Health Care Services

Doctors call off stir as Rajasthan omits pvt hospitals from new law (Huindustan Times: 20230405)

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=541dfac37a&imageview=0

After 17 days of protests, doctors in Rajasthan called off their agitation on Tuesday, with the state government agreeing to keep unaided private hospitals out of the ambit of the Right to Health legislation, which allows all residents of the state the right to emergency treatment and care in any hospital, public or private, without prepayment.

The agreement between the government and doctors was reached after two rounds of talks on Tuesday morning.

All private hospitals established without any aid from the government will be excluded from the purview of the proposed law, said Dr Sunil Chugh, president of the Rajasthan chapter of the Indian Medical Association (IMA).

The strike had crippled health services in the state. Private hospitals were shut, severely inconveniencing patients.

A few large private hospitals that have received aid from the government in the form of subsidised land continue to oppose the law and are not happy with the agreement because they will be covered under the bill, according to Dr Sanjeev Gupta, IMA’s spokesperson. P8
ICMR (The Asian Age: 20230405)


ICMR to study Covid, heart attack death link

AGE CORRESPONDENT
NEW DELHI, APRIL 4

The Indian Council of Medical Research is conducting a study to assess the possible connection between the recent spike in heart attack-related deaths and Covid-19. The report is expected to come in the next two months.

In recent months of the post-Covid period, several cases have come to light where people suddenly died of heart attacks. These incidents sparked a debate about whether long-term Covid is associated with the sudden rise in deaths due to heart failure.

Union health minister Mansukh Mandaviya recently said that the ministry has commissioned a study to find a link between the recent spike of heart attacks in young people and Covid.

The health experts maintain there is no direct or any correlation between Covid and the rising heart attack cases. However, they admit a definite change in the profile of heart disease patients in the post-Covid era.

More on Page 4

Covid (The Asian Age: 20230405)

Masks advisable as Covid could disrupt lives again

Covid-19 is back in the news not just as a regular rejoinder but as a potential disruptor. India has consistently recorded four-figure new infections for the last two weeks and the number which crossed 1,000 on March 23 increased three times in a week. More importantly, deaths have also been reported sporadically from the states, and the toll, though small, is going up.

In theory, the government has kept stressing the fact that the coronavirus has not gone anywhere and that it is important that Covid protocols be followed. But most government agencies, and people, have stopped bothering about the microorganism. The government must now take its own warnings seriously.

It was on March 31 last year that the Union home ministry ended all Covid-related restrictions which were in place in various degrees since March 24, 2022. A year later, state governments have now started reintroducing them, albeit in a limited manner. The Kerala and Tamil Nadu governments have made wearing of masks compulsory in hospitals. The district administration in Satara in Maharashtra has made masks compulsory for staff in government and semi-government offices, colleges and banks.

Experts opine that vaccines need not necessarily stop a person from contracting the disease but would considerably lessen its impact on people, especially those with co-morbidities.

The Union government must revisit the Covid protocols and prod state governments to decide what is to be introduced now. Wearing masks is one of the primary options. It must be made compulsory not just in government offices and hospitals but in all crowded places. Train and air passengers and shoppers in malls who move in crowds also must be made to wear masks. Organisers of all gatherings; be it social, political or religious, must also be advised to follow Covid protocols.

Several waves of the pandemic and different variants of the virus that have visited humanity in the last three years have given us the opportunity not only to develop vaccines against them but also to prepare treatment protocols and identify holes in the heathcare infrastructure. For example, lack of basics such as hospital beds, medicines and ICUs were an issue in one wave while lack of oxygen manufacturing facilities and issues with its supply chain mechanism came out in another. The Union government has already sent advisories to the states to ensure that such shortcomings are rectified in a proactive way.

Vaccination against Covid ceased to be a public programme long back. Experts opine that vaccines need not necessarily stop a person from contracting the disease but would considerably lessen its impact on people, especially those with co-morbidities. The government should seriously reconsider launching a vaccination programme prioritising people who are vulnerable — aged and those with compromised immunity.

It is a fact that advisories and notes from the Union government alone will not work as finance of most states are in a bad shape. The Union government, and the PM-Cares Fund, should design ways to fund the healthcare needs of the states. Given that the pandemic had hit the poorest sections of society the hardest, the government must earmark other resources — administrative and human — too to pre-empt the return of the virus that has proven dangerous for lives and livelihoods.
Dead liver cells

Study reveals white blood cells role in clearing out dead liver cells (The Tribune:20230405)

Billions of apoptotic cells are removed daily in adults by a group of immune cells called phagocytes.

The removal of liver cells that have undergone apoptosis, in which cells are intended to die in a controlled manner, maybe the function of a type of white blood cell typically linked to immunological responses to foreign particles.

The study, which was released as a Reviewed Preprint in eLife, offers what the editors refer to as convincing evidence that neutrophils engulf and kill liver cells undergoing apoptosis, a process the authors refer to as “perforocytosis.” The findings may have implications for novel treatment approaches to treat human autoimmune liver disease (AIL), which may be a result of a neutrophil deficiency.

Billions of apoptotic cells are removed daily in adults by a group of immune cells called phagocytes. Neutrophils represent around 50-70 per cent of the total white blood cell population in humans and are a type of phagocyte. However, unlike other phagocytes, they were widely assumed to be excluded from apoptotic cells, as they promote inflammation which could damage nearby healthy cells and tissues. The current findings now challenge that assumption.

“Although apoptotic cells are well characterised, they are not often found within human samples, possibly because they are removed so efficiently by phagocytes,” says co-lead author Luyang Cao, Associate Investigator in the Department of Neurosurgery, State Key Laboratory of Biotherapy and Cancer Center, West China Hospital, Sichuan University, China. “This means that the specific phagocytes responsible for the removal of apoptotic cells remain unknown, and we do not know if they are specific to different tissues in the body.” To identify the phagocytes responsible for removing apoptotic cells in the liver, the team obtained cells from the liver tissue of patients with tumours caused by hepatocellular carcinoma or hepatic hemangioma. They used two different staining techniques to confirm which cells in the sample were apoptotic.

In a total of 281 apoptotic liver cells from the livers of 32 patients, the team noticed that each cell was engorged by the presence of up to 22 neutrophils. It has previously been suggested that a type of phagocyte called Kupffer cells were responsible for the clearance of apoptotic liver cells, but when the researchers searched for Kupffer cells in the samples, they found that very few were present. They therefore hypothesised that neutrophils were the primary phagocyte for the removal of dead liver cells through the process they called perforocytosis. This contrasts to the usual process of engulfing apoptotic cells that most other phagocytes use.
To confirm the mechanism by which neutrophils remove apoptotic liver cells, the team sought to visualise the process in mouse livers using intravital microscopy - a live imaging technique that allows biological processes to be viewed in real time within living organisms. They labelled liver cells with a protein called Annexin V and neutrophils with an anti-Ly6G antibody. Consistent with their findings in human samples, the team observed that neutrophils burrowed into and cleared dead liver cells in the mice. The process was fast and rigorous, with the dead cells completely digested in four to seven minutes.

“Our discovery of neutrophils burrowing into and clearing out apoptotic liver cells helps to solve some of the mysteries surrounding the apoptotic clearance process,” says co-corresponding author Hexige Saiyin, Assistant Professor in the State Key Laboratory of Genetic Engineering, School of Life Sciences, Fudan University, China.

Next, the team sought to investigate whether reducing the neutrophil population in mice impacts the clearance of apoptotic liver cells. In a sample of cells from the livers of neutrophil-depleted mice, the percentage of apoptotic cells was significantly higher than in normal mice - 0.92 per cent and 0.2 per cent, respectively - suggesting that neutrophil depletion impairs the clearance of apoptotic cells. They also noticed the presence of other phagocytes in the neutrophil-depleted mice, implying a compensatory role of other phagocytes in the absence of neutrophils.

The defective clearance of apoptotic cells is often linked with autoimmune diseases, such as AIL. In the neutrophil-depleted mice, the team noticed an increase in autoantibodies - immune cells that mistakenly attack the body’s own healthy cells instead of foreign bodies such as viruses or bacteria. This increase was unaffected by antibiotic treatments and present only in neutrophil-depleted mice, not in mice with other phagocyte depletions. This implies that neutrophil depletion is associated with impaired apoptotic liver cell clearance and, subsequently, the generation of autoantibodies that may lead to AIL disease. The team consolidated this finding by analysing biopsy samples from human patients with AIL disease. Once again they found that, in each patient, the neutrophil-mediated clearance of apoptotic cells was impaired.

The authors say that more research is needed to better understand the process and significance of perforocytosis, as well as whether perforocytosis occurs in other organs besides livers. The next important step is how to apply this newly identified apoptotic clearance mechanism to the clinical treatment of AIL.

“Since the failure to clear dead cells is linked to inflammatory and autoimmune diseases, further insights into the critical role that neutrophils play in apoptotic clearance may have important implications for the treatment of these diseases. We recently have screened and identified several compounds which markedly enhanced neutrophil perforocytosis and demonstrated great therapeutic values to cure AIL in mouse models. “ concludes senior author Jingsong Xu, former Principal Investigator at the Department of Neurosurgery, State Key Laboratory of Biotherapy and Cancer Center, West China Hospital, Sichuan University (current address: Department of Pharmacology, Center for Lung and Vascular Biology, University of Illinois, Chicago).
Active Covid cases

Active Covid cases in country rise to 21,179; nine deaths reported (The Tribune:20230405)


Two deaths each reported from Delhi and Punjab, one each reported by Jammu and Kashmir, India logged 3,038 new coronavirus cases, while the active cases increased to 21,179, according to the Union Health Ministry data updated on Tuesday.

The death toll climbed to 5,30,901 with nine deaths. While two deaths each were reported from Delhi and Punjab, one each was reported by Jammu and Kashmir, Maharashtra and Uttarakhand in a span of 24 hours and two reconciled by Kerala, the data updated at 8 am stated.

The Covid case tally was recorded at 4.47 crore (4,47,29,284). The active cases now comprise 0.05 per cent of the total infections and the national COVID-19 recovery rate was recorded at 98.76 per cent, the ministry said.

The number of people who have recuperated from the disease surged to 4,41,77,204, while the case fatality rate was recorded at 1.19 per cent.

According to the ministry's website, 220.66 crore doses of Covid vaccine have been administered in the country so far under the nationwide vaccination drive.

Boosting anti-viral immune response

Boosting anti-viral immune response could slow down aging: Study(The Tribune:20230405)


Eliminating senescent cells from aging tissues has been found to restore tissue balance in mice, leading to an increased healthy lifespan

Scientists have uncovered details regarding an immune response to a virus present in all human tissues, that kicks in the elderly and eliminates senescent, or aging, cells in the skin.
Senescent cells are those that stop dividing but do not die, accumulating in the body over time, fuelling chronic inflammation and contributing to conditions such as cancer and degenerative disorders.

Eliminating senescent cells from aging tissues has been found to restore tissue balance in mice, leading to an increased healthy lifespan.

When a team of scientists, led by Massachusetts General Hospital (MGH), US, found that the number of senescent cells in samples from old individuals did not increase as the individuals got older, they realised that there is some mechanism kicking in to keep the aging in check.

The scientists have described their findings in the journal Cell.

Experiments have proved that in the elderly, certain immune cells called killer CD4+ T cells keep senescent cells from increasing.

Further investigating the procedure through which this happens revealed that aging skin cells express a protein, or antigen, produced by human cytomegalovirus, a pervasive herpesvirus that establishes lifelong latent infection in most humans without any symptoms.

By expressing this protein, senescent cells become targets for attack by killer CD4+ T cells.

“Most of us are infected with human cytomegalovirus, and our immune system has evolved to eliminate cells, including senescent cells, that upregulate the expression of cytomegalovirus antigens,” said senior author Shawn Demehri, director of the High Risk Skin Cancer Clinic at MGH.

These findings, highlighting a beneficial function of viruses living in our body, could have a variety of clinical applications.

“Our research enables a new therapeutic approach to eliminate aging cells by boosting the antiviral immune response,” said Demehri.

Demehri noted that the work may also lead to advances in cosmetic dermatology, for example in the development of new treatments to make skin look younger.

Sleeping

How a night of poor sleep can affect your next day at work – and four ways to function better (The Tribune:20230405)


Think back to a night when you slept poorly. How productive were you the next day at work? Did you struggle to get started? Did the day drag on and on? Did you procrastinate on Twitter or TikTok rather than doing your work?

If your answer to these questions is “yes”, you're not alone. Even though we don't fully understand why we sleep, we know that sleep is crucial for our physical and mental functioning.
So how exactly does a night of poor sleep affect our performance the next day at work, and how can we counter any negative effects?

Research in organisational behaviour has identified sleep as important for being effective at work. For example, my colleagues and I have carried out diary studies in which employees complete surveys several times a day over several work weeks.

The findings demonstrate that on days with good as compared to bad sleep (that is, a higher sleep quality or duration) employees perform better at their core work tasks, are more engaged at work, and are more likely to support colleagues.

Meanwhile, a lack of sleep makes employees more likely to procrastinate and engage in unethical behaviour such as claiming credit for someone else's work.

One study found that on days after managers had poorer quality sleep, their employees reported more frequent occasions of abusive supervision, such as making negative remarks about them in front of other colleagues.

Sleep affects willpower

Sleep is particularly important for higher-level cognitive skills that we use to control and coordinate our thoughts and behaviour. A vital cognitive skill that particularly relies on good sleep is self control, or willpower.

A lot of what we do at work requires willpower. We need willpower to control our impulses and emotions, to complete tasks that are less enjoyable or outright unpleasant, and to resist distractions when working.

Examples of situations that require willpower at work might include someone in a customer-facing role providing service with a smile even though they’re not really in a positive mood, or someone working remotely focusing on a challenging task while their children play in the background.

Tips to function well after a bad night's sleep

There's lots of research that highlights the importance of good sleep and provides recommendations to improve sleep, such as refraining from using smartphones before bed. But from time to time, most of us will still have a bad night, especially if we're feeling stressed. So how can we function well at work the next day?

Be strategic about the tasks you work on

If possible, you should avoid work tasks that require willpower on days when you haven't slept well the night before. Instead, work on tasks that are simple and don't require a lot of thinking or attention.

If you can't avoid tasks that require willpower, schedule them for early in the day as that's when you are likely to have more mental energy.

Rethink your mindset
Research shows that the way people think about willpower shapes their ability to engage it.

One theory suggests that exerting willpower drains our mental energy, which makes us less willing and able to exert further willpower. But people who strongly believe that willpower relies on limited mental resources feel more drained after exerting willpower compared with people who believe that willpower relies on unlimited resources that can be easily recovered.

According to my research, employees who believe that willpower relies on unlimited resources in this way perform better at work on days when they lack sleep. So, even though researchers are still working to understand the limits of willpower, you might try to reconsider your view of how strongly exerting willpower depletes your mental energy.

If you can't change yourself, change your situation

If you're on a diet, it's easier not to buy chocolate in the supermarket in the first instance than to refrain from eating it every time you open the kitchen cupboard. Research has shown that people who are very good at exerting willpower actually try to avoid situations that will require it.

In an experiment, when given the option to work on a task in a room with few as compared to many distractions, people who were better at exerting willpower were more likely to choose the room with fewer distractions. So particularly on days where you've had a poor night's sleep, strategies which avoid the need to exert willpower altogether can help you to be more productive and complete your work tasks.

Watch a funny video

Positive emotions can help restore our mental energy as they counteract the harmful effects of negative emotions.

In a recent study, my colleagues and I found that watching a funny video during the day can reduce the harmful mental effects of work demands that require willpower, and thereby enhance employees' effectiveness. So on days when you didn't sleep well you may find it helpful to briefly distract yourself by watching a funny video when you feel that your mental energy is low. But be mindful not to get hooked.

**Music Therapy**

**Listening to music can make your medicines more effective: Study (The Tribune:20230405)**

‘Music-listening interventions are like over-the-counter medications; you don’t need a doctor to prescribe them’

Want your medicines to be more effective? Research suggests that turning up your favourite song while popping the pills may be of help soon.

While previous studies have used music-listening interventions as a tool to treat pain and anxiety, a team from the Michigan State University in the US took a novel approach by studying the effects of music-listening interventions on chemotherapy-induced nausea.

“Music-listening interventions are like over-the-counter medications,” said Jason Kiernan, Assistant Professor in the College of Nursing. “You don’t need a doctor to prescribe them.”

“Pain and anxiety are both neurological phenomena and are interpreted in the brain as a state. Chemotherapy-induced nausea is not a stomach condition; it is a neurological one,” Kiernan said.

The small pilot study, published in the journal Clinical Nursing Research, included 12 patients undergoing chemotherapy treatment who agreed to listen to their favourite music for 30 minutes each time they needed to take their as-needed anti-nausea medication.

They repeated the music intervention anytime nausea occurred over the five days beyond their chemotherapy treatment. The patients in the study provided a total of 64 events.

“When we listen to music, our brains fire all kinds of neurons,” Kiernan said.

While Kiernan did see a reduction in the ratings of patients’ nausea severity and their distress (how much it bothered them to be nauseous), he cautions that it is difficult to isolate whether it was the gradual release of the medication doing its job or the increased benefit of the music.

He aims to do further research on this based on a previously published study that showed an increase in the amount of serotonin, a neurotransmitter—released by platelets in the blood—after listening to unpleasant and pleasant music.

“Serotonin is the major neurotransmitter that causes chemotherapy-induced nausea. Cancer patients take medications to block serotonin’s effects,” Kiernan said.

Researchers found that patients who listened to pleasant music experienced the lowest levels of serotonin release, indicating that the serotonin stayed in the blood platelets and was not released to circulate throughout the body. Results also showed that after listening to music they found unpleasant, patients experienced greater stress and increased levels of serotonin release.

“This was intriguing because it provides a neurochemical explanation and a possible way to measure serotonin and the blood platelet release of serotonin in my study,” Kiernan said.

“In 10 to 20 years, wouldn’t it be neat if you could use a nonpharmacological intervention like listening to 10 minutes of your favourite music to complement a medicine?”
Eating disorders

Eating disorders among teens have more than doubled during Covid, here's what to watch for (The Tribune:20230405)


among teens have more than doubled during Covid, here's what to watch for

The COVID-19 pandemic has been associated with worsening mental health among teens, including increasing numbers of patients with eating disorders.

In fact, research indicates that the number of teens with eating disorders at least doubled during the pandemic.

This is particularly concerning given that eating disorders are among the most deadly of all mental health diagnoses, and teens with eating disorders are at higher risk for suicide than the general population.

While experts don't know exactly why eating disorders develop, studies show that body dissatisfaction and desire for weight loss are key contributors.

This can make conversations around weight and healthy behaviours particularly tricky with teens and young adults.

As an adolescent medicine doctor specialising in eating disorders, I have seen firsthand the increases in patients with eating disorders as well as the detrimental effects of eating disorder stereotypes. I regularly work with families to help teens develop positive relationships with body image, eating and exercise.

Understanding the signs of a possible eating disorder is important, as studies suggest that timely diagnosis and treatment leads to better long-term outcomes and to better chances of full recovery.

Eating disorders defined

Eating disorders, which often start in adolescence, include anorexia nervosa, bulimia nervosa, binge eating disorder, other specified feeding and eating disorders and avoidant restrictive food intake disorder.

Each eating disorder has specific criteria that must be met in order to receive a diagnosis, which is made by a professional with eating disorder expertise.

Research suggests that up to 10 per cent of people will develop an eating disorder in their lifetime.

Medical complications from eating disorders, such as low heart rate and electrolyte abnormalities, can be dangerous and result in hospitalisation, and malnutrition can affect growth and development.
Many of the patients I see in clinic show signs of paused puberty and stalled growth, which can influence bone health, adult height and other aspects of health if not addressed quickly.

Teens are also at risk for disordered eating behaviours such as intentional vomiting, caloric restriction, binge eating, overexercise, the use of weight loss supplements and misuse of laxatives.

A recent study estimated that 1 in 5 teens may struggle with disordered eating behaviors. While these behaviors alone may not qualify as an eating disorder, they may predict the development of eating disorders later on.

Treatment methods for eating disorders are varied and depend on multiple factors, including a patient's medical stability, family preference and needs, local resources and insurance coverage.

Treatment can include a team consisting of a medical provider, nutritionist and therapist, or might involve the use of a specialized eating disorder programme. Referral to one of these treatment methods may come from a pediatrician or a specialised eating disorder provider.

Unpacking misconceptions and stereotypes

Traditional ideas and stereotypes about eating disorders have left many people with the impression that it is mainly thin, white, affluent females who develop eating disorders.

However, research demonstrates that anyone can develop these conditions, regardless of age, race, body size, gender identity, sexual orientation or socioeconomic status.

Unfortunately, stereotypes and assumptions about eating disorders have contributed to health disparities in screening, diagnosis and treatment.

Studies have documented negative eating disorder treatment experiences among transgender and gender-diverse individuals, Black and Indigenous people and those with larger body size.

Some contributors to these negative experiences include lack of diversity and training among treatment providers, treatment plans without cultural or economic nutritional considerations and differential treatment when a patient is not visibly underweight, among others.

Contrary to popular assumptions, studies show teen boys are at risk for eating disorders as well. These often go undetected and can be disguised as a desire to become more muscular. However, eating disorders are just as dangerous for boys as they are for girls.

Parents and loved ones can play a role in helping to dispel these stereotypes by advocating for their child at the pediatrician's office if concern arises and by recognizing red flags for eating disorders and disordered eating behaviours.

Warning signs

Given how common disordered eating and eating disorders are among teens, it is important to understand some possible signs of these worrisome behaviours and what to do about them.

Problematic behaviours can include eating alone or in secret and a hyperfocus on “healthy” foods and distress when those foods aren't readily available. Other warning signs include
significantly decreased portion sizes, skipped meals, fights at mealtime, using the bathroom immediately after eating and weight loss.

Because these behaviours often feel secretive and shameful, it may feel difficult to bring them up with teens.

Taking a warm but direct approach when the teen is calm can be helpful, while letting them know you have noticed the behavior and are there to support them without judgment or blame. I always make sure to let my patients know that my job is to be on their team, rather than to just tell them what to do.

Teens may not immediately open up about their own concerns, but if behaviors like this are present, don't hesitate to have them seen at their pediatrician's office.

Following up with patients who have shown signs of having an eating disorder and promptly referring them to a specialist who can further evaluate the patient are crucial for getting teens the help they may need.

Resources for families can be helpful to navigate the fear and uncertainty that can come along with the diagnosis of an eating disorder.

Focus on health, not size Research shows that poor body image and body dissatisfaction can put teens at risk for disordered eating behaviours and eating disorders.

Parents play an important role in the development of teens' self-esteem, and research demonstrates that negative comments from parents about weight, body size and eating are associated with eating disorder-type thoughts in teens.

Therefore, when talking to teens, it can be beneficial to take a weight-neutral approach, which focuses more on overall health rather than weight or size. I unfortunately have had many patients with eating disorders who were scolded or teased about their weight by family members; this can be really harmful in the long run.

One helpful strategy is to incorporate lots of variety into a teen's diet. If doable, trying new foods as a family can encourage your teen to try something they haven't before.

Try to avoid terms such as “junk” or “guilt” when discussing foods. Teaching teens to appreciate lots of different kinds of foods in their diet allows them to develop a healthy, knowledgeable relationship with food. If you're feeling stuck, you may want to ask your pediatrician about seeing a dietitian.

It's important to remember that teens need a lot of nutrition to support growth and development, often more than adults do, and regular eating helps avoid extreme hunger that can lead to overeating.

Letting teens listen to their bodies and learn their own hunger and fullness cues will help them eat in a healthy way and create healthy long-term habits.

In my experience, teens are more likely to exercise consistently when they find an activity that they enjoy.
Exercise doesn't need to mean lifting weights at the gym; teens can move their bodies by taking a walk in nature, moving to music in their rooms or playing a pickup game of basketball or soccer with a friend or sibling.

Focusing on the positive things exercise can do for the body such as improvements in mood and energy can help avoid making movement feel compulsive or forced.

When teens are able to find movement that they enjoy, it can help them to appreciate their body for all it is able to do.

**Diabetes**

**Diabetes is a key risk factor for stroke: 5 health facts you must know (The Times of India:20230405)**


"Epidemiologic studies have shown that diabetes is a well-established risk factor for stroke," says a recent review study published in Journal of Stroke.

"There are several pathophysiological mechanisms wherein diabetes leads to ischemic stroke, including large artery atherosclerosis, cerebral SVD, and cardiac embolism. Not only is the presence of diabetes associated with an increased risk of stroke, but also post-stroke outcomes are generally worse in people with diabetes than in those without diabetes," the review study adds.

The study has been done by researchers from the Department of Endocrinology and Metabolism, Hadassah Medical Center, Jerusalem, Israel; Hebrew University of Jerusalem; University of Toronto; MayoClinic and University of L’Aquila.READMORE

02/7 How does diabetes lead to stroke?

How does diabetes lead to stroke?

High blood sugar stiffens the blood vessels which over time leads to fatty deposits or clots in the blood vessels. The clots narrow down the blood vessels and cut off blood supply to main organs like the brain and hence cause stroke.

03/7 In people with diabetes the risk of stroke is two times more than others

In people with diabetes the risk of stroke is two times more than others
Diabetes is a highly prevalent disease and is often associated with cardiometabolic risk factors which increases the risk of stroke. Also in case of those with diabetes the post-stroke condition worsens and there is a greater risk for recurrence of stroke, studies have found.

Number of people with diabetes is increasing

As per the estimates of the International Diabetes Federation, currently 537 million adults are living with diabetes; this figure, which is already in an alarming state, is expected to grow to 643 million by 2030 and 783 million by 2045. Diabetes is associated with a higher risk of hemorrhagic stroke and ischemic stroke. As per studies the risk of ischemic stroke increases by 3% each year and triples in those who have had diabetes for ≥10 years, compared with those without diabetes. Hyperglycemia or the condition where blood glucose level >6.0 mmol/L (108 mg/dL) was reported in up to two-thirds of all ischemic stroke subtypes upon hospital admission, the review study found.

The three common issues that link diabetes and stroke

Diabetes plays an active role in influencing three common causes of stroke: large artery atherosclerosis, cerebral small vessel disease (SVD), and cardiac embolism. Large artery atherosclerosis, a leading cause of stroke, is accelerated by the physiological changes caused due to dyslipidemia, hyperglycemia, and insulin resistance. Cerebral microvascular dysfunction, which is commonly seen in people with diabetes, makes a person prone to lacunar and hemorrhagic strokes. Those with diabetes have a 35% higher risk of atrial fibrillation, a known and potential cause of cardiometabolic stroke.

Other risk factors for stroke

Apart from diabetes, the other risk factors for stroke are excessive belly fat which means when the waist size is more than 35 inches in women and 40 inches in men, high blood pressure, pre-diabetes condition, high cholesterol and tobacco consumption.

How to lower the risk of stroke if you have diabetes?

If you have diabetes then it is ideal to adopt a healthy lifestyle so that you can prevent the risk of stroke. "Lower your risk by keeping your blood glucose, blood pressure, and cholesterol on target with healthy eating, physical activity, and, if needed, medicine. And if you smoke, quit. Every step you take will help. The closer your numbers are to your targets, the better your chances of preventing a stroke," the American Diabetes Association recommends.
Marburg virus outbreak

US CDC warns of Marburg virus outbreak: Facts on transmission, symptoms, severity (The Times of India:20230405)


The US Centers for Disease Control and Prevention (CDC) has urged all travellers going to Guinea and Tanzania to avoid catching the fatal virus by taking necessary precautions. The US CDC has decided to send The National Center for Emerging and Zoonotic Infectious Diseases to contain the outbreaks in Tanzania and Guinea. As on March 22, Equatorial Guinea’s Ministry of Health had confirmed eight more cases of Marburg, bringing the number of confirmed cases to nine since the outbreak of the viral haemorrhagic fever was declared on 13 February.

02/7 What is Marburg virus?

What is Marburg virus?

Marburg virus has got global attention after reports of a viral outbreak in Africa came to fore. Marburg disease is also known as Marburg hemorrhagic fever. It causes severe viral haemorrhagic fever in humans. What makes this virus worse for humans is the fact that in case of the infection the fatality rate is around 50%. In the past outbreaks up to 88% fatality rates have been recorded. The deadly virus was first detected in 1967.

03/7 What causes Marburg disease?

What causes Marburg disease?

The disease is caused by Rousettus aegyptiacus, fruit bats of the Pteropodidae family who are believed to be the carriers of the virus. The Marburg virus belongs to the same family as Ebola virus; both of them belong to the Filoviridae family (filovirus). Hence the diseases caused by both viruses are clinically similar.

04/7 What are the symptoms of Marburg disease?

What are the symptoms of Marburg disease?

It takes 2 to 21 days from the infection to the onset of symptoms. The early signs are high fever, severe headache, severe malaise, muscle aches and pains. On the third day of the infection, the
patient is likely to have watery diarrhea, abdominal pain and cramping along with nausea and vomiting. The diarrhea can persist for a week after which the patient shows signs of extreme lethargy like “ghost-like” drawn features, deep-set eyes, and expressionless faces. Between 5-7 days, there is blood in vomitus and faeces, bleeding from the nose, gums, and vagina.

Other symptoms to take note of

Non-itchy rash, which was typical during an early outbreak of the disease, is also a symptom of Marburg disease. Sustained high fever and diarrhea is a characteristic of the disease. The patient is likely to show signs of confusion, irritability, and aggression. Inflammation of testicles, also known as orchitis, is also seen in many patients. Blood loss and shock leads to fatal cases between 8-9 days after the onset of symptoms.

How does the Marburg virus spread?

From human to human, the virus spreads through direct contact with contaminated bodily fluids. "Marburg spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids," the World Health Organisation (WHO) says.

How is it being treated right now?

Currently there are no vaccines to treat the Marburg disease. The current treatment process includes rehydration with oral or intravenous fluids. Treatment of specific symptoms of the infection helps in improving the rate of survival. Avoiding close physical contact with Marburg patients, wearing gloves and appropriate personal protective equipment should be worn when taking care of ill patients at home, and regular hand washing can help prevent the disease.

Heart attack

One in four patients who suffered a major heart attack had no known risk factors, Madras Medical College study finds (The Hindu: 20230405)


The study also found that more women were at risk, compared to men; doctors believe this could be due to socio-cultural reasons, with women possibly undergoing fewer preventive health evaluations; they highlighted the need for more public education and awareness.
One in four patients who suffered a major heart attack: ST-elevation myocardial infarction (STEMI), had no known risk factors such as dyslipidemia (imbalance of lipids like cholesterol), hypertension, diabetes mellitus or smoking. In fact, more women, with no known cardiovascular risk factors suffered heart attacks, compared to men, a study by doctors of the Institute of Cardiology, Madras Medical College (MMC) has found.

The study, ‘Outcomes of ST Segment Elevation Myocardial Infarction without Standard Modifiable Cardiovascular Risk Factors - Newer Insights from a Prospective Registry in India’, found that the absence of standard modifiable cardiovascular risk factors (SMuRF) in STEMI does not confer lower risks during hospitalisation. Despite the absence of risk factors, these patients have adverse outcomes similar to those with risk factors. This study was recently published in Global Heart, an international journal.

NCPCR

NCPCR writes to States to introduce concessions for children with Type 1 diabetes in schools

It is the duty of schools to ensure that children with T1D are provided with proper care and facilities, the letter says (The Hindu:20230405)


The NCPCR has urged States and Union Territories to ensure that children with Type 1 diabetes are properly provided for. Photo: Twitter/@NCPCR_

The NCPCR has urged States and Union Territories to ensure that children with Type 1 diabetes are properly provided for. Photo: Twitter/@NCPCR_

The National Commission for Protection of Child Rights (NCPCR) has written to the Chairman/Secretary Education Boards of all States and Union Territories, stating it is the duty of schools to ensure that children with Type 1 diabetes (T1D) are provided with proper care and required facilities.

In its letter, the NCPCR said it had taken cognisance of the petitions it received from parents of the children diagnosed with juvenile diabetes or T1D in the country.

Essential medicines

Prices of essential medicines set to see a hike from April 1 (The Hindu:20230405)

Painkillers, anti-infection drugs, cardiac drugs, antibiotics to get dearer; surge brought on by a sharp rise in Wholesale Price Index; pharma body cites annual change of 12.12% in WPI in 2022

A senior Health Ministry official said that the price hike was to ensure that there would be no shortage of medicines in the market, and that manufacturers and consumers mutually benefit. File

A senior Health Ministry official said that the price hike was to ensure that there would be no shortage of medicines in the market, and that manufacturers and consumers mutually benefit. File | Photo Credit: The Hindu

Prices of 384 essential drugs and over 1,000 formulations are set to see a hike of over 11%, due to a sharp rise in the Wholesale Price Index (WPI). The price surge to set in from April 1 will mean that consumers have to pay more for routine and essential drugs, including painkillers, anti-infection drugs, cardiac drugs, and antibiotics.

**TB**

**Now, India to estimate TB burden using own system (The Hindu:20230405)**

**Health Ministry says global TB reduction numbers stand at 11% while the reduction in cases in India is 18%**


Representational file photo of a tuberculosis patient receiving medicines

Representational file photo of a tuberculosis patient receiving medicines | Photo Credit: AP

India has become the first country in the world to estimate the tuberculosis (TB) burden in-country and launch its own mathematical system to estimate the disease burden.

It has opted to step away from the global estimates drawn up each year by the World Health Organization (WHO).
WHO

Highest proportional increase of COVID-19 cases in India: WHO(The Hindu:20230405)


XBB.1.16, the new Omicron variant, is responsible for the spike, says the global health body in its report for the period from February 27 to March 26; no rise in hospitalisations or deaths noted


A health worker collects a swab sample from a man for COVID-19 testing in New Delhi on March 31, 2023. | Photo Credit: ANI

The highest proportional increase of new COVID cases was observed in India, in the Southeast Asia Region, according to the World Health Organisation’s latest data for February 27 to March 26, 2023.

Globally, however, nearly 3.6 million new cases and over 25,000 deaths were reported in the same period, a decrease of 27% and 39%, respectively, compared to the previous 28 days.

Diabetes and kidney

Diabetes and kidney: How to protect this organ from damage with regular tests and a low potassium, low phosphorus diet(Indian Express:20230405)


Potassium-rich food like fruit juices, coconut water, potatoes and tomatoes have to be avoided. Phosphorus also tends to accumulate if kidneys are not functioning well and can have toxic effects. Dairy, beans, nuts, colas and most packaged foods are high in phosphorus and should not be consumed, says Dr Ambrish Mithal, Chairman of Endocrinology and Diabetes, Max Healthcare

One of the chief effects of diabetes is injury to small blood vessels.
One of the chief effects of diabetes is injury to small blood vessels. (Pic source: Pixabay)

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Written by Dr Ambrish Mithal

The diagnosis of diabetes invariably raises concerns about long-term complications involving various body organs. By far, the complications most feared by my patients are related to the kidney – images of dialysis machines and transplant surgeries flash across their eyes. This is especially true of those who have seen these modalities being used for their family or friends.

More than one third of people with diabetes face kidney complications. Often, they do not feel anything unusual in the early stages, since uncontrolled sugar does not produce any symptoms on its own. But prolonged elevations of blood sugar, especially if accompanied by high blood pressure, slowly and silently corrode your kidneys. By the time typical features associated with kidney disease like water retention/swelling are discernible, the kidneys are already impacted significantly.

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An early diagnosis can be made by blood and urine tests. The earliest sign is increased protein in the urine, which can precede kidney failure by years and must be checked yearly at the very least. The availability of instant testing for urine albumin/creatinine ratio is a major step forward in this area. These tests can be done on the spot in doctors’ clinics or hospitals. Later, as the blood levels of urea and creatinine start creeping up, symptoms start appearing. These include nausea, vomiting, loss of appetite, weakness/anaemia, itching and muscle cramps. A reduction in requirement of anti-diabetes medication or unexpected hypoglycemia (drop in blood sugar) on usual medicines is sometimes a clue to kidney involvement. The patient may feel happy that his medication requirement is decreasing but in reality it can sometimes reflect a worsening kidney condition.
Why do kidneys get affected by uncontrolled diabetes?

One of the chief effects of diabetes is injury to small blood vessels. The tiny arteries that flush our kidneys and allow toxic dirt to be expelled while retaining nourishing fluids and electrolytes can get choked in diabetes. This reduces the ability of kidneys to throw out waste, which then accumulates in our body with water and salt. At the same time kidneys start leaking protein. Nerve involvement is also common in diabetes: this leads to weak bladder muscles, urine accumulation, back flow and frequent infections. Repeated infections also damage kidneys, at times irreversibly.

Diabetes and high blood pressure usually go hand in hand. High blood pressure is central to diabetes-related kidney complications and as dangerous as uncontrolled blood sugar. Smoking is a major risk factor, and a family history of diabetic kidney disease also makes one more prone.

What can people with diabetes do to protect their kidneys?

Achieving the right targets for blood sugar and pressure is crucial to this. Typically, an HbA1c (that reflects the level of diabetes control for the preceding three months) should be at or below 7 per cent, though this can vary based on the age, duration of diabetes and presence of complications. Getting an HbA1c tested every three months is important for people with diabetes. Blood pressure should be below 130/80, in no case above 140/90. Good control from the start can ensure we do not face small-vessel complications such as those of eyes and kidneys. Apart from managing blood sugar and pressure from the very beginning, treating intercurrent infections of the urinary tract is essential, since infections may be a reversible cause of declining kidney function.

An important factor in accelerating kidney damage is unregulated use of painkillers in India. These are poison for kidneys and their use should be restricted to unavoidable situations. Giving up smoking is mandatory. Use of blood pressure-lowering drugs that protect kidneys from damage, like ACE inhibitors (the ‘prils’) and ARBs (the ‘sartans’) and now the new anti-diabetics like empagliflozin, which protect not just the kidneys, but also the heart, is recommended. These new anti-diabetics have changed our approach to preventing and treating kidney disease in diabetes. Use of alternative therapies is dangerous, especially since some may contain heavy metals that are toxic for kidneys.

What about dietary interventions?

Planning a diet for patients with diabetes and kidney disease requires consultation with a nutritionist. Fresh, home-made food is preferable to processed or restaurant food. Most Indian patients do not require protein restriction as our protein intake is already low. Restricting proteins will only encourage muscle breakdown. Reduction of salt—and at times fluid—intake is important, but the modern trend of using low-sodium salt is dangerous as many such salts are potassium-based. Potassium-rich food like fruit juices, coconut water, potatoes and
tomatoes may have to be avoided. Phosphorus also tends to accumulate if the kidneys are not functioning well and can have toxic effects. Dairy, beans, nuts, colas and most packaged foods are high in phosphorus and should not be consumed. Needless to say, regular exercise and adequate sleep also go a long way in controlling diabetes and preventing its sinister complications.

Why a good exercise session can counteract the effects of patchy sleep

https://indianexpress.com/article/health-wellness/good-exercise-session-counteract-the-effects-of-patchy-sleep-8538109/

What is most important is that your musculoskeletal structure gets challenged in a calibrated manner over an extended period of 45 minutes to an hour every day so that the body demands sleep, says holistic health expert Dr Mickey Mehta.

Indian holistic systems have always emphasised the direct relationship between your quotient of physical activity and the quality (deep) rather than quantity (hours) of sleep. (Source: Freepik)

Last week, a new Chinese study found that exercise could help counteract the health consequences of not getting enough sleep. The researchers found that people who exercised a lot did not have an increased risk of death, even when they only slept less than six hours each night. So how does this work? According to the researchers, working out might help balance out the effects of unhealthy sleep by combating inflammation or possibly helping to regulate metabolism and sympathetic nervous system activity. That’s because exercising produces a chemical called adenosine, which functions as a natural sleep aid. The more adenosine we generate throughout the day, the more restful and restorative our sleep becomes, which could help counteract a night or two of patchy sleep.

Indian holistic systems have always emphasised the direct relationship between your quotient of physical activity and the quality (deep) rather than quantity (hours) of sleep.

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People who do a good amount of pranayama, yoga and functional training are certainly bound to get good quality sleep. But mind you, intense exercises shouldn’t be done in the evening. Otherwise, they will inhibit the hormone called melatonin, which is responsible for the sleep-wake cycle and maintaining the circadian rhythm or the body clock.
So, what kind of exercises work best in the evening? Stretch workouts or walks, after which you take a long warm shower, can help you get better sleep. Slow stair-climbing, between three to seven storeys as per your stamina, is known to induce a good night’s sleep. Sub-maximal swims in the evening ensure a good night’s sleep, especially when you calm yourself down with chamomile tea infused with jaggery, saffron and a little nutmeg.

Playing recreational sports in the evening like badminton, volleyball, tennis, football have similar effects on your sleep cycle. What is most important is that your musculoskeletal structure gets challenged in a calibrated manner over an extended period of 45 minutes to an hour every day so that the body demands sleep.

Diet and weight play an equally important role in sleep management. Early and light dinners work best. One scientific study has shown that short-sleepers – people who sleep less than seven hours per day – tend to eat 300 more calories per day than people who get enough sleep. This is because lack of sleep elevates the hunger hormones, which seek satiety in high fat and heavy foods. Over a long period of time, this daily increase is enough to raise the risk of obesity.

Circadian rhythms tightly regulate sleep-wake cycles and have a significant impact on circulating levels of the hormones ghrelin and leptin, which control appetite and calorie intake. Low sleep duration may be linked to, among other possible reasons, an increase in the orogenic hormone ghrelin, which promotes hunger, and a decrease in the saturating hormone leptin, which causes an increase in food intake to battle fatigue or stress. By changing the levels of hormones that control appetite, lack of sleep inhibits efforts to lose weight through diet by lowering dietary compliance. A better balance of the hormones that control hunger, improved glucose tolerance and a decrease in cortisol levels may occur along with an increase in sleep duration and the correction of sleep disturbances.

Other than exercise, massages or what we call passive exercises, also help in maximising sleep quality. Follow that up with a hot bucket bath with salt water. This removes your fatigue, cleanses your aura and removes negativity besides lulling you into deep sleep.

**Resting heart rate**

*Resting heart rate: Does the risk of heart attack increase if I record more than 100 beats per minute? (Indian Express:20230405)*

https://indianexpress.com/article/health-wellness/resting-heart-rate-disease-risk-hiit-routines-8536453/

A slower resting heart rate can be normal for some people, like athletes, where it is an indication of fitness, which in turn is associated with a lower risk of a cardiac event. But I would say a
resting heart range between 50 and 60 is ideal, says Dr Ranjan Shetty, HOD & Consultant, Interventional Cardiology, Manipal Hospital, Bengaluru

When it comes to a conversation on our heart health, most of it is centred around cholesterol, the clotting of the blood and blood pressure. But there is another equally important marker called the resting heart rate that decides how likely we are to develop heart disease later in life. The best part is that since the heart rate is an indicator of our overall well-being, it can be corrected often by lifestyle modification and exercises.

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So, what’s the resting heart rate to begin with? It is the number of times your heart beats per minute in a state of rest, that is when it is not into any activity. If you want to measure your resting heart rate, then do it after at least two to three hours of exercise, at least 10 to 15 minutes after stopping whatever you were engaged in, and after at least a one-two hour window of having tea, coffee or smoking a cigarette. The best way to measure it would be early in the morning after your sleep cycle and then checking the rates at other times of the day to get a fair idea. All you need to do is press your fingers at the base of your thumb or any pulse point and count the beats in a minute. A normal resting heart rate should be between 60 to 100 beats per minute. Anything over 100 beats per minute when you are at rest is considered fast and worrisome.

The rate can vary from day to day or moment to moment and can be influenced by many external factors like stress, anxiety, hormone patterns and even medication like anti-depressants and BP control drugs.

WHAT SHOULD BE YOUR IDEAL RANGE?

Now a fine distinction needs to be made here. As a society, we have seen that those with a resting heart rate of less than 65 have reported lesser cardiac events. As a society, we have also found that those with a resting heart rate of over 80 have tended to develop them more. But each individual has his own functional heart rate. Some people have a heart rate below 60 beats per minute at rest. Now this is not a cause for worry provided the person has the ability to raise the heart rate when needed during a physical activity, such as during a treadmill test (TMT). That pickup from a lower heart rate is more important. In fact, if a person can go up from 45 to 120 without feeling fatigued, then it indicates that he/she is in a fit state.
A slower resting heart rate can be normal for some people, mostly athletes, where it is an indication of a higher degree of physical fitness, which in turn is associated with a lower risk of a cardiac event. Some of them have a resting heart rate of 30. But I would say a resting heart range between 50 and 60 is the desired healthy limit. It is fairly common for someone who exercises a lot to have a resting heart rate of 60 beats per minute or less. A slower heart rate can also happen to those who are taking medication like beta blockers. Also, it is not abnormal to have a lower heart rate at night.

WHEN SHOULD YOU WORRY ABOUT LOW RESTING HEART RATES?

While a low resting heart rate in fit individuals may not seem worrisome, at other times, especially when accompanied by extreme fatigue and dizziness, it is indicative of some underlying heart condition. This may be because of ageing or the heart not transmitting electrical signals correctly. When this condition persists, it is time to consult your doctor.

WHAT ABOUT HIGH RESTING HEART RATES?

A high resting heart rate means you should get into a regime to bring it down instead of panicking in general. This means your heart has to work extra even during rest, which can impact its overall functionality in the long run. Existing research points to a resting heart rate near the upper end of the 60 to 100 spectrum as increasing your risk of cardiovascular disease. A 2013 study in the journal ‘Heart,’ which tracked cardiovascular health of about 3,000 men for 16 years, found that a high resting heart rate was linked to lower physical fitness, higher blood pressure, higher body weight and higher levels of circulating blood fats. The researchers also found that a resting heart rate between 81 and 90 doubled the chance of death, while a figure higher than this range tripled it.

CAN YOU BRING YOUR HIGH RESTING HEART RATES DOWN?

However, do not get caught in a web of numbers as there are ways to bring them down. For example, if you have a resting heart rate between 80 and 100, it almost certainly means that you are leading a sedentary life. This group needs High Intensity Interval Training (HIIT) exercise regimes. This means any workout that sweats you out fast as you do it at a very intense level and then slow down for the body recovery period. This is followed by another round of high intensity exercises. So let’s say you walk or do normal aerobic exercises. You do such exercises or walking for two minutes, then jog for a minute, then simmer down and repeat the cycle. This varying routine, done four days a week, usually gets your heart rate down over
mostly 20 to 25 days. I have seen patients with a resting heart rate of 100 dropping to 50 and 60 within three months of exercising. HIIT improves your metabolism and will burn calories for about two hours after you exercise.

HOW DOES THE BODY DECIDE THE HEART RATE?

Your heart rate is controlled by the two branches of the autonomic nervous system, which has two branches, the sympathetic and the parasympathetic. The sympathetic nervous system releases hormones to accelerate the heart rate. The parasympathetic nervous system releases a hormone to decelerate it. Stress, caffeine and some form of excitement may raise heart rate, while meditating, yoga or taking slow, deep breaths may slow down your heart rate. At the beginning of your exercise, your body removes the parasympathetic response, which enables the heart rate to gradually increase. As you exercise more strenuously, the sympathetic system boosts your heart rate even more. Regular participation in cardiovascular exercises over an extended period of time can decrease your resting heart rate by increasing the heart’s contractile strength and the length of time the heart fills with blood. The reduced heart rate results from an increase in activity of the parasympathetic nervous system and a decrease in activity of the sympathetic nervous system.

Of course, during exercising but then that’s normal. Your heart rate can increase to 130 to 150 beats per minute or more when you exercise because the heart is working to pump oxygen-rich blood in your system. But heart rate can go up because of fever, disease, dehydration, anxiety, medication as well as other health conditions. Staying hydrated is one of the best ways to take control over your heart rate as blood volume goes up and the heart doesn’t have to pump more blood then. During infections, your heart pumps harder to deliver oxygen to immune cells so that you can fight off the infection. Post-Covid, I have seen the resting heart rate in my patients go up to 100 within two to four months of disease occurrence. We give them a tablet and recommend an exercise and the phase passes by in about six to eight weeks. Even in Omicron, the resting heart rate in my patients has gone up after four to six months.

In the end, do not obsess over numbers. Some patients panic when they see they have reached 100 per cent of their predicted heart rate on a device. As I said, numbers are very individualistic and it all depends on your physical activity patterns and existing body conditions. Know that there are ways to regain control over your resting heart rate.
Anxiety attacks

Anxiety attacks: Feeling trapped in a bus or flight, scared before a presentation? Know how to combat triggers (Indian Express: 20230405)

https://indianexpress.com/article/health-wellness/anxiety-attacks-trapped-bus-flight-presentation-scared-triggers-8535597/

Consult a mental health professional at the earliest for evaluation of your deep-seated triggers. Then a restorative regime can be customised for your condition, says Dr Vanishree BN, Consultant - Psychiatry, Manipal Hospital, Bengaluru.

About ten days ago, Anjali Sinha, who works as a senior sales manager at a private firm, was flying from Delhi to Pune via Ahmedabad when she had an anxiety attack. The incident happened when the plane landed in Ahmedabad for the stopover. She panicked when the crew announced that there could be a delay in boarding new passengers from Ahmedabad and found it difficult to breathe. An anxiety attack followed and she was gasping till the crew members on the flight and a doctor on board helped her calm down. The news hit the headlines as Sharma took to her social media handle to thank all those who helped her regain composure. But more importantly, it tells us how an innocuous development – in this case the prospect of a delayed flight – can trigger extreme reactions.

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What is an anxiety attack and why do we experience it? How do we deal with such attacks?

Anxiety attack can be experienced by anyone. It is the commonest mental health condition and, therefore, it is vital for all of us to understand what might be the cause of such attacks, how to identify them and what are the ways to deal with them. Triggers might vary from one person to another but usually it is a manifestation of work-related or personal stress piled up from weeks to months. It could be the result of phobias like fear of flying, taking a lift, enclosed spaces or nervousness before delivering a speech or attending a lecture.
How does an anxiety attack look like or what does one experience during this phase?

There is usually a surge of fearfulness with people experiencing physical symptoms like sweating, breathing difficulty, chest pain and dizziness, sometimes leading to fainting. One can feel a rapid rise in heart rate, an uncomfortable feeling in the stomach and some heaviness in the chest. Such attacks can last from a few seconds to minutes or a couple of hours. Sometimes one can remain in a panicked state for the whole day.

When the sense of impending doom lasts for a few moments, we call it a panic attack. If such feelings of negativity and fear last a day, we call it general anxiety. I have had a patient, who complained of sweating, breathlessness and chest pain every day. It was such a persistent pattern that it took us some time to figure out that his anxiety stemmed from his apprehension about finishing his tasks of the day in the prescribed time limit. One of our patients felt trapped whenever she boarded a flight or AC bus/train. The enclosed space got to her, causing palpitations till she got out of it. Another of my patients had performance anxiety before attending a meeting and making a presentation.

How can one deal with anxiety attacks?

While one can identify anxiety attacks symptomatically, always try to understand what might be the triggers.

1) Know what your physical symptoms of anxiety are. List them.

2) Note down the frequency and intensity of such attacks.

3) Whenever you are on the verge of experiencing such attacks, seek help immediately from somebody around you. Make sure you sit down at an available place. Then try to anchor your vision to a fixed point, even a wall. Try to breathe in and breathe out, each phase lasting four seconds. Do this very slowly till the attack subsides.

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Knowing that you are prone to anxiety attacks, get into a long-term routine of relaxation exercises on a day-to-day basis. There are muscle relaxation exercises like Jacobson’s muscle relaxation exercises, also known as JPMR exercises, which anyone can practise as videos are easily available on social media platforms. These focus on tightening and relaxing specific
muscle groups in sequence. These might just take 10-15 minutes of your time every day but they are easy to follow and help you stay calm generally. To a certain extent, these exercises have proven to reduce physical symptoms of anxiety.

When do you need to consult a mental health expert?

One should always remember that the above-mentioned ways to deal with anxiety are just quick fixes. Consult a mental health professional at the earliest for evaluation of your deep-seated triggers, and then he/she can customise a restorative regime for your condition. Treatment might include medications, some of which might need to be continued for six to eight months, depending on the diagnosis and severity of the condition.

This, alongside weekly or fortnightly therapy sessions with the mental health professional, specifically to address the cause of your anxiety, can help you develop coping mechanisms.

weight loss journey

On a weight loss journey? How salads can help burn more calories and how to have them right(Indian Express:20230405)


By incorporating a mix of raw and cooked vegetables, using healthy fats in your dressing and being mindful of portion sizes, you can enjoy the benefits of salads while optimising nutrient intake, says Ushakiran Sisodia, Clinical Nutritionist and Dietitian, Nanavati Max Super Speciality Hospital, Mumba

salads

Salads have become the go-to option for anyone looking to jump-start their diet (Source: Getty Images/Thinkstock)

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Dieting is one the most commonly used verbs of this decade. The sway of social media, the silver screen or the persuasive marketing strategies of big brands has forced everyone to jump on the dieting bandwagon. It’s not just about the superstars striving for the perfect beach bod anymore. Regular individuals, like the working women or the work-from-home dads, are equally motivated to shed those extra pounds. And let’s not forget the influencers who spend most of their day in front of the camera, trying to maintain an ideal physique.

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Salads have become the go-to option for anyone looking to jump-start their diet. It’s no wonder why — they’re quick, easy and packed with a variety of fruits and vegetables that are essential for good health. However, it’s important to take a closer look at how we consume these leafy wonders. While we may be aware of the benefits of fruits and vegetables, we often overlook the best ways to maximise their nutritional value.

Why eat salads?

Salads are a great way to incorporate a variety of vegetables and fruits into your diet, which provide essential vitamins, minerals and fibre. They are also low in calories, making them a great option for those looking to lose weight or maintain a healthy weight.

In addition, salads are a good source of antioxidants, which can help protect the body from damage caused by free radicals. They provide hydration, which is important for overall health and can be especially beneficial during the hot summer months.

How not to eat a salad?

While salads offer many benefits, you cannot depend on them solely for your holistic nutritional needs. Some salads lack protein and healthy fats. These nutrients are essential for satiety and can help keep you feeling full for longer periods of time. Without them, you may
find yourself feeling hungry soon after eating a salad, which can lead to overeating or snacking on less healthy options.

Another downside of eating salads is that they can be high in sodium, especially if you are using store-bought dressings or toppings. Excess sodium can lead to high blood pressure and other health issues, so it’s important to be mindful of how much you are consuming.

Busting salad myths

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Why is eating only raw vegetables not a good idea? Raw vegetables offer many benefits, such as retaining more nutrients than cooked vegetables but some people may not be able to digest them. Raw vegetables are high in insoluble fibres, which lead to digestive issues like bloating, gas and cramps. Additionally, some nutrients in vegetables are more easily absorbed when they are cooked, such as lycopene in tomatoes.

It’s recommended to incorporate a mix of raw and cooked vegetables into your salads. This will provide a variety of textures and flavours, also making it easier on your digestive system.

**Why a low-fat dressing is just as harmful**

Another popular theory is that you should always use a low-fat dressing on your salads to keep the calories low. While this may seem like a good idea, many low-fat dressings are high in added sugars and sodium to make up for the lack of fat. These ingredients can be detrimental to your health and can lead to weight gain if consumed in excess. Instead, try making a home-made dressing, using healthy fats like olive oil or avocado oil. These fats are important for satiety and will help keep you feeling full for longer periods of time.

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Don’t overdo salads before a meal. Keep it just right

You should always eat your salad first to fill up on healthy nutrients and let fibres do their work before moving on to the main course. While this may work for some people, it can also lead to overeating if you are not mindful of portion sizes.
Instead, try incorporating your salad into your meal as a side dish. This will help you keep portion sizes in check and will provide a balanced meal with a variety of nutrients.

What do we learn

Salads can be a healthy addition to your diet when eaten the right way. By incorporating a mix of raw and cooked vegetables, using healthy fats in your dressing, and being mindful of portion sizes, you can enjoy the benefits of salads while optimising nutrient intake.

It’s also important to note that not all salads are created equal. Be wary of store-bought salads that may be high in sodium or contain unhealthy toppings like croutons or fried chicken. Instead, try making your own salads at home using fresh ingredients and healthy toppings like nuts, seeds, and grilled chicken.

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Most importantly, being extremely Westernised, we ignore the importance of including indigenous vegetables in our salads. Vegetables like bitter gourd, bottle gourd and ridge gourd are all nutrient-dense and can add a unique flavour and texture to your salads. Same with our dark leafy greens like spinach, there’s no need to just rely on lettuce.