre shares some of the issues that people need to keep in mind when it comes to the health of their voice.

How is voice produced?

The sound of your voice is produced by the vibration of the vocal folds, which are two bands of smooth muscle tissue that are positioned opposite each other in the voice box. When you are not speaking, the vocal folds are open so that you can breathe. When it’s time to speak, however, the brain orchestrates a series of events. The vocal folds snap together while air from the lungs blows past, making them vibrate. The vibrations produce sound waves that travel through the throat, nose, and mouth, which act as resonating cavities to modulate the sound. The quality of your voice—its pitch, volume, and tone—is determined by the size and shape of the vocal folds and the resonating cavities. This is why people’s voices sound so different.

Also Read |Her own voice: A day in the life of Smita Malhotra, a voice artist
When could you have a voice issue?

If you answer “yes” to any of the following questions, you may have a voice problem:
– Has your voice become hoarse or raspy?
– Have you lost your ability to hit some high notes when singing?
– Does your voice suddenly sound deeper?
– Does your throat often feel raw, achy, or strained?
– Has it become an effort to talk?
– Do you find yourself repeatedly clearing your throat?
Causes of voice problems vary from simple to complex medical conditions which can be treated with simple medications, speech and swallow therapy or surgical intervention, Dr Nagaonkar.

Also Read | World Cancer Day 2019: How to detect early signs of throat cancer?

“We are dealing with patients coming from other specialties suffering from speech and swallow issues such as neurological diseases, post head and neck surgery, medical oncology, gastroenterology, and pulmonology. We are actively involved in FEES (Fiberoptic endoscopic evaluation of swallowing) which is a test done to do an evaluation of swallowing. This is followed by focused speech and swallow therapy. This has immensely helped in improving the quality of patient care,” Dr Nagaonkar added.

Are you having a scratchy throat? (Source: Getty Images/Thinkstock)
Here are few tips to take care of your voice

*Stay hydrated
- Drink plenty of water, especially when exercising.
- If you drink cafféinated beverages or alcohol, balance your intake with plenty of water.
*Take vocal naps—rest your voice throughout the day.

Maintain a healthy lifestyle and diet

*Don’t smoke, and avoid second-hand smoke. Smoke irritates the vocal folds. Also, cancer of the vocal folds is seen most often in individuals who smoke.
*Avoid eating spicy foods. Spicy foods can cause stomach acid to move into the throat or esophagus, causing heartburn or GERD.
*Include plenty of whole grains, fruits, and vegetables in your diet. These foods contain vitamins A, E, and C. They also help keep the mucus membranes that line the throat healthy.
*Wash your hands often to prevent getting a cold or the flu.
*Get enough rest. Physical fatigue has a negative effect on the voice.
*Exercise regularly. Exercise increases stamina and muscle tone. This helps provide good posture and breathing, which are necessary for proper speaking.
*If you have persistent heartburn or GERD, talk to your doctor about diet changes or medications that can help reduce flare-ups.

Use your voice wisely

*Try not to overuse your voice. Avoid speaking or singing when your voice is hoarse or tired.
*Rest your voice when you are sick. Illness puts extra stress on your voice.
*Avoid using the extremes of your vocal range, such as screaming or whispering. Talking too loudly and too softly can both stress your voice.
*Practice good breathing techniques when singing or talking. Support your voice with deep breaths from the chest, and don’t rely on your throat alone. Singers and speakers are often taught exercises that improve this kind of breath control. Talking from the throat, without supporting breath, puts a great strain on the voice.
*Avoid talking in noisy places. Trying to talk above noise causes strain on the voice.
*People who suffer from voice and speech issues should consider voice therapy. With appropriate techniques taught by speech and swallow therapists, most of the problems can be resolved.
Dementia risk

Where you live affects your dementia risk
"With healthy lifestyle habits a key factor in reducing or delaying your risk of developing dementia, it is important for everyone to have access to local facilities such as gyms and public pools, green spaces and health care, but unfortunately that is not always the case," said Associate Professor Pase (The Indian Express: 20220418)

https://indianexpress.com/article/lifestyle/health/where-you-live-dementia-risk-7851764/

Socioeconomic status is a key indicator of health outcomes, including access to, and quality of health care. In 4,656 adults across metro, regional and rural Australia, new research from the Healthy Brain Project showed those living in more disadvantaged areas have poorer memory and a greater risk of developing dementia.

Health inequalities in dementia risk

Dementia is the second leading cause of death in Australia. Our rapidly ageing population means without a substantial medical breakthrough, the number of people living with dementia in Australia is expected to double from 487,600 in 2022 to 1.1 million by 2058. There has been a concerted effort to understand and identify risk factors for dementia. These include risk factors we can’t change (such as age or genetics), and others that are more modifiable (such as diet or physical activity).

ALSO READ | Stemming India’s health worker brain drain

However, dementia and its risk factors don’t affect all communities equally. Educational, racial/ethnic, and geographical disparities can influence who develops dementia, including within Australia and the United States.

dementia risk  Dementia is the seventh leading cause of death in the world. (Photo: Getty/Thinkstock)

Our study assessed geographic inequality at a neighbourhood level. We measured neighbourhood-level socioeconomic status by matching participants’ postcodes with the Australian Bureau of Statistics’ Index of Relative Socio-economic Advantage and Disadvantage.
This index integrates information related to multiple factors, such as average household income, education, unemployment rates, occupational skills, disability, vehicle ownership,
internet connection, family structures, and housing arrangements. Lower scores suggest greater socioeconomic disadvantage.

What did we find?

We found lower neighbourhood-level socioeconomic status was associated with worse memory performance and higher dementia risk.

This was especially the case for older adults (55 years old and above). Older adults living in neighbourhoods with low socioeconomic status had poorer memory and higher dementia risk.

This is in line with a US-based study that found adults living in the lowest 20% of disadvantaged neighbourhoods had smaller brains.

What do these findings mean?

The first thing to note is this was an observational study, which involves following a group of people, and investigating how potential risk factors are associated with dementia risk. The results do not mean living in a more disadvantaged area causes memory loss or dementia.

Dementia, heart health By changing our habits, we can both improve heart health and reduce the risk of dementia. (File Photo)

The results only indicate there is a relationship or association between neighbourhood disadvantage and dementia risk.

Second, neighbourhood-level socioeconomic status measures many complexities and nuances of where people live.

This captures a range of information likely to influence health outcomes and disease risk. Some of these factors include the prevalence of crime and safety, local resources including access to health care and education, opportunity and space for physical activity and leisure, social disorder, access to greenery, as well as air and noise pollution.

ALSO READ | Noise-induced hearing loss: From causes to symptoms and prevention

These economic, psychosocial, and environmental factors can not only influence health outcomes, but also influence the way we behave. For example, the lack of green space or community sporting facilities may discourage physical activity, which is a known risk factor for both poor heart and brain health.

Similarly, libraries and leisure centres provide important avenues for social engagement and mental development, the lack of which are also risk factors for dementia.

ALSO READ | Risk of heart disease high even a year after Covid, study finds

Additionally, due to affordability, people from lower socioeconomic backgrounds may also live in areas with fewer services that enable a healthy lifestyle. They are also more likely to experience poorer health outcomes as a result of entrenched disadvantage and lower health literacy.

This cyclical nature of inequality may also explain why we observed higher dementia risk in individuals from low socioeconomic neighbourhoods.
It will be critical for future work to understand whether neighbourhood socioeconomic status influences memory decline over time, and actual dementia diagnosis.

dementia risk Economic, psychosocial, and environmental factors can not only influence health outcomes, but also influence the way we behave (Source: Getty Images/Thinkstock)

What should be done?

Targeting neighbourhood socioeconomic status will take enormous investment and collective effort at a local, state, and national level. As a starting point, increasing the availability and accessibility of green spaces and community facilities, such as leisure and sporting clubs, in every postcode will enable greater opportunity for healthy, active lifestyles into older age.

On an individual level, positive health behaviours have been identified that can help to prevent or delay memory loss and dementia risk. These include eating a balanced diet, learning new skills or languages, regular physical activity, staying socially connected, and getting a good night’s sleep.

Vaccine

Long Covid will haunt us…We have the right to demand higher performance from vaccines…Vaccines can do more if they are adequately boosted, revised’

"I believe the Indian government is aggressively pursuing a booster programme, not only with Corbevax but others as well, to really look at what the optimal formulation is," says Dr Peter Hotez, who co-chairs the Lancet Commission on Covid-19 Vaccines and Therapeutics Task Force.

(The Indian Express:20220418)


"The original way these vaccines were conceived was to stop symptomatic illness; so not only severe disease and hospitalisation," Dr Peter Hotez says.

Dr Peter Hotez, who co-chairs the Lancet Commission on Covid-19 Vaccines and Therapeutics Task Force, talks to Kaunain Sheriff M about the next phase in the development of Covid-19 vaccines, explains why heterologous boosters will give more “enduring and lasting protection”, says the Indian govt’s decision to “aggressively pursue a booster programme is wise”, and elaborates on the challenges of long Covid and the road ahead.

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Why Hotez: Dr Hotez is an internationally recognised physician-scientist and among the most trusted voices on vaccine development. The Hyderabad-based Biological E’s Corbevax, which is being administered to children between the age group of 12-14 years in India, was developed in collaboration with the team of scientists headed by Dr Hotez at the Texas Children’s Hospital Center for Vaccine Development and Baylor College of Medicine in Houston, Texas.

Covid-19 vaccines were developed for protection against severe disease and mortality. In the next phase, will we see vaccines that will stop transmission or protect against asymptomatic infection?

The original way these vaccines were conceived was to stop symptomatic illness; so not only severe disease and hospitalisation. Of course, you want to prevent those as well, but you would also like to stop all symptomatic infections and emergency room visits. I think that is very important. And the reason for that is because we are now learning about the consequences of Long Covid-19 — like the neurological deterioration. This is going to haunt both India and the United States. We have the right to demand higher performance from these vaccines, beyond protection against hospitalisation and deaths. Of course, that remains the priority. But I think these vaccines can do more provided they are adequately boosted, revised... (It will also be based on) how we especially use heterologous boosters, because I think that will give more enduring and lasting protection.

At a Covi-19 vaccination centre in New Delhi on Saturday, April 04 2022. We had the Delta variant which caused severe symptoms. Now we have Omicron, which is less severe but is highly transmissible. There is a possibility of the emergence of another Covid-19 variant in the future. How do we develop that one Covid-19 vaccine that can protect against all variants? Is it scientifically possible?

It looks as though if you immunise and boost with a vaccine against the original lineage, it actually holds up pretty well against Omicron — but it requires a fair bit of boosting. I think the issue in a place like India where Covishield is widely used... I am not clear whether those vaccines by themselves would be as powerful as they would be with an additional booster. And potentially, Corbevax could be a booster for that, and really help in fighting off the new variants of concern. This is something Biological E together with the Indian regulator is looking at now: the potential for Corbevax not only to be used as a standalone vaccine for children and adolescents, but also potentially as a booster in adults.

Explained | Can you get long Covid after an infection with Omicron?
I believe the Indian government is aggressively pursuing a booster programme, not only with Corbevax but others as well, to really look at what the optimal formulation is. I think that is wise because that may be the best hedge against any new variant of concern that might emerge. I think it is likely that Omicron and its sub-variants like BA2 will soon be in the rear-view mirror and the question will be what is next? And I don’t think anybody can really predict that. Focussing on maximising protection through boosters is going to be the way to go.

Dr Peter J Hotez. (Photo Source: Bayer College of Medicine)
What is the scientific community’s take on booster doses? Should they be administered only to priority groups or be rolled out for everyone?

First of all, for full disclosure, there is no consensus in the scientific community. I don’t want to pretend that I’m representing the full scientific community on this. My personal opinion: I
am on the side of being more generous with boosters and boosting all populations, including adolescents. In fact, here in the US, Pfizer has just applied for a booster for 5-11-year-olds. I support that. Here’s why: when you give the first two doses, so close together, you almost necessitate giving the third immunisation several months later. That is how most vaccines work. Even if you look at most of our paediatric vaccines, what we do is a series of primary immunisations, we wait six months to a year, and then we boost. I think we should expect that Covid-19 vaccines will likely need to go by the same playbooks. So I tend to be on the far end of advocating for boosters. I say that because I have colleagues who point to evidence showing that even without the booster, you have good protection against severe illness and hospitalisation. They are right. But again, this comes back to what the goal of immunisation is. I think we can do better. I think if we have the ability to stop emergency room visits and stop long Covid-19, we should take advantage of that.

Explained | Why are Covid vaccines administered into the upper arm?

Have you seen people who have received boosters being less susceptible to getting long Covid-19? Is there scientific evidence for it?

We are starting to. It’s interesting you have asked this question. I am now working on a manuscript, part of our Lancet Commission on Covid-19, to actually look at the literature on vaccinating against long Covid-19. It does seem those individuals, who are vaccinated and boosted, are much less susceptible to long Covid-19. This is another very important reason why I think we want to optimise vaccination strategy. Because I think this is going to be a big tax on our mental health and health system in general. We are going to have a whole generation of individuals who are, maybe, suffering from brain degeneration, cognitive decline, exercise intolerance… This is going to be the next phase that haunts us. If we can vaccinate to prevent that, then I think that is worth trying.

Medical workers wait for people at a temporary COVID-19 testing center in Seoul, South Korea, Friday, April 15, 2022. (AP)

So there is scientific evidence that shows boosters help in preventing long Covid-19?

Yes. But it is nearly as robust as we would like it to be. We have four-five papers on this topic. It is all leaning in that direction. That is the state right now. By definition, it takes time to develop long Covid. We are still early in the pandemic and papers are starting to trickle in now. But that is going to be the direction.

Do you think heterologous boosting is better? Should someone who has taken Covishield shots opt for a different booster?

It depends. There may be an advantage of a heterologous booster (a booster that does not match the primary vaccination). We have seen some of that in the United States. We will look at the data for heterologous boosters of Covishield or Covaxin, and see if there is an improvement. That data is so important; not only for India but for the world. The problem is that globally it’s been done in such a hotchpotch manner. I would even love to see Corbevax for the mRNA vaccines. In principle, I think, there might be some advantage of heterologous (boosting). Let us see what the data shows.
Opinion: It won’t be easy to bring Moscow to book over the Ukraine invasion

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Your lab has been working on developing vaccines against coronaviruses for almost a decade. How did that help you in developing a vaccine against Covid-19?

Well, it is a very interesting story. Our group has been developing vaccines primarily for the neglected diseases of poverty. We would like to say that we are making vaccines that the big pharma companies had no interest in producing because there are no financial returns on them. And the platform we used was one that is already in place among vaccine producers in low and middle-income countries. Each makes their own recombinant protein Hepatitis B vaccine — it is made through microbial fermentation and yeast. That is a vegan process, low cost, and you can make a highly effective vaccine. So we have adopted that technology. Once we make the vaccines then for technology transfer it is easier to plug into the system that already exists. That is what we have been doing for parasitic disease. And then about 10 years ago, we started doing this for the coronavirus vaccine for SARS that emerged in 2002. That was very successful. So when the Covid-19 sequence came along, it was logical to say that this is what we do. It seems to be working well for SARS, it should work well for Covid-19. Indeed, it did.

Police officers in hazmat suits stand by a vehicle transporting fencing, as residents protest over neighbouring residential compounds being turned into coronavirus disease (COVID-19) isolation facilities, in Pudong, Shanghai, China. (Reuters)

Are there any other specific vaccines that you have been working on that could soon see the light of the day?

What we have said to Indian vaccine producers is that if there is a particular vaccine that you are interested in, and you think it can work with the technology that we are good at shaping, we would love to collaborate. So, we are quite eager to explore other vaccines which could also include, down the line, a more universal coronavirus vaccine. Even after we get through these slew of variants — we have now seen SARS in 2002, MERS in 2012, and now Covid-19 — we could be looking at Covid 26 or Covid-32. How do we hedge against that and make a more universal coronavirus vaccine? So we are in discussions with Biological E about helping them with that concept as well.

There is preliminary scientific debate about developing a universal vaccine against coronaviruses. What are the challenges in developing such a vaccine?

There are a couple of challenges. One, it is hard to predict an exact sequence of the next virus that emerges. You need something that will induce broad protection against maybe a variant that we don’t even know exists right now. So that is always the problem. But there are ways to do this. We think, for instance, by combining our different coronavirus vaccines, you make this phenomenon of epitope broadening, which means that you can make a vaccine that is more than the sum of its parts in terms of giving broadly neutralising protection. Then again, what is going to be the best technology for this? mRNA people feel that there are advantages to their platform. We feel once again that the infrastructure is already in place to make a vaccine using a recombinant protein technology by yeast fermentation — let us push that as hard as we can as well.
Insomnia

Study suggests insomnia increases cardiovascular risk by 16 per cent; here’s what to know

All participants were tracked for an average of just over four years, to see if/when any major adverse cardiovascular events (MACE) occurred, such as stroke, heart failure, or cardiovascular death (The Indian Express: 20220418)

https://indianexpress.com/article/lifestyle/health/study-insomnia-cardiovascular-risk-heart-health-7867170/

Experts have emphasised on sleep being an important factor to help the body rejuvenate and recover every day. A new study indicates that insomnia can heighten the risk of cardiovascular diseases or CVDs. Published in the journal Sleep Advances, the study indicated insomnia can raise the risk of CVDs by 16 per cent. It analysed just over 1,000 people with an average age of 62 years old, who had all experienced a heart attack or a procedure to open blocked arteries in the past (average of) 16 months.

The study found nearly half of the participants had insomnia at the start of the study, and 24 per cent had used sleep medication recently. During the follow-up period, 364 MACE had occurred in 225 of the participants, according to the study.

In a press statement, medical student and lead author of the study Lars Frojd said, “This means that 16 per cent of recurrent major adverse cardiovascular events might have been avoided if none of the participants had insomnia.” However, he also added that “further research is needed” to determine if insomnia treatment would help heart patients. But the research
indicated that patients should be assessed for insomnia and offered resources to support their sleep either way.

Why is sleep important?

Sleep is very important part of our day to day life, said Dr Rahul Chhabria, consultant cardiologist, Bhatia Hospital, Mumbai. “It gives rest to both our body and our mind. Whenever we sleep our blood pressures reduces a little bit, about 10 per cent compared to that of day time which is called nocturnal deep sleep. However, lack of such sleep, doesn’t let the blood pressure reduce which is associated with the event of a cardiovascular risk,” he said.

What is insomnia?

Dr Praveen Kulkarni, senior cardiologist at Global Hospitals Parel, Mumbai explained that insomnia is regarded as the inability to fall asleep, staying asleep, or ending up with early morning wakefulness. “Prevalence of insomnia is rising considering today’s lifestyle. Frequent wakefulness or inability to sleep causes variation in the blood pressure response, in the heart rate response in the body, and activates some hormonal imbalances, as well. Indirectly, such individuals also end up being physically inactive, and have altered eating habits which leads to hypertension which is the commonest prevalent cardiovascular disease. They are two-three times more likely to end up with heart diseases and complications. They are likely to be diabetic, have stroke, and become obese,” he said.

What can be done?

* Maintain sleep hygiene
* Avoid screen time before sleep
* Early to bed, early to rise is crucial
* Avoid day time naps
* Avoid alcohol, caffeine intake closer to sleep
* Need to exercise regularly

If these measures fail, the individual needs to consult a sleep specialist, he said while adding that OSA or Obstructive Sleep Apnea which blocks the airway, should also be checked to reduce the risk of CVDs. “As a result, the patient takes deep breaths which is called snoring. Such episodes of apnea and snoring lead to cacosomnia that is responsible for hypertension, increased stress, and feeling of not being fresh in the morning. Such patients tend to sleep during day time,” said Dr Ruchit Shah, interventional cardiologist, Masina Hospital, Mumbai.

Changing the sleeping habits and addressing any issues that may be associated with insomnia, such as stress, medical conditions or medications, can restore restful sleep for many people, said Dr Bharat Kukreti, associate director, cardiology, Paras Hospitals, Gurugram.
“If these measures don’t work, a doctor may recommend cognitive behavioral therapy (CBT), medications or both, to help improve relaxation and sleep. CBT can help one to control or eliminate negative thoughts and actions that keep us awake and is generally recommended as the first line of treatment for people with insomnia,” said Dr Kukreti.

Ayurvedic remedies

Count on these easy-to-follow Ayurvedic remedies to help manage joint pain
Ayurvedic expert Dr Dixa Bhavsar took to Instagram to share some handy tips to find relief from joint pain(The Indian Express:20220418)

https://indianexpress.com/article/lifestyle/health/ayurvedic-tips-manage-joint-pain-7811274/

Joint-PainTake a look at these helpful tips to help relieve joint pain. (Source: Pexels)

Amidst hectic work schedules and even busier personal calendars, regular physical activity may take a backseat on your list of priorities. This could lead to a bunch of health concerns such as pains in joints, back and other parts of the body. As such, sitting at a desk for long periods of time without a break along with various vitamin deficiencies and age-related disorders etc may be the reason behind joint pain in many.

“One can suffer from joint pain at any age due to calcium and vitamin D deficiency, overexertion, arthritis (osteoarthritis, rheumatoid arthritis, gouty arthritis), or due to old age (friction in joints),” explained Ayurvedic expert Dr Dixa Bhavsar in an Instagram post.

To help manage joint pain effectively at home, the expert listed a few Ayurvedic methods. Take a look.

According to Dr Bhavsar, an ‘aggravated vata’ is responsible for ‘pain in any part of the body.’ Hence, she recommended reducing excess vata in your “body and mind” by avoiding overthinking and stress. “Yes, kapha (obesity, diabetes, hypothyroid etc diseases) and Pitta (inflammatory diseases, intake of spicy, salty, fermented food) also play a role but the main responsible factor for joint pain is vata in most of the cases,” she said.

Avoid unhealthy food such as deep-fried pakoras, fries etc, if you’re experiencing joint pain. (Source: Pexels)

Follow these tips to help relieve joint pain, as suggested by the Ayurvedic expert.

*Avoid sour, salty, deep-fried and fermented foods at all costs.
*Avoid vata aggravating ahara (dry and stale food), and vihara (excessive exercise, staying awake until late and a stressful lifestyle).

*Consume healthy fats such as ghee, sesame seeds, olive oil, etc.

**International Caesarean Awareness month**

**International Caesarean Awareness month: What does C-section recovery timeline look like?**

Caesarean delivery involves a cut in the abdominal wall and the deeper tissues up to the lower part of the uterus just behind the urinary bladder. The uterus is opened here and the baby is delivered. (The Indian Express: 20220418)


Caesarean delivery, all you need to know about Caesarean delivery, what happens during Caesarean delivery, recovery time for Caesarean delivery, things to do for health and recovery after C-section birth, Indian express news Refined techniques in anaesthesia and surgery along with good quality suture materials have brought down incidences of morbidity and mortality. (Photo: Getty/Thinkstock)

It is no secret that there has been a surge in caesarean section rates. Sedentary lifestyle, change in eating habits, obesity, diabetes and hypertension during pregnancies, increasing IVF pregnancies and twin pregnancies, elderly primigravida, primigravida mother (delivering first time), mothers requesting for caesarean, fear of experiencing labor pain or for auspicious timings are all factors behind it, says Dr Jayashree Nagaraj Bhasgi, senior consultant, obstetrics and gynaecology, Fortis Hospital, Richmond Road, Bengaluru.

“Caesarean delivery is definitely a life-saving procedure when done during a complication encountered during labor. It involves a cut in the abdominal wall and the deeper tissues up to the lower part of the uterus just behind the urinary bladder. The uterus is opened here and the baby is delivered,” she explains.

ALSO READ | Five habits that can cause discomfort and pain during urination

But, once the baby is out, what happens to the mother and what does the timeline of her recovery look like?

According to the doctor, refined techniques in anaesthesia and surgery along with good quality suture materials, strict aseptic precautions, usage of appropriate antibiotics, availability of blood and blood products have brought down incidences of morbidity and mortality.
“Patients are usually discharged 3-4 days after surgery. Early ambulation is important, specially in obese patients to prevent clots formation in the lower limbs, which can travel to the lung and cause breathlessness. Physical activity is limited initially and plenty of rest is advised,” Dr Bhasgi advises.

Safe pain killer medicines and heat pads to alleviate pain are prescribed. Surgical pain wanes and almost stops in a weeks’ time. Sleeping on the back and sides using a comfortable pillow is advised but not on the abdomen. “As the pain goes away, the patient is advised to increase her activity till she is comfortable — but not to the point of exertion,” she adds.

ALSO READ | Health tips for mothers-to-be in every trimester

The doctor also cautions that strenuous activity be avoided for 2 months, till the sutures on the uterus dissolve and the wound is healed completely. “This means little or no house work and no running after the other little one. Usage of tampons and menstrual cups, and sexual activity is discouraged during this time to avoid infections of genital tract.”

Per the doctor, the patient is allowed to shower normally as the bandage is usually removed on the third day of the surgery and a waterproof one is applied. After that is removed on the seventh day, she can wash the wound area with soap and water and is advised to keep it dry and to wear loose comfortable clothing.

Caesarean delivery, all you need to know about Caesarean delivery, what happens during Caesarean delivery, recovery time for Caesarean delivery, things to do for health and recovery after C-section birth, indian express news Strenuous activity be avoided for 2 months, till the sutures on the uterus dissolve and the wound is healed completely. (Photo: Getty/Thinkstock)

If there is an increase in pain, and the patient sees redness in the wound or purulent discharge she should visit the hospital, warns Dr Bhasgi.

Other things to keep in mind:

* Postpartum belly binder can be used after the pain stops.

* Bleeding from the vagina is more in the first 3-4 days after caesarean, but gradually reduces and will continue till 3-6 weeks.

* Any change in the vaginal discharge, heavy bleeding after 7 days, passing clots, foul smell, fever, increase in pain in the abdomen needs attention of the doctor.

ALSO READ | Amy Schumer shares a photo to normalise her C-section scars

* Breastfeeding is initiated immediately after the baby is born. The mother is advised to look for any lumps in the breast. They are formed when the milk stagnates in the breast. To avoid it, remove the excess milk after feeding the baby, basically empty the breast so that fresh milk can be produced.

* Drink a good amount of fluid and eat a balanced diet. Fibre-rich food is a must to prevent constipation after delivery. Increased intake of fluids also prevents urinary infection.

* Returning to activities like exercising, driving, carrying anything heavier than the baby and sex can be started when one feels able and comfortable — ideally after eight weeks.
Huge gain: Iron absorption was three-fold higher from the low phytate grain than the market variety. | Photo Credit: Special Arrangement

Improving natural iron absorption from iron-rich grains is a better strategy than chemical iron fortification of cereals.

Is iron deficiency universal and profound in India? Is it due to dietary iron deficiency? With the Indian vegetarian diet, containing 8.5 mg iron/1,000 Kcal-energy, women who eat adequately (enough energy for a sedentary lifestyle), should have an iron intake of about 15 mg/day, matching their daily iron requirement (15 mg/day). Adult men with their lower iron requirement (11 mg/day), and those eating for an active lifestyle with higher energy intake, are even better off. Therefore, dietary iron deficiency is not the major problem. Nor is iron deficiency the common cause for deficiency anemia in India; it is only one cause. Other nutrients like vitamin B12, folate and protein are also important. Indeed, anemia itself may be over-diagnosed, since surveys using capillary blood will overestimate the prevalence of anemia, and there is some doubt that the hemoglobin cutoff to diagnose anemia is incorrectly high, overestimating its prevalence.

Therefore, when body iron deficiency occurs, it is less likely to be due to an iron-deficient diet, and more likely due to poor absorption of dietary iron. With poor, cereal-based diets, iron is not well-absorbed, because of a substance called phytate that is present in cereal grains, which binds tightly to dietary iron and impedes its absorption. Similarly, drinking tea or taking paan after meals also blocks iron absorption because of other inhibitory substances called polyphenols, which also bind iron tightly. Chronic body inflammation also blocks iron absorption from the intestine.

This iron absorption blockade can be overcome by eating fruits (vitamin C) with meals, or simply changing behavior, like avoiding tea with meals. Alternatively, dietary iron intake could be increased in a natural manner, by eating iron-rich grains like millets, which will increase iron intake naturally, and not excessively. It is laudable that there is interest in promoting millet consumption in India for adults and children: these ancient grains are good for us in many ways, and not just for their rich iron content. They are also high in calcium, zinc, magnesium, potassium, dietary fibre, and important vitamins such as thiamine, riboflavin, folic acid, and niacin.

Millets are therefore a great solution for increasing dietary iron density, offering much more than a single nutrient to the diet. Replacing just 100 gm of the daily cereal (rice) intake with finger millet (ragi) will increase the daily iron intake by 50%, and calcium by 350%. These are spectacular benefits, but they can be offset due to the high intrinsic phytate content of the ragi grain, which could reduce iron absorption. Even so, this ancient yet local grain, offering more
than a single nutrient, should be a dietary staple, with strategies devised to enhance absorption of its iron.

One such agricultural research strategy is to find a natural finger millet variety with the same rich iron content, but with a lower phytate content, to offer better iron absorption. A recently published collaborative study published in the journal Frontiers in Nutrition does just that. Teams at the University of Agricultural Sciences, Bengaluru (UASB) led by Prof M.S. Sheshashayee and our team at St. John’s Medical College, Bengaluru screened hundreds of Indian finger millet accessions to identify a grain variety with low grain phytate content, but the usual high iron content. This specific accession was grown repeatedly over three years, to ensure that the low phytate content was consistent across seasons, without any yield penalty. Whole genome sequencing showed a variation in the phytate transporter gene responsible for storage of phytate in grains. In this unique collaboration between agricultural and health sciences, iron absorption from this low-phytate millet grain was then measured in adult women in comparison with a market variety using a very accurate dual iron-stable-isotope erythrocyte incorporation method. Iron absorption was almost three-fold higher from the low phytate grain compared to the high-phytate market variety.

This is a promising and sustainable strategy. Yet, in India, the contrary path of iron fortification of staple foods is followed. This is a single nutrient approach that simply increases the chemical iron content of the diet, supplying about 10 mg/day per fortified food. It is counter-productive when iron deficiency is not universal, and absorption is the problem. Then, the fortified intake can be excessive when no iron deficiency exists, and excess iron is harmful: it is pro-oxidant, with many side effects, increasing the risk of diabetes, and unabsorbed iron can turn colonic bacteria towards an unhealthy typology.

Addressing the supply side of iron through natural means, like improving natural iron absorption from iron-rich grains, is a much better and holistic strategy than single nutrient efforts like chemical iron fortification of cereals, which has its own logistic problems, costs and health risks. As natural and ancient grains that provide a diversity of nutrients, millets, with their high natural iron content, low water requirement and low environmental footprint, would be an excellent and sustainable strategy to mitigate any existing iron deficiency in India, while promoting general health of populations, including risk-reduction for chronic diseases.

leech therapy’

Andhra Pradesh: Guru-Sishya Parampara to promote ancient ‘leech therapy’ (The Hindu :20220418)

The treatment has a mention in ‘Sushruta Samhita’, a 3,000-year-old treatise on medicine and surgery. Using leeches to treat a plethora of ailments as prescribed in Ayurveda is gaining prominence as an accepted procedure across the globe. Medicinal Leech Therapy (MLT), also known as Hirudotherapy, has a mention in the ‘Sushruta Samhita’, a 3,000-year-old treatise on medicine and surgery, M. Bhaskar Rao, retired vice-principal of Sri Venkateswara Ayurvedic College has said.

**WHO Methodology**

**India objects to WHO methodology for calculating COVID-19 toll** *(The Hindu: 20220418)*


Health Ministry responds to reports of India stalling the world health body's efforts

India has been in regular and in-depth technical exchange with the World Health Organization (WHO) on the issue of collecting and making public the COVID-19 death toll in the country, the Union Health Ministry said on Saturday in response to The New York Times article titled India Is Stalling the WHO’s Efforts to Make Global Covid Death Toll Public dated April 16.

The Ministry, in a statement, said that the analysis while using mortality figures directly obtained from Tier I set of countries, uses a mathematical modelling.

**warm’ vaccine**

**Work in progress: India-made ‘warm’ vaccine to fight COVID-19** *(The Hindu: 20220418)*


IISc-incubated Mynvax behind jabs that can be stored at room temperature for 4 weeks, generated a significant number of antibodies in mouse trials against prevalent variants of the virus, according to a study in the peer-reviewed journal Viruses. A prospective vaccine against SarsCov2 being developed in India, that doesn’t need to be stored in refrigerators or cold-chain storage, generated a significant number of antibodies in
mouse trials against prevalent variants of the virus, according to a study in the peer-reviewed journal Viruses.

The ‘warm’ vaccine developed by the Bengaluru-based Mynvax laboratories, a company incubated at the Indian Institute of Science Bangalore, is uniqu