

## DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY TUESday 2024027

## **Antidepressant**

Onset of Covid soared antidepressant use among young girls: Study (The Tribune: 2024027)

https://www.tribuneindia.com/news/health/onset-of-covid-soared-antidepressant-use-among-young-girls-study-594777

The increase in the antidepressant dispensing rate was 130% faster among girls aged 12 to 17 and 60% faster among females aged 18 to 25.

Onset of Covid soared antidepressant use among young girls: Study

Antidepressant use rose sharply in adolescents and young adults, particularly among girls, after the onset of Covid, according to a new study.

The findings, published in the journal Pediatrics, showed the rate of antidepressant use rose nearly 64 per cent faster after March 2020 among young people aged 12 to 25.

"Antidepressant dispensing to adolescents and young adults was already high and rising before March 2020. Our findings suggest these trends accelerated during the pandemic," said lead author Kao Ping Chua, a paediatrician and researcher at University of Michigan Health CS Mott Children's Hospital in the US.

Importantly, the increase in the antidepressant dispensing rate during the pandemic was driven by females: 130 per cent faster among girls aged 12 to 17 and 60 per cent faster among females aged 18 to 25.

"Multiple studies suggest that rates of anxiety and depression among female adolescents increased during the pandemic," Chua said. "These studies, coupled with our findings, suggest the pandemic exacerbated a pre-existing mental health crisis in this group."

In contrast to females, the antidepressant dispensing rate changed little among male young adults after March 2020 and declined among male adolescents, which Chua found surprising.

"It's hard to believe this decline reflects improved mental health," he said.

This could be because male adolescents may have skipped physicals and other health care visits during the pandemic, decreasing opportunities to diagnose and treat anxiety and depression, the researchers said.

Chua said the overall rise in antidepressant dispensing to adolescents and young adults may not only be related to worsened mental health. Long waitlists for psychotherapy, for example, may have also played a role.

"In my primary care clinic, I often heard from patients and families that they were facing about 9-month long waiting list for therapy during the pandemic. In those situations, it didn't make sense to withhold antidepressants and recommend a therapy-only approach," he said.

#### Smart watch isn't a medical device

Your smart watch isn't a medical device - but it is tracking all your health data (The Tribune: 2024027)

 $\frac{https://www.tribuneindia.com/news/health/your-smart-watch-isnt-a-medical-device-but-it-is-tracking-all-your-health-data-594765$ 

Your smart watch isn't a medical device - but it is tracking all your health data

For millions of people, smartwatches aren't just a piece of technology. They can use them to take control of their health in ways never thought possible.

As you go on your morning run, a smartwatch can monitor the rhythmic pounding of your feet and your heart's steady beat. The watch can record the distance covered and the intensity of your workout, guiding you towards your fitness goals.

During lunch, you can use it to log calories for a BLT sandwich. As deadlines loom, they can offer gentle reminders to take a moment for yourself. And as you doze off, they might pick up instances of apnoea or other sleep disturbances.

But some users could also conflate health tips with medical advice. Device and app developers have consistently made it clear that their products cannot replace a professional medical doctor's advice or treatment.

A smartwatch is not a medical device as defined by law. In the UK, medical devices are strictly regulated in a way that other devices such as smartwatches are not. These regulations provide users with better legal protections and clarity as well as providing for resolution in the event of a mishap.

### What qualifies

The key legal framework in the UK is the Medical Devices Regulations 2002 (UK MDR). Once a product has been identified as a medical device under UK MDR, further classification of it takes place, ranging from low risk (stethoscopes and wheelchairs) to high risk (pacemakers, heart valves, implanted cerebral simulators).

If a device is designed to go inside the body, or if it contains medicinal substances, it is more likely it is treated as high risk. Depending on the risk classification, the law then imposes stringent standards to protect users from harm. These include obligations on the manufacturers and developers to ensure their devices are safe, through conducting risk impact assessments, periodic audits and other actions.

All matters relating to medical devices in the UK fall under the responsibility of the Medicines and Healthcare Products Regulatory Agency (MHRA). The MHRA conducts surveillance of medical devices available in the UK and has the authority to make decisions regarding their marketing and distribution. It is also the MHRA's duty to ensure that manufacturers and developers are complying with the regulations.

#### Pursuit of wellness?

An important question is how one distinguishes a device, digital tool or app as one used for a medical purpose – which is how the UK MDR defines a medical device – versus one that is used for general health and wellness. The latter would include, for example, meditation apps or step counters.

Traditionally, smart watches have been treated as smart, wearable technology. On the face of it, they offer users insight into their general health and wellness, helping them make necessary lifestyle adjustments to improve their health or fitness goals.

In recent years, however, such technologies have become increasingly advanced. Tens of thousands of digital tools and applications have flooded app stores. These include monitoring apps for mental health, symptom checkers based on information entered by patient users, or medical calculators for drug dosing.

Smartwatches may have electrocardiogram (ECG) functions. An ECG is a test used to check a person's heart's rhythm and electrical activity. Medical professionals have traditionally used ECGs to look for signs of coronary heart disease or other cardiovascular conditions. The same functions on a watch may not have the right sensitivity to pick up on medical conditions.

The latest version of the Apple watch has embedded sensors that may be able to detect atrial fibrillation, a type of irregular heart rhythm. In the US, Apple has obtained clearance from the Food and Drug Administration (FDA) allowing it to be used for this purpose, marking a bold move into the regulated medicine and healthcare space.

Biosensors, previously thought of as devices that were administered only in clinical settings have now evolved by design into slim patches for consumer use. Take the Nix Biosensor device. When paired with Apple Watches, it is designed to measure a user's optimal hydration level in real time by identifying molecular markers in sweat and determining the loss of fluid and electrolytes (substances that maintain a balance of fluids inside and outside cells).

Finally, emerging trends also indicate that more and more women are relying on fertility and cycle trackers in smartwatches and sophisticated apps. However, there have been concerns that users might use the information in place of actual birth control.

Hence, as smartwatches and trackers evolve, it's possible that they may approach the threshold for what authorities could consider a medical device.

## Privacy protections

There's something else to consider too. Users of devices and digital tools regularly hand over their personal data. Businesses must ensure compliance with the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018 (DPA).

Personal health data is a "special category of data". This would fall under the application of Articles 6 and 9 of the UK GDPR and Schedule 1 of the DPA. This means that more stringent standards are imposed for the collection and use of such data (in its processing), including potentially an obligation to conduct an extensive data impact assessment.

Indeed, the UK's privacy watchdog, the Information Commissioner's Office (ICO) issued a statement on February 8, 2024 reminding all app developers to ensure they protect users' privacy following the regulator's review of period and fertility apps.

Other potential safeguards for users' privacy could come from the Medicines and Medical Devices Act 2021 (MMDA), from the appointment of the Patient Safety Commissioner and from the National Health Service (NHS), which can now evaluate digital tools using the digital technology assessment criteria (DTAC).

Clear guidelines in this area are not just necessary, they're imperative. Without them, we potentially risk both stifling innovation and compromising user care

## 1st India-specific AI model to determine foetus age

## IIT Madras develops 1st India-specific AI model to determine foetus age (The Tribune: 2024027)

https://www.tribuneindia.com/news/health/iit-madras-develops-1st-india-specific-ai-model-to-determine-foetus-age-594763

Accurate age of a foetus -- gestational age -- helps in providing proper care of pregnant women and also to determine precise delivery dates

In a first, researchers at the Indian Institute of Technology (IIT) Madras have developed an Artificial Intelligence (AI) model that is specific to Indian population and can accurately determine the age of a foetus in a pregnant woman, in her second and third trimesters.

Accurate age of a foetus -- gestational age -- helps in providing proper care of pregnant women and also to determine precise delivery dates.

Currently, physicians in India determine the gestational age using a formula developed for Western population, increasing chances of error.

The new model called 'Garbhini-GA2' accurately estimates the age of a foetus for the Indian population, reducing error by almost three times, said the team of researchers, including from the Translational Health Science and Technology Institute (THSTI), Faridabad on Monday.

It is "the first late-trimester gestational age estimation model to be developed and validated using Indian population data", they noted in the study, published in the peer-reviewed journal Lancet Regional Health Southeast Asia.

The new model can also improve the care delivered by obstetricians and neonatologists, thus reducing maternal and infant mortality rates in India.

The research is also part of 'Interdisciplinary Group for Advanced Research on Birth Outcomes - DBT India Initiative' (GARBH-Ini) programme.

"GARBH-Ini is a flagship programme of DBT, and the development of these population-specific models for estimating gestational age is a commendable outcome. These models are being validated across the country," said Dr. Rajesh Gokhale, Secretary, Department of Biotechnology (DBT), Government of India, in a statement on Monday.

"IIT Madras has been contributing towards solving healthcare problems at the grassroots and local level with the aim of enhancing public health in India. To this end, we are utilising advanced data

science and AI/ML techniques to build tools to predict unfavourable birth outcomes. The first step towards this is to develop accurate GA models that perform significantly better than currently used models designed using Western populations," added Dr Himanshu Sinha, a Coordinator at the Center for Integrative Biology and Systems Medicine, IIT Madras, and who led the data science work for this research.

Garbhini-GA2 used three routinely measured foetal ultrasound parameters, and was developed using GARBH-Ini cohort data documented at Gurugram Civil Hospital, Haryana, and was validated in an independent cohort in South India.

Once validated in prospective pan-India cohorts, this Garbhini-GA2 can be deployed in clinics across India, improving the care delivered by obstetricians and neonatologists, thus reducing maternal and infant mortality rates in India, the researchers said.

"Improving the gestational age accuracy is a critical component of the broader goals of the GARBH-Ini study, which aims to reduce the adverse pregnancy outcomes," said Dr Shinjini Bhatnagar, Principal Investigator of the GARBH-Ini programme and a Distinguished Professor, at THSTI.

## Depression,

Common anesthetic in low doses can improve symptoms of depression, find researchers (The Tribune: 2024027)

https://www.tribuneindia.com/news/health/common-anesthetic-in-low-doses-can-improve-symptoms-of-depression-find-researchers-594479

Low doses of ketamine can restore social deficits by restoring function in anterior insular cortex, says study

Common anesthetic in low doses can improve symptoms of depression, find researchers

Well-being is important for everyone, especially when we are lonely or alone. Depression is a serious problem for many people, and finding an effective therapy is crucial.

A study published in Molecular Psychiatry found that low doses of ketamine, a common anaesthetic, can restore social deficits by restoring function in the anterior insular cortex.

Ketamine is often used at low doses to treat depression, but its actions in the brain remain relatively unclear. Generally, ketamine refers to a mix of two different forms of ketamine: (S)-ketamine and (R)-ketamine.

These two molecules are mirror isomers or enantiomers--they have the same molecular formula, but their three-dimensional forms are mirror images of one another.

Although they usually occur as (S) and (R) pairs, they can also be separated into either (S)-ketamine or (R)-ketamine. Each is beneficial in treating depression, although their specific effects vary.

When the research team decided to test the effects of (S)-ketamine and (R)-ketamine on depression-like symptoms in mice, they first had to decide on an appropriate model. Given that depression and social impairments can be induced by long-term social isolation, they chose a chronic (at least 6 weeks) social isolation mouse model.

The researchers then used a method that allowed them to directly compare neuronal activation throughout the entire brains of mice treated with (S)-ketamine, (R)-ketamine, or saline (as a control) directly after behavioural tests.

"In this way, we were able to observe differences between (S)-ketamine and (R)-ketamine treatments in terms of neuronal activation across the whole brain, without having a predefined hypothesis," said lead author of the study Rei Yokoyama.

"Notably, we found that chronic social isolation led to decreased neuronal activation in the anterior insular cortex--a brain region that is important for emotional regulation--during social contact, and that (R)-ketamine, but not (S)-ketamine, reversed this effect." The researchers also found that mice treated with (R)-ketamine were better at recognizing unfamiliar versus familiar mice in a social memory test, indicating improved social cognition. Moreover, when neuronal activity was suppressed in the anterior insular cortex, the (R)-ketamine-induced improvements disappeared.

"These findings highlight the importance of the anterior insular cortex for the positive effects of (R)-ketamine on social impairments, at least in mice," said Hitoshi Hashimoto, senior author of the study.

"Together, our results indicate that (R)-ketamine may be better than (S)-ketamine for improving social cognition, and they suggest that this effect is dependent on restoring neuronal activation in the anterior insular cortex."

#### Gut bacteria

China warns COVID-19 cases may rise during spring festival: Report (The Times of India: 2024027)

https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/from-stress-to-serenity-leveraging-yoga-and-meditation-for-mental-health-in-2024/articleshow/108005678.cms

3 powerful natural remedies to fix bloating by balancing gut bacteria

WTO chief lets cat out of bag: Piyush Goyal may be fighting Lok Sabha polls

This guide explores the importance of yoga and meditation in finding tranquility and enhancing mental wellness. It provides techniques for mindfulness, stress relief through yoga asanas, breathing techniques, creating a routine, nurturing a supportive environment, embracing patience, and seeking professional guidance. Read More

From stress to serenity: Leveraging yoga and meditation for mental health in 2024

In the whirlwind of modern life, finding tranquility is paramount. Yoga and meditation, ancient practices rooted in centuries-old wisdom, emerge as beacons of hope. They offer a holistic approach to mental wellness, bridging the gap between mind, body, and spirit. This guide, akin to advice from a seasoned physician, unveils simple yet profound techniques to transition from stress to serenity.

story

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Embracing mindfulness: A pathway to peace

Mindfulness is the cornerstone of mental health. It teaches us to be present, acknowledging our thoughts and feelings without judgment. Meditation, a practice that cultivates mindfulness, can be as simple as focusing on your breath for a few minutes each day. This act, seemingly minor, can significantly reduce stress and enhance overall well-being.

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Gentle yoga asanas for stress relief

Yoga, with its myriad forms, offers something for everyone. Here are a few asanas designed to alleviate stress, suitable for beginners and seasoned practitioners alike.

Child's Pose (Balasana): A grounding posture that promotes relaxation. Kneel on your mat, fold forward, and extend your arms. Let your forehead touch the ground. This pose soothes the nervous system.

Cat-Cow Stretch (Marjaryasana-Bitilasana): Improves spine flexibility and relieves tension. On all fours, inhale as you arch your back (Cow), exhale as you round it (Cat). This movement fosters emotional balance.

Legs-Up-The-Wall Pose (Viparita Karani): A restorative posture that calms the mind. Sit close to a wall, then lie back and extend your legs up it. This pose reduces anxiety and improves sleep.

Seated Forward Bend (Paschimottanasana): Stretches the spine and helps relieve stress. Sit with legs extended, inhale, and then exhale as you fold forward. This asana quiets the mind and eases depression.

Corpse Pose (Savasana): The ultimate relaxation pose. Lie on your back, arms and legs comfortably apart. Close your eyes and breathe deeply. Savasana reduces stress and promotes a peaceful mind.

Incorporating breathing techniques

Pranayama, or yogic breathing, is a powerful tool for managing stress. Simple techniques like deep abdominal breathing can be profoundly calming. Another effective method is the 4-7-8 technique: inhale for 4 seconds, hold for 7, and exhale for 8. These practices can lower stress levels and improve mental clarity.

## Creating a routine

Consistency is key. Carve out a specific time each day for yoga and meditation. Even a few minutes can make a difference. Morning sessions can energize and set a positive tone for the day, while evening practices may help unwind and prepare for restful sleep.

## Nurturing a supportive environment

Your environment plays a crucial role. Choose a quiet, comfortable space for your practice. You might add elements like soft lighting or calming music to enhance the atmosphere. This setting can make your practice more enjoyable and effective.

### Embracing patience and self-compassion

Progress in yoga and meditation is gradual. Be patient and kind to yourself. Remember, it's not about perfection but the journey toward well-being. Celebrate small victories and remain committed to your practice.

## Connecting with a community

Joining a yoga or meditation group can provide support and motivation. Sharing experiences and challenges with others on the same path can be incredibly uplifting. Many communities exist online and in-person, offering a sense of belonging and encouragement.

#### Seeking professional guidance

While yoga and meditation are generally safe, consulting with a healthcare provider is advisable, especially for individuals with specific health concerns. A professional can recommend modifications to ensure the practices are beneficial and enjoyable.

#### The road ahead

As we advance through 2024, the importance of mental health cannot be overstated. Yoga and meditation stand out as accessible, effective tools for enhancing mental wellness. By incorporating these practices into our daily lives, we can navigate the complexities of the modern world with grace and resilience.

In essence, yoga and meditation are more than just exercises; they are a way of life. They teach us to live in harmony with ourselves and the world around us. As we embrace these practices, we embark on a transformative journey from stress to serenity, fostering a healthier, happier existence for ourselves and those around us.

Let this year be the one where we prioritize our mental health, exploring the depths of yoga and meditation. In doing so, we unlock the door to a life of balance, peace, and fulfillment.

(Author: Dr. Indranill Basu Ray, Cardiac Electro physiologist and Cardiology and Public health professor based in Memphis, Tennessee, USA. He is the Founder and Chairman of the American Academy for Yoga in Medicine)

#### Piles or haemorrhoids

What causes Piles or haemorrhoids? Treatment, home remedies and foods to consume (The Times of India: 2024027)

https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/what-causes-piles-or-haemorrhoids-treatment-home-remedies-and-foods-to-consume/photostory/108009102.cms?picid=108010765

Piles, medically known as haemorrhoids, are a common yet bothersome condition affecting millions worldwide. Characterised by swollen veins in the rectum and anus, haemorrhoids can lead to discomfort, pain, and bleeding during bowel movements. While often not dangerous, they can significantly disrupt one's quality of life. Here is all you need to know about what causes piles, how they occur, and effective ways to manage them using home remedies and dietary adjustments.

02/7What are Hemorrhoids?

#### **Shop Similar Look**

Beneath the inner lining of the lowest part of your rectum and anus lie clusters of veins resembling small pillows. These are what we refer to as haemorrhoids or piles. When these veins become inflamed and swollen, they lead to the development of haemorrhoids. There are two primary types: internal haemorrhoids, situated inside the rectum, and external haemorrhoids, which form under the skin around the anus. External haemorrhoids tend to be more uncomfortable due to the irritation of the overlying skin and the possibility of blood clots forming within them.

03/7What are the causes of Hemorrhoids?

#### Shop Similar Look

Several factors contribute to the development of haemorrhoids. Chronic constipation, straining during bowel movements, and prolonged sitting on the toilet are common culprits. These activities interfere with the blood flow to and from the area, causing the veins to enlarge. Pregnancy and

ageing also play significant roles, as increased pressure on the veins and weakened connective tissues can lead to hemorrhoidal issues.

While most of these go away on their own and can be easily managed at home with a soft diet and constipation preventing medicines, sometimes they need medical attention and it is best to consult a doctor in that case.

## **Back pain**

Back pain a bother? There's one simple asana that anybody can do (Indian Express: 2024027)

https://indianexpress.com/article/health-wellness/back-pain-bother-simple-asana-anybody-can-do-9178334/

back pain yogaEven if you don't do the full yoga routine, this will help relieve your soreness and pain. (Express Photo)

Every other person today complains of a back problem. Our spine is most impacted with all that we do in our waking hours and worse, still carry our worries and tension to the bed. This, coupled with constant use of our electronic devices in all kinds of odd positions, bad diet and lack of exercise makes it a challenge to keep an upright spine which is what distinguishes us from animals.

The other problem is everyone wants a simple practice which can be done with least demand on their time and body potential.

So here is that one asana which everyone can do. Even if you don't do the full yoga routine, this will help relieve your soreness and pain.

This asana is good for people with all kinds of back problems, including sciatica, slipped disc, both upper torso and lower back pain. You can remain in the starting position of this asana for an extended period of time to release tension in your spinal column and nerves. If you notice, children naturally assume this posture during their play and resting times.

It opens up the lungs and improves respiration, which is badly affected by mental stress and tension, indirectly affecting the spine too. Moreover, changing the placement of your elbows, either close or away from the body, impacts different parts of your spine, thus making it possible for you to target the specific pain point.

Fold your arms and place the elbows together as close to your body as is comfortably possible.

Cup your jaws in your palms.

You can keep the elbows together for a pronounced arch of the spine or separate them slightly if you feel excess pressure on the neck.

If you are looking to impact the upper back and neck area, then place the elbows comfortably away from the body.

If you want to impact lower back, then place the elbows comfortably close to the body.

Inhale and fold your right leg, exhale and lower it.

Do the same with the left leg.

Repeat with both legs together.

This makes one set, do three to five sets.

Maintain awareness on your back. You may even keep eyes closed so that awareness is on your breathing and effect of the practice is felt on your back.

Just remaining in Makrasana while reading or watching TV or chatting is also a good relaxation and cure for back pain and problems. Additionally, avoid sugar, fast food, fatty, fried food, too much coffee or tea. Have small amounts of nuts, peanuts and fruits. Include relaxation practices like Shavasana and Yoga Nidra before sleeping.

## **Women Physical Fitness**

Women need just 2.5 hours of exercise a week: New US study shows why they can get more out of less than men (Indian Express: 2024027)

 $\underline{https://indian express.com/article/health-wellness/women-exercising-benefits-compared-to-men-9176971/$ 

'Women are the pivots in our households, so if she works out, the whole family is likely to do so,' says Dr Rakesh Yadav, professor of cardiology at AIIMS

A US study has found that women get the same benefits of exercise as men with fewer sessions per week.

A US study has found that women get the same benefits of exercise as men with fewer sessions per week. (Representational image via Canva)

Here is a finding that might inspire more women to work out regularly. A US study has found that women get the same benefits of exercise as men with fewer sessions per week. Spanning 400,000 US adults, the study also found that fewer women met the standard for weekly aerobic and strength training sessions.

"This is a very positive finding and should encourage every woman to take the time out to exercise. What's more, women are the pivots in our households, so if she works out, the whole family is likely to do so," says Dr Rakesh Yadav, professor of cardiology at AIIMS.

Why are women more likely to benefit from exercising regularly?

The researchers said that the higher degree of benefit in women could be because of differences in physiology. The authors said that this could be because men have a greater exercise capacity than women, owing to proportionately larger hearts, wider lung airways and larger muscle fibres. On an average, men have 38 per cent more lean body mass than women. This essentially means that women's heart, muscles and airways have to work harder to complete the same movements, thereby accruing more benefits for them.

The researchers also said that the different muscle make-up of women and men could also be the reason women are more likely to lose muscles when they don't use them but they are also likely to gain more benefits when they do.

Says Dr Yadav, "The benefit that is observed in the study could also be because women who work out regularly are also much more likely to have a healthier lifestyle, less likely to smoke and drink and are more likely to be eating healthier. All of this comes together."

With vigorous physical activity, the all-cause mortality in men went down by 19 per cent at nearly two hours a week, whereas women achieved the same benefit with slightly less than an hour of effort. When women did vigorous physical activity for nearly two hours, their all-cause mortality risk reduced by 24 per cent as compared to those who did not exercise.

However, the study found that only 19.9 per cent of women as compared to 27.8 per cent of men engaged in regular muscle training exercise. The average number of sessions was also fewer for women — 0.85 sessions per week as compared to the men's average of 1.25 sessions.

Men reached their maximum survival benefit from doing five hours a week of moderate to vigorous physical exercise, which lowered their risk of all-cause mortality by 18 per cent as compared to men who did not exercise. Women accrued similar benefits with just 2.5 hours of moderate to vigorous exercise per week. If they continued beyond this, the study found, their all-cause mortality could reduce by up to 24 per cent.

How much should you ideally exercise in a week?

Everyone, including women, should do some exercise for 40 to 45 minutes a day, says Dr Yadav. "It is essential that people begin gradually. They should not take up vigorous activities such as running or lifting weights suddenly after not working out for years. These activities require proper training. But walking is easy and good for everyone, across all age groups. Walking five minutes can be equivalent to running a minute. An elderly person might not be able to run but they will be able to walk," he said.

He also advises yoga. "I always tell my patients that they need to move all their joints at least once a day through yoga, stretching, or the kind of physical training we did in schools as children."

Anonna Dutt is a Principal Correspondent who writes primarily on health at the Indian Express. She reports on myriad topics ranging from the growing burden of non-communicable diseases such as diabetes and hypertension to the problems with pervasive infectious conditions. She reported on the government's management of the Covid-19 pandemic and closely followed the vaccination programme. Her stories have resulted in the city government investing in high-end tests for the poor and acknowledging errors in their official reports. Dutt also takes a keen interest in the country's space programme and has written on key missions like Chandrayaan 2 and 3, Aditya L1, and Gaganyaan. She was among the first batch of eleven media fellows with RBM Partnership to End Malaria. She was also selected to participate in the short-term programme on early childhood reporting at Columbia University's Dart Centre. Dutt has a Bachelor's Degree from the Symbiosis Institute of Media and Communication, Pune and a PG Diploma from the Asian College of Journalism, Chennai. She started her reporting career with the Hindustan Times. When not at work, she tries to appease the Duolingo owl with her French skills and sometimes takes to the dance floor.... Read More

## Global fertility

India's egg-freezing boom: How competitive cost and success rate are drawing foreigners to secure their parenthood (Indian Express: 2024027)

https://indianexpress.com/article/health-wellness/india-egg-freezing-cost-success-rate-foreigners-parenthood-9176372/

Top Indian cities are becoming hotspots of the global fertility tourism market

"The baby born would be as healthy as it would be if birthed by the mother early enough," says the country's top infertility expert, Dr Anjali Malpani. (Express Photo)

When Bruna Alves, a Brazilian woman working with a surrogacy firm in Tel Aviv, Israel, wanted to freeze her eggs at 32, she chose India instead of her employer, even overlooking the fact that the company she worked for owned a chain of FDA-registered IVF clinics in Asia. "That's because Indian facilities offer one of the most affordable rates globally, the services are top-notch, the doctors are experienced, credible, proficient in English, easy to understand, and best of all, are always available on a video call to take care of your anxieties," says the now 34-year-old.

Young women like Bruna are increasingly opting for egg freezing, a minimally invasive process where their eggs or oocytes are extracted, frozen and stored, sealing them in at their best, so that they can be thawed, fertilised and implanted in their uterus when they are ready to become mothers. "The baby born would be as healthy as it would be if birthed by the mother early enough," says the country's top infertility expert, Dr Anjali Malpani. This is an example of how technology gives a woman agency to choose the time of her motherhood.

#### **Food and Nutrition**

Millions of older people don't get enough nutrients – how to spot it and what to do about it(Indian Express: 2024027)

https://indianexpress.com/article/lifestyle/health/older-people-nutrients-tips-9161551/

If people are eating small amounts of food, it is important to think about how to add more nutrients into it

diet

Here's what you need to be kept in mind (Source: Freepik)

By 2050, approximately a quarter of the UK population is expected to be over the age of 65. With this in mind, the World Health Organisation (WHO) has put "healthy ageing" on its agenda. This means finding ways to maintain health, wellbeing and functional ability in order to have a good quality of life and enjoy the later years.

Everyone ages at a different rate – but there are some things that can influence how well we age, such as by making changes to the types of activity we do and the foods we eat.

Older adults are generally less physically active than they were when they were younger and because of this, their energy intake requirement may decrease. However, there is a difference between energy requirements and nutrient requirements, and nutrient requirements actually remain the same, if not increase, as we get older.

This means we need to get more nutrients into less energy which can be tricky as older adults often have lower appetites. This is why scientists suggest that it may be necessary to enrich the food of older people to maintain the nutrient intake.

How to spot when someone isn't eating enough?

Several studies have shown that undernutrition affects one in ten older people living independently at home. However, it affects five in ten older people living in nursing homes, and seven in ten older people in hospital.

Being overweight, even obese, does not protect against undernutrition. And when older adults lose weight, they lose muscle, meaning that they are more likely to lose their abilities to do daily tasks.

Festive offer

Weight loss in older adults is a key sign of malnutrition that needs to be addressed – but it can be easily missed, especially when many older adults associate the idea of thinness with good health. But clothing that's too loose or a watchstrap that floats on the wrist are all warning signs of undernourishment.

Similarly, if someone you care for has started to say things like, "Oh, I don't want much food today, I'm not hungry", "I'm not hungry, it's natural, I'm getting older", or "I'd rather just have a biscuit to be honest," then these could be warning signs. An effective way to keep on top of this is regular weighing at least once per month which enables a quick response to potential indicators of malnutrition.

If people are eating small amounts of food, it is important to think about how to add more nutrients into it. A very effective technique, "fortification" is commonly done with pre-made products such as breakfast cereals, plant-based milk and bread in the UK.

Fortification (adding foods, ingredients or nutrients into to existing foods or meals) is easy to do at home as well and can provide a flexible approach for older adults as it allows them to continue eating the foods that they most enjoy.

For older adults in particular, protein is a very important nutrient, because of muscle loss (sarcopenia) which is a natural part of ageing. This could be slowed down or even reversed by eating enough protein at regular intervals throughout the day. A few ways to increase protein include: • Adding dairy ingredients such as milk, high-protein yoghurt, Quark (soft cheese), milk powders, eggs and cheese into meals — even into simple foods like mashed potato.

- Nuts are a great source of protein, try adding ground almonds to savoury or sweet meals (beware of nut allergies).
- Soy protein can be a convenient and cost-effective option, either for vegetarians or to further fortify minced-meat meals.

#### **Psoriasis**

## Can weight loss help in treating psoriasis? (Indian Express: 2024027)

 $\underline{https://indian express.com/article/lifestyle/health/psioriasis-symptoms-obesity-risk-factor-weightloss-8644797/}$ 

Consulting with healthcare professionals can provide personalised guidance on managing psoriasis symptoms and achieving a healthy weight

psoriasisTreatments are available to help you manage symptoms, as well as lifestyle habits and coping strategies which can aid in dealing with psoriasis. (Source: Freepik)

Psoriasis a chronic autoimmune condition which causes rashes and itchy, scaly patches on the skin and joints, most commonly the knees, elbows, trunk and scalp. It is a common, long-term disease with no cure.

Explaining the causes of psoriasis, Dr Mandeep Singh, HOD-Plastic Surgery, Paras Health, Gurugram said, "The exact causes of psoriasis are not fully understood, but it is believed to involve a combination of genetic predisposition, immune system dysfunction, and environmental triggers

such as infections, injuries to the skin, stress, smoking, certain medications and changes in climate."

Treatments are available to help you manage symptoms, as well as lifestyle habits and coping strategies which can aid in dealing with psoriasis.

There's also interest in things other than medications that may help manage the skin disease. According to a study published in the journal Dermatology in 2017, evidence suggests that obesity is a risk factor for psoriasis, which aggravates the condition, and that weight reduction may improve the severity of it in overweight individuals.

Similarly, Dr Shrea Kapoor, a dermatologist took to Instagram to share how losing weight helps psoriasis. "If you or a family member have skin lesions of psoriasis, then you could benefit by losing some weight. Weight gain is an inflammatory state and so is psoriasis. When you lose even 5 per cent of the body weight, you can reduce the itchiness, scaliness, and formation of new plaques in psoriasis. And if you are prone to getting psoriasis, keeping your weight in check can stop you from getting it," she said.

#### Festive offer

Talking about the same, Dr Singh said that losing weight can have a positive impact on managing psoriasis symptoms and overall well-being. "While weight loss may not be a cure for psoriasis, it can contribute to reducing inflammation and improving the effectiveness of treatment," he noted.

The expert noted that since obesity is associated with chronic inflammation, which exacerbates psoriasis symptoms, weight loss can help decrease inflammation markers in the body, potentially leading to a reduction in psoriasis severity. "Studies suggest that individuals with psoriasis who are overweight or obese may have a poorer response to certain treatments. Losing weight can enhance the effectiveness of medications and other therapies, improving symptom control," he informed.

Additionally, Dr Kapoor recommends lifestyle changes such as reducing processed sugary food, increasing good fats like sources of Omega-3, and walking for at least 30-45 minutes a day, to manage symptoms of psoriasis.

#### Rheumatoid arthritis

## Can rheumatoid arthritis be prevented? (The Hindu: 2024027)

 $\frac{https://www.thehindu.com/sci-tech/health/can-rheumatoid-arthritis-be-prevented-explained/article 67858354.ece}{}$ 

Can the disease be delayed by repurposing an existing drug? Can it act as a signalling pathway to start the appropriate immune response? What are the concerns? Where does India stand on treating this autoimmune disease?

Can doctors prevent the onset of rheumatic arthritis in people who have not yet developed the condition?

Can doctors prevent the onset of rheumatic arthritis in people who have not yet developed the condition? | Photo Credit: Getty Images/iStockphoto

The story so far: Earlier this week, The Lancet published the results of a study that proposed to repurpose an existing drug to treat rheumatoid arthritis as prophylaxis, to prevent disease. Can doctors prevent the onset of rheumatic arthritis in people (with indicative biomarkers) who have not yet developed the condition? The results of the study showed that "rheumatoid arthritis prevention trials are feasible and targeting the adaptive immunity of such individuals at an early stage, can prevent the onset of rheumatoid arthritis."

It is a chronic, autoimmune condition that mostly affects the joints. Scientists have not yet understood why an autoimmune condition occurs, allowing the immune system that protects the body, to attack itself. A patient experiences pain, swelling of joints and loss of function and mobility as a result of stiffness. As can be expected, this is likely to significantly lower a patient's quality of life. As per the National Institute of Arthritis and Musculoskeletal and Skin Diseases, of the National Institutes of Health, U.S., rheumatoid arthritis affects the lining of the joints, and damages the tissue that covers the ends of the bones in a joint. It often occurs in a symmetrical pattern, meaning that if one knee or hand has the condition, the other hand or knee is also often affected. Fatigue, occasional fevers, and a loss of appetite are to be expected, and there is a possibility that it may cause medical problems outside of the joints including in the heart, lungs, blood nerves, eyes and skin.

#### Guinea worm disease

# Race to global eradication of Guinea worm disease nears finish line (The Hindu: 2024027)

https://www.thehindu.com/sci-tech/health/race-to-global-eradication-of-guinea-worm-disease-nears-finish-line/article67871054.ece

Nations like South Sudan and Mali, where Guinea worm disease was once more common, have made commendable progress, although the fight continues in Chad and the Central African Republic.

File picture of children in the town of Terekeka, South Sudan, draw water from a stagnant pond that was once infected with Guinea Worm when the town was endemic.

File picture of children in the town of Terekeka, South Sudan, draw water from a stagnant pond that was once infected with Guinea Worm when the town was endemic. | Photo Credit: AP

The world is on the brink of a public health triumph as it closes in on eradicating Guinea worm disease. There were more than 3.5 million cases of this disease in the 1980s, but according to the World Health Organization's (WHO) weekly epidemiological report, they dwindled to 14 cases in 2021, 13 in 2022, and just six in 2023.

At a time when medical advancements often headline with breakthrough vaccines and cures, the battle against Guinea worm disease stands out for its reliance on basic public health principles rather than high-tech interventions. Unlike many of its viral counterparts, this parasitic adversary has offered no chance for immunity, defied prevention by vaccines, and resisted most cures – yet the possibility of its eradication is closer than ever thanks to the triumph of human resilience and ingenuity.

#### **ASHA**

The women of ASHA: overworked, underpaid and on the edge of breakdown (The Hindu: 2024027)

 $\underline{https://www.thehindu.com/sci-tech/health/the-women-of-asha-overworked-underpaid-and-on-the-edge-of-breakdown/article67866061.ece}$ 

ASHAs engage in the double burden of domestic chores while running around the community as health workers, resulting in improper nutrition, inadequate sleep and deprioritising their own health. They are at risk of anaemia, malnutrition and non-communicable diseases

ASHA workers protesting in Bengaluru on February 13, 2024. Image for representational purpose only. File

ASHA workers protesting in Bengaluru on February 13, 2024. Image for representational purpose only. There's a saying in the Chhattisgarhi dialect. Sukh mein sab hain, dukh mein Mitanin. Everyone is there in times of joy, but in sorrow, there are only Mitanins. The word translates to 'friends'. A friendship, between women, one with the promise of compassion. In 2002, Mitanins also came to symbolise care, when the newly-formed State of Chhattisgarh designated women to play the role of community health workers. They were advocates for resource-deficient communities, friendly faces of a distant health system, agents of both change and care work.

Mitanins inspired the ASHA framework three years later. The Accredited Social Health Activist – a saree-clad cadre of almost 10 lakh women today – is a friend. Her care work dictates the reach and success of India's health schemes. But agents of change tire too. Every ASHA logs in a 'triple shift', spread out between the home, community and health centres. Overworked and underpaid, they are caught in a frenzied rhythm: many do not eat well and sleep enough, and are at risk of anaemia, malnutrition and non-communicable diseases, found a new study supported by the Dr. Amit Sengupta Fellowship on Health Rights. It documented the limited autonomy the health workers have over their time, money and well-being.

## **Blood clots, - COVID-19 vaccination**

Global study quantifies rise in blood clots, heart inflammation following COVID-19 vaccination (The Hindu: 2024027)

https://www.thehindu.com/sci-tech/health/global-study-quantifies-rise-in-blood-clots-heart-inflammation-following-covid-19-vaccination/article67867735.ece

The data set spanning 99 million people did not include patients from India; a majority of Indians were administered the ChAdOX1 or Covishield vaccines during the pandemic

Boxes of the Oxford/AstraZeneca (ChadOX1) COVID-19 vaccine are pictured in a refrigerator at a vaccination centre in Hertfordshire, Britain on January 11, 2021.

Boxes of the Oxford/AstraZeneca (ChadOX1) COVID-19 vaccine are pictured in a refrigerator at a vaccination centre in Hertfordshire, Britain on January 11, 2021. | Photo Credit: Reuters

One of the largest assessments of its kind, spanning 99 million people and investigating reports of adverse reactions following COVID-19 vaccination, found that instances of Guillain Barre Syndrome, myocarditis, pericarditis and cerebral venous sinus thrombosis (CVST) were at least 1.5 times more than expected following inoculation with mRNA and ChadOX1 vaccines. This is in line with previous observations by the World Health Organization and the European Medicines Agency, and was what led to these being classified as 'rare' side effects following the vaccination for COVID-19.

## TB

## **76% of TB patients received payment for nutritional support (The Hindu: 2024027)**

https://www.thehindu.com/sci-tech/76-of-tb-patients-received-payment-for-nutritional-support/article67878833.ece

Under the Ni-kshay Poshan Yojana programme, ₹500 per month is credited into the account of a person with TB for the duration of treatment

February 24, 2024 09:10 pm | Updated February 26, 2024 06:09 pm IST

The percentage of TB patients in nine States who received at least one instalment of Rs.500 increased from 57% in 2018 to 76% in 2022

The percentage of TB patients in nine States who received at least one instalment of Rs.500 increased from 57% in 2018 to 76% in 2022 | Photo Credit: Getty Images/iStockphoto

If in 2022 only 1.6 million (66%) of the 2.4 million notified TB cases received at least one month's payment of ₹500 under the Ni-kshay Poshan Yojana direct benefit transfer programme for nutritional support as per the India TB report 2023, a study that analysed the data of nine States found that in 2022 76.1% of TB patients received at least one month's payment, up from 56.9% in 2018. Though the time taken to receive the first payment has reduced since 2018, more than 50% of patients had to wait for over three months in 2022 to receive the first instalment. The study which analysed the data from 2018 to 2022 of nine randomly selected States — Tamil Nadu, Telangana, Odisha, Bihar, Gujarat, Rajasthan, Uttarakhand and Meghalaya — were published

recently in the journal BMC Public Health. The study was conducted by researchers at the Chennai-based National Institute of Epidemiology.

The States were classified as high, medium and low based on the overall performance of the NTEP in the given State. States with a TB score of over 80 were grouped under high, while those with a TB score between 60 and 80 were classified as medium, and States with a score of less than 60 were clubbed under low. Three States from each category were randomly selected. Delhi, Rajasthan and Bihar had TB scores less than 60, while Uttarakhand, Telangana and Tamil Nadu had medium TB scores, and Meghalaya, Odisha and Gujarat had high TB scores of over 80.

#### non-communicable diseases

Are non-communicable diseases increasing in India? (The Hindu: 2024027)

https://www.thehindu.com/sci-tech/health/explained-are-non-communicable-diseases-increasing-in-india/article66971961.ece

What are the causes of such an increase? What are these figures trying to tell us? Which States are highly prone to NCDs? How can we get stop this developing problem?

The story so far: The new national estimates for diabetes and other non-communicable diseases (NCD) shows that 31 million more Indians became diabetic in four years (2019-2021).

In 2021, a study found that India has 101 million people with diabetes and 136 million people with prediabetes. Additionally, 315 million people had high blood pressure; 254 million had generalised obesity, and 351 million had abdominal obesity. 213 million people had hypercholesterolaemia (wherein fat collects in arteries and puts individuals at greater risk of heart attack and strokes) and 185 million had high low-density lipoprotein (LDL) cholesterol. The decade-long nationwide study was funded by the Indian Council of Medical Research and Department of Health Research, Ministry of Health and Family Welfare and co-ordinated by the Madras Diabetes Research Foundation. The results of the study are to be published in The Lancet Diabetes and Endocrinology journal.

## Air pollution

## No hotter air about air pollution (The Hindu: 2024027)

https://www.thehindu.com/opinion/op-ed/no-more-hot-air-about-air-pollution/article67625021.ece

If the government is serious about fighting for clean air, it should ensure that the issue is discussed in the winter session of Parliament

'The existing and alarming situation of air pollution in the country warrants an urgent proactive plan on the part of the government to protect life expectancy'

'The existing and alarming situation of air pollution in the country warrants an urgent proactive plan on the part of the government to protect life expectancy' | Photo Credit: The Hindu

Prime Minister Narendra Modi and his colleagues in the Bharatiya Janata Party must have forgotten what they have said about the menace of air pollution in their manifesto for the 2014 elections. To brush up their memory, here is a quote from page 36 of the said manifesto: "The present generation has to make this world a better place to live. A better place not only for us, but for our future generations as well. We have to nurture the environment, institutions, people, resources and amenities... We will take Climate Change mitigation initiatives with all seriousness and work with the global community and institutions in this regard. We will: (do) Ecological Audit of projects and pollution indexing of cities and townships will be done on a scientific basis. Pollution control mechanisms will be set up on priority basis".

After ruling for five years, in the election in 2019, the BJP proclaimed its pollution control commitment in the following words, in Point 21 of the 2019 manifesto: "We have evolved technologically better strategies and devices to map the level of pollution in cities and rivers and have taken effective steps to reduce the level of pollution in major cities, including the national capital. We will convene the National Clean Air Plan into a Mission and we will focus on 102 most polluted cities in the country. Through concerted action, we will reduce the level of pollution in each of the mission cities by at least 35% over the next years." Living in Delhi and breathing its polluted air, they should have understood by now that the promises still remain the same — as only promises.