



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Tuesday

201901126

Sex ratio improves in country

Sex ratio improves in country; birth and death rates dip(The Hindu: 201901126)

<https://www.thehindu.com/sci-tech/health/sex-ratio-improves-in-country-birth-and-death-rates-dip/article29846222.ece>

Total fertility rate in 12 States has fallen below two children per woman

India has registered an improved sex ratio and a decline in birth and death rates with non-communicable diseases dominating over communicable in the total disease burden of the country, according to the Central Bureau of Health Intelligence's (CBHI) National Health Profile (NHP) 2019.

The NHP covers demographic, socio-economic, health status and health finance indicators, human resources in the health sector and health infrastructure. It is also an important source of information on various communicable and non-communicable diseases that are not covered under any other major programmes.

“This information is essential for health system policy development, governance, health research, human resource development, health education and training,” Union Health Minister Harsh Vardhan said.

As per the NHP, sex ratio (number of females per 1,000 males) in the country has improved from 933 in 2001 to 943 in 2011.

In rural areas the sex ratio has increased from 946 to 949.

“The corresponding increase in urban areas has been of 29 points from 900 to 929. Kerala has recorded the highest sex ratio in respect of total population (1,084), rural population (1,078) and urban (1,091). The lowest sex ratio in rural areas has been recorded in Chandigarh (690),” the report said.

The report also showed that the estimated birth rate, death rate and natural growth rate are declining.

Sex ratio improves in country; birth and death rates dip

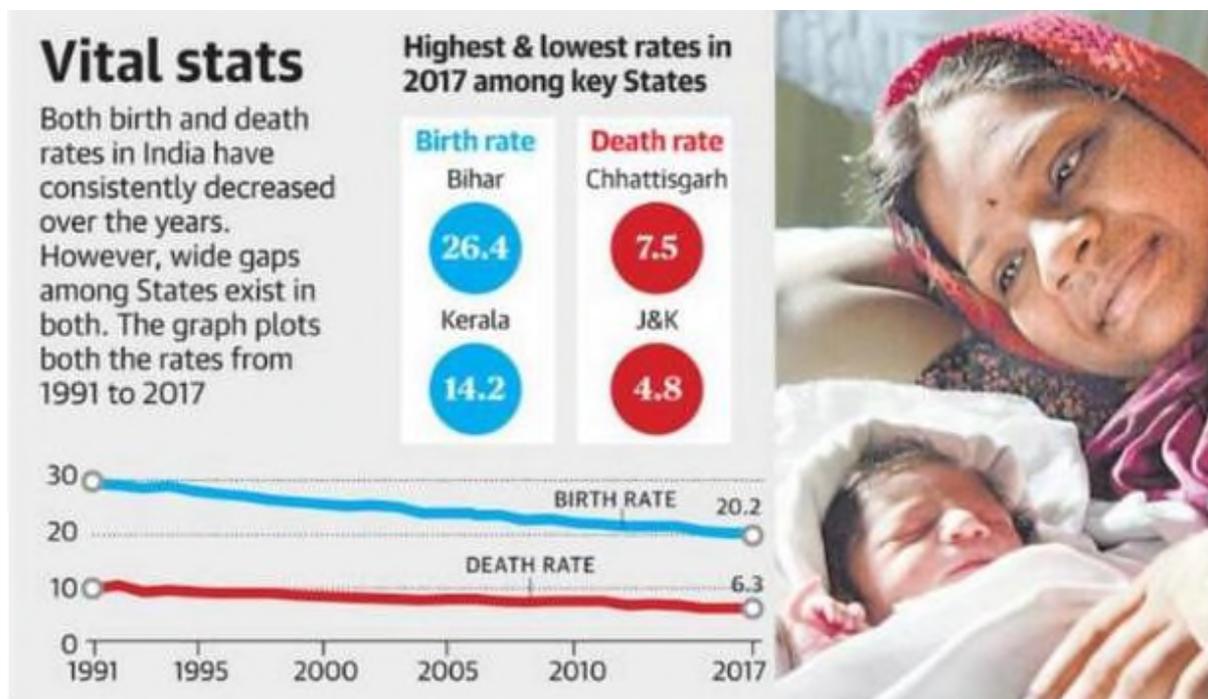
The estimated birth rate reduced from 25.8 in 2000 to 20.4 in 2016 while the death rate declined from 8.5 to 6.4 per 1,000 population over the same period. The natural growth rate declined from 17.3 in 2000 to 14 in 2016 as per the latest available information.

As per the report, the total fertility rate (average number of children that will be born to a woman during her lifetime) in 12 States has fallen below two children per woman and nine States have reached replacement levels of 2.1 and above.

Delhi, Tamil Nadu and West Bengal have the lowest fertility rate among other States.

It was also observed that non-communicable diseases dominated over the communicable in the total disease burden of the country.

The NHP also compiled a detailed data on health manpower availability in public sector. “The total number of registered allopathic doctors (up to 2018) is 11,54,686. Number of dental surgeons registered with Central/State Dental Councils of India was 2,54,283. There is an increasing trend in the number of dental surgeons registered with the Central/State Dental Council of India from 2007 to 2018. The total number of registered AYUSH Doctors in India as on January 1, 2018 was 7,99,879,” the report noted.



Sanitation status:

Sanitation status: Centre flags likely respondent bias in NSO survey (The Hindu: 201901126)

<https://www.thehindu.com/sci-tech/health/sanitation-status-centre-flags-likely-respondent-bias-in-nso-survey/article30079151.ece>

Ministry mum on The Hindu queries over degree of discrepancies.

Citing the National Statistical Office's caveat on the possibility of respondent bias on the issue of access to toilets due to the order of questions asked in its latest survey on sanitation, the Centre has said it is "inappropriate to use the results of this report to draw conclusions on the sanitation status in India".

Respondents were initially asked whether they had received benefits from the government schemes and may have given a negative reply in the hope of getting additional benefits, said a joint statement by the Jal Shakti Ministry which administers the flagship sanitation scheme, Swachh Bharat, along with the Ministry of Statistics and Programme Implementation, which oversees the NSO. "This bias may have led to significant under reporting of sanitation coverage. Such biases are often observed in households when canvassing information on items and issues where government funded beneficiary schemes are under implementation," said the statement issued on Monday.

The NSO report, based on a survey carried out between June and December 2018, shows that only 71% of rural households reported having access to toilets at a time when the Centre's Swachh Bharat scheme was claiming 95% access.

People walk to defecate in the open in the morning on the banks of the Ganga in Prayagraj on November 17, 2019.

Open defecation-free India: National Statistical Office survey debunks Swachh Bharat claims

The Hindu's report on the survey, published on Monday, included the NSO's caveat on possible respondent bias. The Jal Shakti Ministry failed to respond to queries from The Hindu on when the issue had been raised with the NSO, and whether the Ministry believes that the possibility of respondent bias accounts for the entire discrepancy between NSO data and Swachh Bharat claims.

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Rare diseases

Patients with rare diseases wait for support (The Hindu: 201901126)

<https://www.thehindu.com/sci-tech/health/patients-with-rare-diseases-wait-for-support/article30063321.ece>

Applications of about 190 patients seeking treatment support await the approval of Health Ministry

The wait for financial support for treatment is getting longer for patients with rare diseases. The applications of about 190 patients — a majority of them children suffering from Lysosomal Storage Disorders — seeking treatment support has been pending with the Union Ministry of Health and Family Welfare for several months. And a National Policy for Treatment of Rare Diseases is yet to be finalised.

Patient advocacy groups including the Lysosomal Storage Disorders Support Society (LSDSS) and the Organisation for Rare Diseases in India (ORDI) have been repeatedly representing the case of patients with rare diseases with the Union Health Ministry. There are about 50 Lysosomal Storage Disorders.

Non-committal response

Early this year, the patient groups appealed to the Centre to grant interim support for patients till the national policy was finalised but had received a “non-committal” response from the Union Ministry, the groups said.

Manjit Singh, president of LSDSS, said there were more than 2,000 identified children with rare diseases across the country. Of this, 500 patients required lifetime treatment. “A total of 198 patients from across the country had applied with the Union Ministry of Health seeking treatment support,” said Mr. Singh. “They were recommended by doctors and respective State technical committees. “Their applications are still pending,” he said. Many of these patients require Enzyme Replacement Therapy.

In its reply to ORDI’s appeal for timely formulation of the policy, in July, the Union Health Ministry had said that it had formulated a National Policy for Treatment of Rare Diseases in 2017. But the government had decided to review the policy in the light of new information and updates. An expert committee constituted under the chairmanship of Director General of Health Services to formulate the revised policy was having deliberations with all stakeholders to finalise the draft at the earliest, the ministry said.

Letter to MPs

Prasanna Shirol, co-founder of ORDI, said they had written to 500 Members of Parliament seeking their support. “We have recently written to Parliamentary Standing Committee members on the issue,” he said.

The expert committee is likely to finalise its draft report soon, the Ministry had stated in its reply to an RTI application, Mr. Shirol said.

A protein

A protein that has potential to tackle diabetes (The Hindu: 201901126)

<https://www.thehindu.com/news/cities/Hyderabad/a-protein-that-has-potential-to-tackle-diabetes/article30041479.ece>

(L to R) CCMB scientists Anand Sharma, Yogendra Sharma, Radhika Khandelwal and Amrutha Chidananda who have discovered the protein – secretagoin or SCGN.

(L to R) CCMB scientists Anand Sharma, Yogendra Sharma, Radhika Khandelwal and Amrutha Chidananda who have discovered the protein – secretagoin or SCGN.

Discovered by scientists at CCMB, it helps in managing insulin levels

The scientists at CSIR-Centre for Cellular and Molecular Biology (CCMB) have discovered a protein that helps manage insulin levels thereby showing the potential to tackle diabetes and neuro-degenerative disorders like dementia and Alzheimers.

At a media conference here on Thursday, Yogendra Sharma and his colleagues Anand Sharma, Radhika Khandelwal and Amrutha Chidananda said diabetes affects scores of people worldwide with over 60 million affected in India alone. “It is a metabolic disorder with a defect in insulin production and secretion resulting in high blood glucose levels. At present, the processes regulating insulin synthesis, maturation, secretion and signalling in diabetes are not completely understood,” they pointed out.

Through their research, the scientists have demonstrated the role of a protein – secretagoin or SCGN – in increasing the insulin action in obesity-induced diabetes. This protein (SCGN) binds to insulin and protects it from various stresses while increasing its stability. An injection of the protein, which is at lower levels in diabetic patients, given to obese diabetic mice has shown to clear excess insulin from circulation thereby reducing the fat mass.

The scientists have also found that the SCGN-treated animals also have lower levels of harmful LDL-cholesterol and lower lipid accumulation in liver cells.

These findings, published in the latest issue of the journal Science, establish SCGN as a functional insulin-binding protein with therapeutic potential against diabetes, said Dr. Sharma.

Since diabetes and neuro-degenerative disorders are often linked with each other, the protein is also found to be in lower quantities in the brains of Alzheimer’s patients. In a parallel study, also recently published in Biochemistry, Dr. Sharma’s group has shown the SCGN’s role in preventing the formation of ‘alpha-synuclein protein fibrils’ – a precursor for many neuro-degenerative diseases.

“The SCGN will soon become a diagnostic marker and aid in diabetes management,” said Dr. Sharma. “This is yet another example of how quality basic science can lead to valuable applications” added CCMB Director Rakesh Mishra.



Immune cells

Immune cells rewire, repair brain while we sleep: Study (The Hindu: 201901126)

<https://www.thehindu.com/sci-tech/health/immune-cells-rewire-repair-brain-while-we-sleep-study/article29779507.ece>

A research shows that the signals in our brain that modulate the sleep and awake state also act as a switch that turns the immune system off and on

A research shows that the signals in our brain that modulate the sleep and awake state also act as a switch that turns the immune system off and on | Photo Credit: AP

Researchers have found that immune cells called microglia, which play an important role in reorganising the connections between nerve cells, fighting infections, and repairing damage, are also primarily active while we sleep.

Microglia serve as the brain's first responders, patrolling the brain and spinal cord and springing into action to stamp out infections or gobble up debris from dead cell tissue.

“This research shows that the signals in our brain that modulate the sleep and awake state also act as a switch that turns the immune system off and on,” said study lead author Ania Majewska, Professor at University of Rochester in the US.

In previous studies, Majewska's lab has shown how microglia interact with synapses, the juncture where the axons of one neuron connects and communicates with its neighbours.

The microglia help maintain the health and function of the synapses and prune connections between nerve cells when they are no longer necessary for brain function.

For the findings, researchers conducted the study on mice.

The current study points to the role of norepinephrine, a neurotransmitter that signals arousal and stress in the central nervous system.

This chemical is present in low levels in the brain while we sleep, but when production ramps up it arouses our nerve cells, causing us to wake up and become alert.

The study showed that norepinephrine also acts on a specific receptor, the beta2 adrenergic receptor, which is expressed at high levels in microglia.

When this chemical is present in the brain, the microglia slip into a sort of hibernation.

The study, which employed an advanced imaging technology that allows researchers to observe activity in the living brain, showed that when mice were exposed to high levels of norepinephrine, the microglia became inactive and were unable to respond to local injuries and pulled back from their role in rewiring brain networks.

“This work suggests that the enhanced remodeling of neural circuits and repair of lesions during sleep may be mediated in part by the ability of microglia to dynamically interact with the brain,” said study first author Rianne Stowell.

“Altogether, this research also shows that microglia are exquisitely sensitive to signals that modulate brain function and that microglial dynamics and functions are modulated by the behavioural state of the animal,” Stowell said.

The study was published in the journal Nature Neuroscience.



Low-calorie sugar

Scientists make low-calorie sugar using bacteria (The Tribune: 201901126)

<https://www.tribuneindia.com/news/health/scientists-make-low-calorie-sugar-using-bacteria/865881.html>

Scientists have used bacteria to derive a sugar from fruits and dairy products that has only 38 per cent of the calories of traditional table sugar.

The sugar called tagatose is approved by the US Food and Drugs Agency (FDA) as a food additive, and there have been no reports to date of the problems that many sugar substitutes have, such as a metallic taste, or links to cancer, according to the researchers at Tufts University in the US.

The researchers said tagatose may be safe for diabetics, and will not cause tooth cavities.

While derived from fruits and dairy products, tagatose is not abundant and is difficult to extract from those sources, they said.

The manufacturing process involves a conversion from more easily obtained galactose to tagatose and is highly inefficient, with yields that may reach only 30 per cent, the researchers explained.

In the study published in the journal Nature Communications, the researchers described a process that may unlock the commercial potential of this low-calorie, low-glycemic sugar.

Assistant Professor Nikhil Nair and postdoctoral fellow Josef Bober, both from the Tufts University, came up with an innovative way to produce the sugar using bacteria as tiny bioreactors that encapsulate the enzymes and reactants.

Using this approach, they achieved yields up to 85 per cent.

Although there are many steps from the lab to commercial production, yields this high could lead to large-scale manufacturing and getting tagatose on every supermarket shelf, the researchers said.

The enzyme of choice to make tagatose from galactose is called L-arabinose isomerase (LAI).

However, galactose is not the main target for the enzyme, so the rates and yields of the reaction with galactose are less than optimal.

In a solution, the enzyme itself is not very stable, and the reaction can only push forward until about 39 per cent of the sugar is converted to tagatose at 37 degrees Celsius, and only up to 16 per cent at 50 degrees Celsius, before the enzyme degrades.

The researchers looked to overcome each of those hurdles through biomanufacturing, using *Lactobacillus plantarum*—a food-safe bacterium—to make large quantities of the LAI enzyme and keep it safe and stable within the confines of the bacterial cell wall.

They found that when expressed in *L. plantarum*, the enzyme kept converting galactose to tagatose and pushed the yield to 47 per cent at 37 degrees Celsius.

However, now that the LAI enzyme was stabilised within the cell, it could increase yield to 83 per cent at the higher temperature of 50 degrees Celsius without degrading significantly, and it was producing tagatose at a much faster rate, the researchers said.

To determine if they could push the reaction even faster, Nair and Bober examined what might still be limiting it.

They found evidence that the transport of the starting material, galactose, into the cell was a limiting factor.

To resolve that issue, they treated the bacteria with very low concentrations of detergents—just enough to make their cell walls leaky, according to the researchers.

The galactose was able to get in and tagatose released from the cells, allowing the enzyme to convert galactose to tagatose at a faster rate, shaving a couple hours off the time needed to get to 85 per cent yield at 50 degrees Celsius, they said. —PTI

ASMR -Anxiety and insomnia

Does ASMR work against anxiety and insomnia? (The Hindu: 201901126)

<https://www.thehindu.com/sci-tech/health/does-asmr-work-against-anxiety-and-insomnia/article30004848.ece>

Close your eyes, and listen: ASMR is making its foray into wellness as a relaxant for people with anxiety and insomnia, but is there science behind it?

It was past midnight, but sleep still eluded Ayushi Khemka, founder of Mental Health Talks India, Delhi. “It was one of my lowest phases of depression,” she recalls now, three years later. Her solution to this insomnia would be to plug her headphones in, and open a playlist she had curiously named, ‘That part of the Internet.’ It had the soft and scratchy sounds of chalk on blackboard.

For many, listening to ASMR sounds like these is still a niche hobby. It sounds technical — ASMR stands for autonomous sensory meridian response — however, what listeners like Ayushi feel are “tingles, riding down the spine and in the fingers.”

ASMR videos promising to ease you into sleep have garnered over 50 million views on YouTube. They feature sounds such as the scratching of rubber mats and scrub brushes, nails tapping on wood and marble, squishing of bath sponges, of bath salts and sand being moved around, haircuts, and more.

Apps for meditation have begun including ASMR. Headspace and Calm use Nature sounds, also considered ASMR; others like Mindwell, launched earlier this year, have special ASMR categories, as does Canadian app Relax Melodies.

“ASMR began as a very niche form of content, but it quickly became evident to us that our users would benefit from this kind of experience,” says Aster Justine Haile, content creator for Relax Melodies. She claims that their ASMR-driven bedtime stories are now the most sought after section on their app. “With millions of testimonies online, the proof is in the fact that people keep coming back to ASMR as an effective tool for relaxation and better sleep.”

In this age of constant video consumption, for many, the auditory ASMR works primarily because it allows people to shut off every other sense. On bad days, Shashank Surisetty, an IT professional from Hyderabad, likes to unwind by listening to Nature ASMR sounds, such as raindrops falling on a roof, wood being chopped, or twigs cracking. “Even if I watch something relaxing, I am thinking about what kind of screen it would look better on! But listening to these sounds is a relaxing experience,” he says.

Ayushi explains how, much like meditation, it helps improve focus. She has gone from listening to ASMR, to trying and producing those sounds on her own, by buying kinetic sand and slime. “When I am having a bad anxiety attack, I immediately use my kinetic sand to produce that ASMR. It gives me something to do with my hands,” she says. “It’s like this cheap first aid therapy.”

The growth of ASMR videos has spawned an equal number of people online who scoff at it. Even within the ASMR community, different triggers affect different people. ASMR whispers in particular, are divisive. A person gets close to the camera, gently waves their fingers about, and whispers, often role-playing as someone — a doctor, a make-up artist. While some enjoy the whispering sounds travelling from one ear to another, others find it creepy, even sexual in nature.

“We don’t know very much about ASMR from a scientific perspective, although there are some early studies. It certainly seems to be something that many people experience, but why it occurs and what its implications are for mood disorders or psychiatry in general are still unknown,” says Mindfit head Dr Shyam Bhat, Bengaluru-based psychiatrist.

A 2015 peer-reviewed research done on ASMR by Swansea University, United Kingdom, suggests links between the phenomenon and “temporary improvements in symptoms of depression and chronic pain in those who engage in ASMR.”

We need research into whether the markers for a calm state, such as heartbeat and sweat, change after listening to ASMR sounds. There is the question of whether the tingling sensation is a result of cognitive bias, much like placebos. “Is this purely a biological phenomenon? Or is it caused by psychological, cultural and social factors, such as living in a hyper stimulating, isolated and emotionally deprived environment?” Dr Bhat wonders out loud.

Shaking head - brain damage

Shaking head to remove water from ears can cause brain damage (The Tribune: 201901126)

<https://www.tribuneindia.com/news/health/shaking-head-to-remove-water-from-ears-can-cause-brain-damage/865435.html>

Shaking head is one of the most common methods people use to get rid of water in their ears, but it can also cause complications as researchers have found that trapped water in the ear canals can cause infection and brain damage.

Researchers at Cornell University and Virginia Tech in US, revealed that shaking the head to free trapped water can cause brain damage in small children.

"Our research mainly focuses on the acceleration required to get the water out of the ear canal," said Indian-origin researcher and study author Anuj Baskota from Cornell University.

"The critical acceleration that we obtained experimentally on glass tubes and 3D printed ear canals was around the range of 10 times the force of gravity for infant ear sizes, which could cause damage to the brain," Baskota said.

For adults, the acceleration was lower due to the larger diameter of the ear canals. They said the overall volume and position of the water in the canal changes the acceleration needed to remove it.

"From our experiments and theoretical model, we figured out that surface tension of the fluid is one of the crucial factors promoting the water to get stuck in ear canals," said Baskota.

Luckily, the researchers said there is a solution that does not involve any head shaking.

"Presumably, putting a few drops of a liquid with lower surface tension than water, like alcohol or vinegar, in the ear would reduce the surface tension force allowing the water to flow out," Baskota said.

The study was presented at the American Physical Society's Division of Fluid Dynamics 72nd Annual Meeting on November 23 in Washington State Convention Center in Seattle, US.—
IANS

Environmental health (The Asian Age: 201901126)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=14168374>

■ 'Drought, scanty monsoon pushed people to eastern & southern parts of India around 3,000 years ago'

Climate change not a new phenomenon: Study

B.R. SRIKANTH
BENGALURU, NOV 25

A team of scientists, which reported that the Indus Valley Civilisation is much older than it was thought earlier, has discovered that climate change and scanty monsoon is not a new phenomenon, but was witnessed thousands of years ago, forcing people to migrate from western territory to greener pastures in the east and southern areas of the country.

In a study sponsored by Isro and Infosys Foundation, these scientists have discovered two unexplored settlements of early Iron Age to early

Historic and Medieval age, close to the Indo-Pak border in the hyper-arid region of western Great Rann of Kutch near the southern fringe of Thar Desert, Gujarat, as well as how human colonies moved towards the east and south because of poor monsoon and drying up of rivers in the west. The uncovering of remains of 3000 years-old Iron Age era marks a breakthrough in archaeology as that period was considered a 'Dark Age' because of lack of evidence. Apart from artifacts like pitcher, jars and bull figurines, numerous animal remains like bones, and teeth have been



Materials and maps linked to the study; the four researchers (right).

recovered which helped in reconstructing the social subsistence pattern. The site also yielded black glass bangles, pieces of blue glass, and large number of copper coins. The study was facilitated by

the Indian army in view of the region's proximity to the Indo-Pak border.

Prof Anindya Sarkar of Indian Institute of Technology (IIT), Kharagpur, leader of the research team, told this

newspaper, the two sites—Karim Shahi region of the Rann and Vigakot in the Thar desert—were perhaps trade hubs. At Vigakot, the team discovered a 1100 year old Chinese Qingbai porcelain

probably manufactured in Guangdong province of south China and Sgraffiato potteries of tenth century Persia, suggesting it to be a part of a long distance trade between West Asia and China. He said "We found that bigger plants which are normally seen when the monsoon is good gave way to plants which are ultimately changed to a dry zone. Of course, climate change in that era was due to natural reasons, and depended on earth's rotation around the Sun. Sparse rain created large scale climate refugees who took refuge in areas with good rain-

fall. If it could have happened in the past, it will happen in future too." The study involved analysis of sediments, pollen and oxygen isotopes in fossil molluscan shells, indicating presence of active river system and some rainfall that probably sustained human habitation from the Early Iron Age to medieval times. In addition to Prof Sarkar and his colleagues at the Department of Geology at IIT Kharagpur, other scientists involved were from Physical Research Laboratory (PRL), Ahmedabad, Dean College, PGRI, Pune, and Department of Botany, Calcutta University.

Pollution

To tackle pollution, smog tower to come up in Delhi (The Indian Express: 201901126)

<https://indianexpress.com/article/cities/delhi/to-tackle-pollution-smog-tower-to-come-up-in-delhi-6136680/>

On Monday, the Supreme Court directed the Centre and the Delhi government to draw up a comprehensive plan in 10 days to install 'smog towers' across the capital to deal with air pollution.

Either work or leave: SC pulls up officials over poor air, water

SC on pollution: 'Why are people in this gas chamber... better to finish them with explosives'

SC on pollution: Better finish people in one go than force them to live in gas chamber

delhi, delhi pollution, delhi pollution towers, delhi smog towers, smog towers in delhi, delhi pollution today, delhi air quality today, delhi aqi, delhi weather

X

In Delhi, the 20-metre high tower would trap particulate matter of all sizes suspended in the air. (Express Photo by Abhinav Saha)

A 'smog tower' being planned for Delhi as an experiment would create a "clean air zone" around it with an estimated 50% reduction in particulate matter, experts involved in the project told The Indian Express Monday

On Monday, the Supreme Court directed the Centre and the Delhi government to draw up a comprehensive plan in 10 days to install ‘smog towers’ across the capital to deal with air pollution.

The project is being headed by the Indian Institute of Technology (IIT) Bombay in collaboration with IIT-Delhi and the University of Minnesota. The latter helped design a similar tower of over 100 metres in China’s Xi’an city. The Central Pollution Control Board is also involved with the project.

Smog towers are structures designed to work as large-scale air purifiers. They are usually fitted with multiple layers of air filters, which clean the air of pollutants as it passes through them. China, which has been battling air pollution for a few years, has two smog towers — in its capital Beijing and in a northern city called Xi’an. The latter is dubbed as the world largest smog tower and has reportedly brought down PM 2.5 by 19% in an area of around 6 sq km in the tower’s vicinity.

In Delhi, the 20-metre high tower would trap particulate matter of all sizes suspended in the air. “Large-scale air filters will be used in the towers, which will draw in the air through fans installed at the top before passing it through the filters and releasing it near the ground,” said an IIT-B expert in-charge of the project.

Waste burning

Waste burning goes on unabated Concern Max complaints on CPCB app are on garbage burning (Hindustan Times: 201901126)

<https://epaper.hindustantimes.com/Home/ArticleView>



A man feeds birds on the Yamuna on Monday. Air quality in the city remained in the “poor” zone on Monday with the average PM2.5 levels at over double the safe limit. Sanchit Khanna/HT PHOTO

Soumya Pillai

soumya.pillai@htlive.com

New Delhi : Just when Delhi’s air quality was improving, on Monday, the blue sky around the Yamuna banks near Okhla was shrouded with thick, black clouds of smoke.

Residents of the nearby areas said someone had set ablaze a garbage dump and slowly the dried leaves also caught fire.

It took 20 minutes and five fire tenders to control the blaze. But the damage had already been done.

Senior officials of the Delhi Fire Services (DFS) said that apart from Monday’s fire, nearly 18 garbage burning and open fires were reported from across the city over the weekend (Saturday and Sunday).

“We try to address cases of open fires with immediately, especially because of the increase in pollution levels. The figure this weekend was slightly higher than last weekend when five such cases were handled by DFS,” a senior fire official said.

Fire department records show that from November 1 to November 25, a total of 49 incidents of open fires were reported in Delhi. In October, the total number of open fire count was 43.

According to Central Pollution Control Board’s (CPCB) application Sameer , garbage burning topped the list of pollution-related complaints lodged in the city in November. This was followed by road dust and construction waste.

The Sameer app ranks complaints but does not provide any absolute numbers.

CPCB officials said strict orders had been given to all pollution monitoring teams to pay special attention to cases of garbage burning and fires in open patches of land.

“Garbage burning is definitely a problem but it is also difficult to spot and control it in time. We have directed all the teams on ground to act promptly on such complaints,” a senior CPCB official said.

Experts said strict enforcement would help curb the problem but it will persist until government agencies take steps to create awareness among people and also come up with waste management strategies.

“Enforcement is definitely a problem area and because of loopholes in waste disposal channels. Burning seems to be the most convenient way. These incidents often go unchecked but if you look collectively, it does the most harm,” said Anumita Roychowdhury, executive director (research and advocacy) at Centre for Science and Environment.

Rare diseases

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<https://www.thehindu.com/sci-tech/health/patients-with-rare-diseases-wait-for-support/article30063321.ece>

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2017. But the government had decided to review the policy in the light of new information and updates. An expert committee constituted under the chairmanship of Director General of Health Services to formulate the revised policy was having deliberations with all stakeholders to finalise the draft at the earliest, the ministry said.

Letter to MPs

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The expert committee is likely to finalise its draft report soon, the Ministry had stated in its reply to an RTI application, Mr. Shirol said.

Delhi air quality

Delhi air quality in poor category

The weatherman has forecast mainly clear skies for the day. (The Hindu: 201901126)

<https://www.thehindu.com/news/cities/Delhi/air-quality-in-poor-category-in-city/article29997931.ece>

Delhiites got some respite from pollution on Sunday as the air quality in the city improved to “poor” category from the “severe” category.

3.7% food samples found unsafe

3.7% food samples found unsafe, 15.8% sub-standard, says regulator (The Hindu: 201901126)

<https://www.thehindu.com/news/national/37-food-samples-found-unsafe-158-sub-standard-says-regulator/article30079347.ece>

Kerala, Tamil Nadu among the best performing States, says FSSAI

Data released by the Food Safety and Standards Authority of India (FSSAI) on enforcement of norms has noted that 3.7% of the samples collected and

(72,045) Primary Health Centres (PHC), Sub-Centres (SC), and Community Health Centres (CHC) in India are without toilet

72,045 PHCs in country don't have toilet facilities for staff(The Hindu: 201901126)

<https://www.thehindu.com/news/national/72045-phcs-in-country-dont-have-toilet-facilities-for-staff/article30079540.ece>

No separate toilets for men and women patients in 1,15,484

Seventy two thousand forty five (72,045) Primary Health Centres (PHC), Sub-Centres (SC), and Community Health Centres (CHC) in India are without toilet

97% of hospital bill'

'Patients use own money to foot 97% of hospital bill'(The Times of India: 201901126)

<https://timesofindia.indiatimes.com/india/patients-use-own-money-to-foot-97-of-hospital-bill/articleshow/72233204.cms>

NEW DELHI: Close to 97% of expenditure on hospitalisation is borne by people using their own income or savings or borrowings and sale of assets and the private sector, excluding charitable or NGO-run hospitals, accounts for over 55% of hospitalisation expenses, not including admission for childbirth.

This was revealed by a National Statistical Office (NSO) survey conducted from July 2017 to June 2018 covering almost 1.14 lakh households across India. The survey was done before the launch of the Ayushman Bharat scheme in September 2018 and therefore cannot reveal what impact it has had, but it shows that a plethora of pre-existing schemes by governments at the Centre and states have made little difference.

Medicines constituted almost 50% of expenditure in the case of hospitalisation in public facilities followed by almost 18% on diagnostics and just 4% on doctor's or surgeon's fees. 'Package components' constituted just 12.5%. In the case of private hospitals, package components constituted the biggest chunk of almost 32% followed by medicines (22%) and doctor's or surgeon's fees (18%). Bed charges accounted for barely 3% in public hospitals and 11.6% in the private sector.

NEWS IN BRIEF

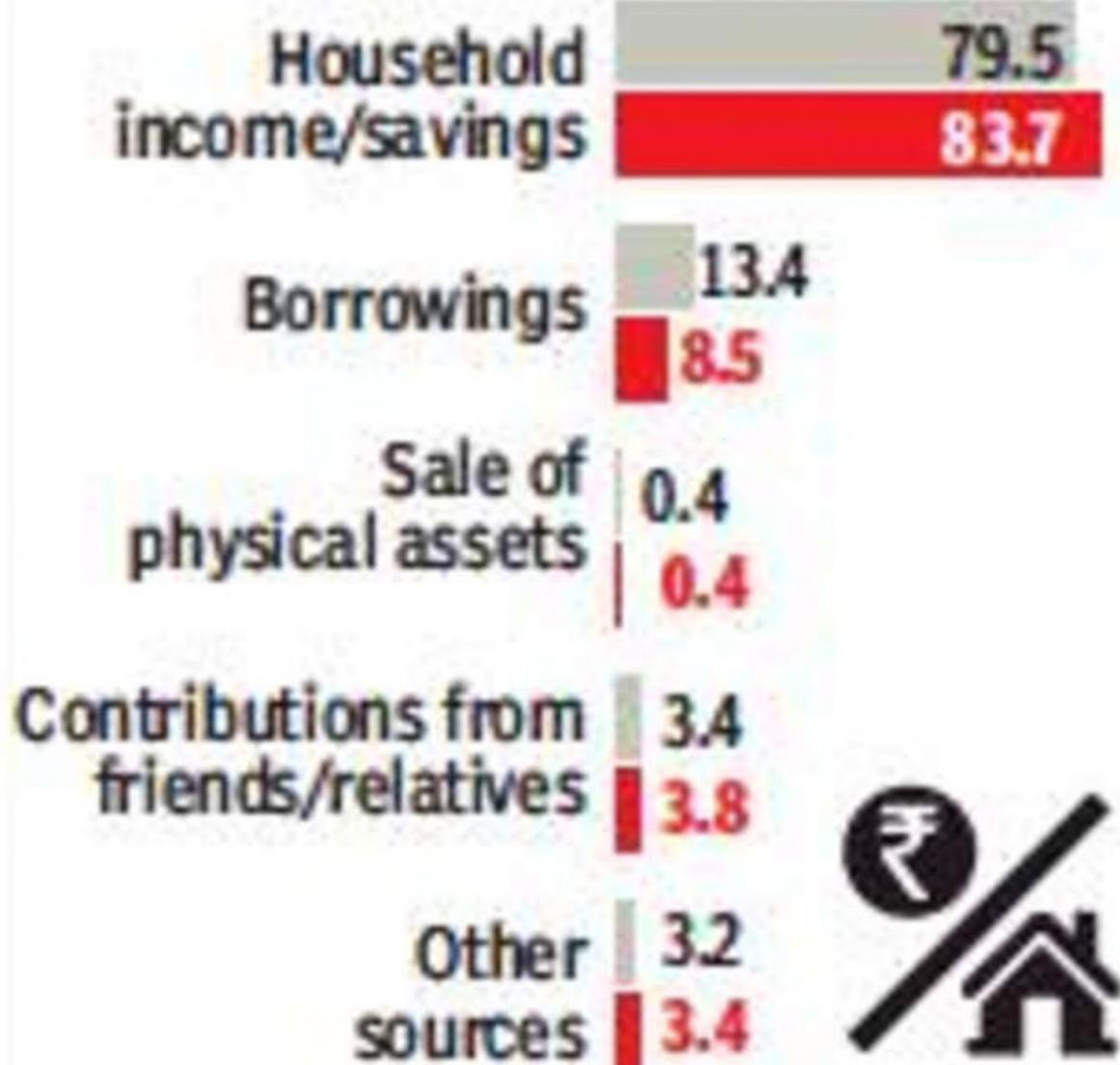
This is not Goa, says Sharad Pawar as Aghadi parades '162 MLAs'

On the eve of the SC's verdict on Maharashtra's political conundrum, MLAs from the anti-BJP front gathered in a 'majority' show of strength on Monday at a hotel where Sharad Pawar was flanked by Uddhav Thackeray and Mallikarjun Kharge. "This is not Goa, this is Maharashtra. If something wrong is done here, we will teach people a lesson," the NCP chief said.

MEDICAL BURDEN

Percentage break-up
of source of finance for
hospitalization expenditure

■ Rural ■ Urban



Cancer (Hindustan: 201901126)

https://epaper.livehindustan.com/imageview_402731_89038796_4_1_26-11-2019_22_i_1_sf.html

कैंसर रोगियों को स्ट्रोक से मौत का खतरा ज्यादा



सेहत

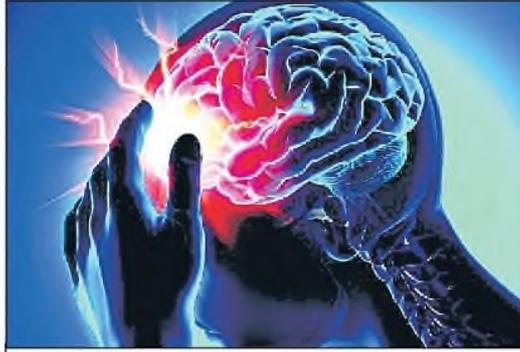
वार्शिंगटन | एजेसी

जो लोग कैंसर का शिकार हैं या कैंसर का इलाज करा चुके हैं, उनमें आम लोगों के मुकाबले मस्तिष्काघात से मरने की संभावना अधिक होती है। इस बात का खुलासा एक अध्ययन में हुआ है। अध्ययन में उन 70 लाख से अधिक रोगियों के डाटा का आकलन किया गया, जिनमें बीमारी के घातक रूपों की पहचान हुई थी।

कैंसर और मस्तिष्काघात में संबंध:

अमेरिका की पेसिल्वेनिया स्टेट यूनिवर्सिटी के शोधकर्ताओं ने नेशनल कैंसर इंस्टीट्यूट के सर्विलांस, एपिडेमिओलॉजी और एंड रिजल्ट प्रोग्राम (सीर) से डाटा एकत्रित किया। इसमें अमेरिका की लगभग 28 प्रतिशत आबादी के कैंसर के मामले, उनके जीवित बचने, उपचार, उम्र और रोग के वर्ष की जानकारी शामिल थी।

इस अध्ययन से पता चला है कि जिन लोगों को कैंसर है या कैंसर के इलाज के बाद जीवित हैं, उनमें मस्तिष्काघात से जान जाने का खतरा दो गुना से अधिक है। यह अध्ययन नेचर कम्युनिकेशंस नामक पत्रिका में प्रकाशित हुआ है। शोधकर्ताओं ने कहा, सीर के डाटा से 70 लाख से अधिक रोगियों की जानकारी एकत्रित



- कैंसर रोगियों में मस्तिष्काघात से मरने की संभावना दो गुना से अधिक
- कम उम्र के कैंसर रोगियों को गंभीर मस्तिष्काघात होने का अधिक खतरा

स्ट्रोक से 50 लाख से अधिक लोगों की हो चुकी है मौत

विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) के अनुसार, 2018 में कैंसर के कारण लगभग 90 लाख से अधिक लोगों की मौत हुई थी। जबकि द लांसेट नामक जर्नल में प्रकाशित एक अध्ययन के मुताबिक, दुनियाभर में 50 लाख से अधिक लोगों की मौत मस्तिष्काघात के कारण हुई। शोधकर्ताओं ने कहा कि ये दोनों बीमारियों संबंधित हो सकती हैं।

की गई। इसमें घातक कैंसर से जूझ रहे रोगियों का पता चला था। यह कैंसर ऊतक से बाहर फैल गया था। उन्होंने कहा कि स्तन कैंसर, प्रोस्टेट कैंसर और बड़ी आंत के कुछ हिस्सों का कैंसर गंभीर मस्तिष्काघात से संबंधित है।

कम उम्र के कैंसर रोगियों को अधिक खतरा : पेसिल्वेनिया स्टेट यूनिवर्सिटी में रेडिएशन ऑन्कोलॉजी की असिस्टेंट प्रोफेसर निकोलस जॉर्स्की ने कहा, पिछले शोधों से पता चला है कि अधिकतर कैंसर रोगी अपने कैंसर से नहीं मर रहे, बल्कि मौत का कारण कुछ और है। जॉर्स्की ने आगे कहा कि हमारे निष्कर्ष बताते हैं कि मस्तिष्काघात से होने वाली इन मौतों

को रोकने के लिए रोगियों को एक स्क्रीनिंग प्रोग्राम से फायदा हो सकता है। साथ ही यह पहचानने में मदद मिलेगी कि किन रोगियों के लिए यह सही हो सकता है।

शोधकर्ताओं ने कहा, जिन 70 लाख कैंसर रोगियों के आंकड़ों का उन्होंने विश्लेषण किया, उनमें से 80,000 से अधिक लोगों की मौत मस्तिष्काघात से हुई थी। इनमें पुरुषों और महिलाओं को मस्तिष्काघात से मरने की संभावना समान थी। अध्ययन में यह भी कहा गया है कि जिन लोगों को कम उम्र में कैंसर होता है, उनमें घातक मस्तिष्काघात होने का खतरा अधिक होता है।

ओमेगा-3 से प्रोस्टेट कैंसर का खतरा नहीं

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ओमेगा -3 एक महत्वपूर्ण वसा है, जिसे कई तरह के स्वास्थ्य लाभों के लिए जाना जाता है। लेकिन यह किसी व्यक्ति को दिल की बीमारियों से बचाने के लिए जरूरी है या नहीं, यह एक सवाल बना हुआ है। एक और सवाल यह है कि क्या ओमेगा -3 प्रोस्टेट कैंसर के खतरे को बढ़ाता है।

इसके लिए शोधकर्ताओं ने हृदय रोगों व प्रोस्टेट कैंसर पर ओमेगा-3 के लाभ और जोखिमों को देखने के लिए शोध किया। शोध यूटा में सॉल्ट लेक सिटी में इंटरमाउंटेन हेल्थकेयर हार्ट

शोध

- हृदय रोगों और प्रोस्टेट कैंसर पर ओमेगा-3 के प्रभावों को जांचा
- प्रोस्टेट कैंसर खतरे को बढ़ाए बिना हृदय रोगों से बचाता है ओमेगा-3

इंस्टीट्यूट के शोधकर्ताओं द्वारा किया गया। शोध में ओमेगा-3 से प्रोस्टेट कैंसर बढ़ने का कोई खतरा नहीं पाया गया। शोधकर्ता ने भी स्पष्ट किया कि ओमेगा-3 से प्रोस्टेट कैंसर का कोई खतरा नहीं है। यह सप्लीमेंट प्रोस्टेट कैंसरके खतरे को बढ़ाए बिना दिल की बीमारियों से बचाने में कारगर है।

Girl child (Hindustan: 201901126)

https://epaper.livehindustan.com/imageview_402731_88640736_4_1_26-11-2019_22_i_1_sf.html

खुशियां ही नहीं पिता की उम्र को भी बढ़ाती हैं बेटियां

पोलैंड। माता-पिता की जिंदगी खुशियों से भर देने के साथ बेटियां पिता की जिंदगी के कुछ और साल भी बढ़ा देती हैं। यह बात एक अध्ययन में कही गई है। पोलैंड की जेगीलोनियन यूनिवर्सिटी के अध्ययन में दावा किया गया है कि बेटियों के पिता उन लोगों के मुकाबले लंबी उम्र जीते हैं, जिनके यहां बेटियां नहीं होती।

अध्ययन में पता चला कि बेटा होने का तो पुरुष की सेहत या उम्र पर कोई फर्क नहीं पड़ता, पर बेटा होने पर पिता की उम्र 74 हफ्ते बढ़ जाती है। पिता के यहां जितनी ज्यादा लड़कियां होती हैं, वे उतनी लंबी उम्र जीते हैं। इससे पहले हुए एक अध्ययन में अविवाहित महिलाओं के शादीशुदा के मुकाबले ज्यादा खुश रहने की बात सामने आई थी।

Yoga ((Hindustan: 201901126)

https://epaper.livehindustan.com/imageview_402731_88640116_4_1_26-11-2019_22_i_1_sf.html

योग से नींद में होता है सुधार

न्यूयॉर्क। योग व फिजिकल थेरेपी से नींद में होने वाली परेशानियों को दूर किया जा सकता है और पीठ व कमर में होने वाले दर्द को भी कम किया जा सकता है। एक हालिया शोध में यह दावा किया गया है। बोस्टन यूनिवर्सिटी द्वारा किया गया यह शोध जर्नल ऑफ जनरल मेडिसिन में प्रकाशित किया गया है। इसमें दर्शाया गया है कि 12 हफ्तों तक योग करने से नींद की गुणवत्ता में सुधार हुआ और इसकी अवधि 52 घंटे हो गई।