



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Thursday 201901024

## Peritoneal dialysis services

### Health Ministry's guidelines for peritoneal dialysis services welcomed(The Hindu: 201901024)

<https://www.thehindu.com/news/national/health-ministrys-guidelines-for-peritoneal-dialysis-services-welcomed/article29779817.ece>

Move will move will benefit the 2 lakh Indians who develop end-stage kidney failure every year in India'

Aimed at achieving equity in patient access to home-based peritoneal dialysis; reducing the overall cost of care; and bringing in consistency of practice, pricing and a full range of product availability, the Health Ministry has released guidelines for establishing peritoneal dialysis services under the Pradhan Mantri National Dialysis Program (PMNDP).

It has also requested all States to include proposals for establishing peritoneal dialysis under their respective programme implementation plans. According to a health official, the guidelines aim to serve as a comprehensive manual to States that intend to set up peritoneal dialysis.

Extensive consultation

The guidelines were formulated after an extensive consultative process that was coordinated by the National Health Systems Resource Centre and an expert committee.

Chair of the Committee, Professor Vivekanand Jha, also executive director, George Institute for Global Health-India, said that this move will instantly benefit the 2 lakh Indians who develop end-stage kidney failure every year in India.

“They now have another treatment option that allows them to do dialysis at home with potential flexibility in lifestyle. Mass-based peritoneal dialysis programmes also have the potential to substantially bring down the cost of treatment,” he added.

During peritoneal dialysis, a cleansing fluid (dialysate) is circulated through a tube (catheter) inside a part of the abdominal cavity (peritonealcavity). The dialysate absorbs waste products from blood vessels in the abdominal lining (peritoneum) and then is drawn back out of the body and discarded. Prof. Jha explained that the Health Ministry had announced the National Dialysis Programme in 2016 and the first phase of the programme envisaged setting up of haemodialysis centres in all districts.

“Given that peritoneal dialysis avoids the substantial costs of infrastructure set-up, maintenance and staffing, reduces the demands placed on the healthcare system and offers patient autonomy, the decision has now been made to include peritoneal dialysis in the ambit of the National Dialysis Programme,” Prof. Jha said.

Children excluded

Arvind Bagga, Professor and Head of the Department of Pediatric Nephrology at the All India Institute of Medical Sciences, Delhi, and a member of the expert committee, said that children with kidney failure were particularly disadvantaged due to the exclusion of peritoneal dialysis from this programme.

“This modality is particularly suited to children who need dialysis because of biological and lifestyle reasons. Further, paediatric haemodialysis facilities are scarce in India,” he added.

The guidelines, meanwhile, envisage providing training to community health workers to provide support to persons on peritoneal dialysis at home or in primary healthcare settings.

‘Self-care tools’

“We recommend that simple self-care tools can be developed, which can help people on peritoneal dialysis to pre-empt development of complications by detecting them early and be in constant communication with care providers,” said Narayan Prasad, secretary general, Indian Society of Nephrology and a member of the expert committee.

**Anxiety Depression (The Asiann Age: 201901024)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13976567>

# SM use not related to teen anxiety, depression: Study

**Washington, Oct. 23:** The amount of time spent on social networking sites such as Facebook and Twitter is not directly increasing anxiety or depression in teenagers, according to a study.

Researchers from Brigham Young University in the US noted that the amount of time teenagers spend on social media has risen significantly since 2012 and continues to grow. "We spent eight years trying to really understand the relationship between time spent on social media and depression for developing teenagers," said Sarah Coyne, a professor at Brigham Young University.

"If they increased their social media time, would it make them more depressed? Also, if they decreased their social media time, were they less depressed? The answer is no. We found that time spent on social media was not what was impacting anxiety or depression," said Coyne.

Researchers noted that mental health is a multi-process syndrome where no one stressor is likely the cause of depression or

■ The study shows that it is not merely the amount of time spent on social media that is leading to an increase in depression or anxiety among adolescents.

anxiety.

The study, published in the journal *Computers in Human Behavior*, shows that it is not merely the amount of time spent on social media that is leading to an increase in depression or anxiety among adolescents.

"It's not just the amount of time that is important for most kids. For example, two teenagers could use social media for exactly the same amount of time but may have vastly different outcomes as a result of the way they are using it," Coyne said.

The researchers worked with 500 youth between the ages of 13 and 20 who completed once-yearly questionnaires over an

eight-year span.

Social media use was measured by asking participants how much time they spent on social networking sites on a typical day. To measure depression and anxiety, participants responded to questions with different scales to indicate depressive symptoms and anxiety levels. These results were then analysed on an individual level to see if there was a strong correlation between the two variables.

At age 13, adolescents reported an average social networking use of 31-60 minutes per day, the researchers said.

These average levels increased steadily so that by young adulthood, they were reporting upwards of two hours per day, they said. The study found that this increase of social networking, though, did not predict future mental health.

Adolescents' increases in social networking beyond their typical levels did not predict changes in anxiety or depression one year later, the researchers found.

— PTI

**Medical Device (The Asiann Age: 201901024)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13976572>

# High-tech rivals pose a threat to 200-yr-old stethoscope

At many medical schools in US, it's the newer devices that get students' hearts pumping and not the stethoscope that is gifted

New York, Oct. 23: Two centuries after its invention, the stethoscope — the very symbol of the medical profession — is facing an uncertain prognosis.

It is threatened by hand-held devices that are also pressed against the chest but rely on ultrasound technology, artificial intelligence and smartphone apps instead of doctors' ears to help detect leaks, murmurs, abnormal rhythms and other problems in the heart, lungs and elsewhere. Some of these instruments can yield images of the beating heart or create electrocardiogram graphs.

Dr. Eric Topol, a world-renowned cardiologist, considers the stethoscope obsolete, nothing more than a pair of "rubber tubes." It "was OK for 200 years," Topol said. But "we need to go beyond that. We can do better."

In a longstanding tradition, nearly every US medical school presents incoming students with a white coat and stethoscope to launch their careers. It's more than symbolic — stethoscope skills are still taught, and proficiency is required for doctors to get

their licenses.

Over the last decade, though, the tech industry has downsized ultrasound scanners into devices resembling TV remotes. It has also created digital stethoscopes that can be paired with smartphones to create moving pictures and readouts.

Proponents say these devices are nearly as easy to use as stethoscopes and allow doctors to watch the body in motion and actually see things such as leaky valves. "There's no reason you would listen to sounds when you can see everything," Topol said.

At many medical schools, it's the newer devices that really get students' hearts pumping.

"Wow!" "Whoa!" "This is awesome!" Indiana University medical students exclaimed in a recent class as they learned how to use a hand-held ultrasound device on a classmate, watching images of his lub-dubbing heart on a tablet screen.

The Butterfly iQ device, made by Butterfly Network Inc., went on the market last

## NEW-AGE MEDICAL DEVICES

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With medical advances and competing devices over the past few decades, "the old stethoscope is kind of falling on hard times in terms of rigorous training," said Dr. James Thomas, a cardiologist at Northwestern Medicine in Chicago.



To improve detection of heart murmurs, Eko is developing artificial intelligence algorithms for its devices, using recordings of thousands of heartbeats. The devices produce a screen message telling the doctor whether the heart sounds are normal or if murmurs are present.

When the stethoscope is pressed against the body, sound waves make the diaphragm — the flat metal disc part of the device — and the bell-shaped underside vibrate. That channels the sound waves up through the tubes to the ears. Conventional stethoscopes typically cost under \$200, compared with at least a few thousand dollars for some of the high-tech devices.

But picking up and interpreting body sounds is subjective and requires a sensitive ear — and a trained one.

With medical advances and competing devices over the past few decades, "the old stethoscope is kind of falling on hard times in terms of rigorous training," said Dr. James Thomas, a cardiologist at Northwestern Medicine in Chicago.

Chicago pediatrician Dr. Dave Drelicharz has been in practice for just over a decade and knows the allure of newer devices. But until the price comes down, the old stalwart "is still your best tool," Drelicharz said. Once you learn to use the stethoscope, he said, it "becomes second nature."

"During my work hours in my office, if I don't have it around my shoulders," he said, "it's as though I was feeling almost naked." — AP

year. An update will include artificial intelligence to help users position the probe and interpret the images. Students at the Indianapolis-based medical school, one of the nation's largest, learn stethoscope skills but also get training in hand-held ultrasound in a program launched there last year by Dr. Paul Wallach, an executive associate dean. He

created a similar program five years ago at the Medical College of Georgia and predicts that within the next decade, hand-held ultrasound devices will become part of the routine physical exam, just like the reflex hammer.

The devices advance "our ability to take peek under the skin into the body," he said. But Wallach added

that, unlike some of his colleagues, he isn't ready to declare the stethoscope dead. He envisions the next generation of physicians wearing "a stethoscope around the neck and an ultrasound in the pocket."

Modern-day stethoscopes bear little resemblance to the first stethoscope, invented in the early 1800s by Frenchman Rene Laennec, but they work essentially the same way. Laennec's creation was a hollow tube of wood, almost a foot long, that made it easier to hear heart and lung sounds than pressing an ear against the chest. Rubber tubes, सर्पिणस and the often cold metal attachment that is placed against the chest came later, helping to amplify the sounds. To

## Hygiene

### Poor toilet hygiene, not food, behind superbug spread (The tribune: 201901024)

<https://www.tribuneindia.com/news/health/poor-toilet-hygiene-not-food-behind-superbug-spread/851273.html>

Poor toilet hygiene, rather than undercooked chicken or other food, may be behind the spread of antibiotic-resistant E. coli bacteria, a study has found.

People harmlessly carry E. coli bacteria in their gut, as do animals. However, some strains cause food poisoning whereas others cause urinary tract infections (UTIs), and infections after gut surgery, according to the researchers from the University of East Anglia (UEA) in the UK.

E. coli has become considerably more antibiotic resistant over the past 20 years both in humans and animals, the researchers said.

Particularly important are strains with 'Extended Spectrum Beta-Lactamases (ESBLs) -- enzymes that destroy many important penicillin and cephalosporin antibiotics, they said.

However, until now, it has not been known whether antibiotic-resistant E. coli that cause bloodstream infections are picked up via the food chain, or passed from person to person.

Researchers showed how they sequenced the genomes of resistant E. coli from multiple sources across the UK -- including from human bloodstream infections, human faeces, human sewerage, animal slurry and meat including beef, pork and chicken, and fruit and salad.

The findings, published in The Lancet Infectious Diseases journal, show that antibiotic-resistant 'superbug' strains of E. coli from human blood, faeces and sewerage samples were similar to one another.

Strain 'ST131' dominated among ESBL-E. coli from all these human sample types, the researchers said.

They found that resistant E. coli strains from meat, principally chicken, cattle and animal slurry were largely different to those infecting humans.

ST131 was scarcely seen. Instead, strains ST23, 117 and ST602 dominated, according to the researchers.

They found there was little crossover of ESBL-E. coli from animals to humans.

The researchers looked at more than 20,000 faecal samples and around nine per cent were positive for ESBL-E. coli across the regions, except for in London, where the carriage rate was almost double -- at 17 per cent.

"We found ESBL-E. coli in 65 per cent of retail chicken samples -- ranging from just over 40 per cent in Scotland to over 80 per cent in Northwest England," said David Livermore, from UEA's Norwich Medical School.

"But the strains of resistant E. coli, were almost entirely different from the types found in human faeces, sewage and bloodstream infections," Livermore said.

"Only a very few beef and pork samples tested positive, and we didn't detect ESBL-E. coli at all in 400 fruit and vegetable samples -- many of which were imported to the UK," he said.

The results show that there are human-adapted strains of ESBL-E. coli, principally ST131, which dwell in the gut and which occasionally -- usually via UTIs -- go on to cause serious infections.

They study also shows that there are animal strains of ESBL-E. coli.

"But -- and critically -- there's little crossover between strains from humans, chickens and cattle. The great majority of strains of ESBL-E. coli causing human infections aren't coming from eating chicken, or anything else in the food chain," David added. – PTI

## **Expedite policy for ADHD students**

### **Expedite policy for ADHD students: HC (The tribune: 201901024)**

<https://www.tribuneindia.com/news/delhi/expedite-policy-for-adhd-students-hc/851601.html>

The Delhi High Court has directed the Centre and the Delhi Government to expedite the drafting of an education policy for the children suffering from Attention Deficit Hyperactivity Disorder (ADHD).

A Bench of Chief Justice DN Patel and Justice C Hari Shankar noted that children suffering from this disorder were not covered under the Rights of Persons with Disabilities Act, 2016 and hence a policy should be evolved.

“We hereby direct the respondents to expedite the drafting of the policy, so that the children suffering from ADHD can be imparted education with all care and proper education,” the Bench said.

The High Court also allowed the petitioner in the case to submit suggestions to authorities. It noted that a meeting was convened on April 24 which was attended by principal secretaries of education and health departments of the Government of Delhi. — PTI

## **Air quality**

### **Air quality worsens in Capital (The tribune: 201901024)**

<https://www.tribuneindia.com/news/delhi/air-quality-worsens-in-capital/851595.html>

The AAP on Wednesday asked the apex anti-pollution body CPCB to ‘take a leaf out of CM Arvind Kejriwal’s book on how to tackle pollution in cities like Varanasi, the Prime Minister’s constituency, that recorded high levels of pollution. According to the CPCB’s daily air quality bulletin, Varanasi recorded the high level of pollution at an AQI of 276 which falls in the poor category on Tuesday.

Air quality of the Capital deteriorated on Wednesday and was recorded in the ‘poor’ category. Authorities, however, said the condition during this Diwali is “likely not to be as bad as last year”.

The air quality index (AQI) on Wednesday was recorded at 244 against Tuesday’s 206, according to the data available with the Central Pollution Control Board (CPCB).

The System of Air Quality and Weather Forecasting and Research Institute (SAFAR) said that the high wind speed will positively influence Delhi’s air quality.

“The surface, as well as boundary layer winds, are forecast to change direction to easterly by tomorrow afternoon. This will decrease the biomass pollutant share in the Delhi region which is relatively very low so far,” the SAFAR said. It said that no drastic deterioration in air quality is expected for the next two days. Looking at present forecast of weather parameters in SAFAR model simulations, air quality during Diwali period is likely to be not as bad as last year which

is being followed closely and clear forecast will be issued on October 25. AQI is forecast to be in the same lower end of the poor category,” it said.

The authorities said that high deterioration in AQI of Delhi is only expected by the first week of November. “The repeated western disturbances are expected in the last week of October, which is likely to positively influence Delhi’s air quality. “According to the current analysis, the situation on Diwali may not be as bad as last year. SAFAR will update its analysis in the coming days.” — PTI

## **India’s data infrastructure**

### **Minding the gaps in India’s data infrastructure (The Hindu: 201901024)**

<https://www.thehindu.com/opinion/lead/minding-the-gaps-in-indias-data-infrastructure/article29779725.ece>



The national discourse can ill-afford the danger of being hijacked by the poor quality of data

Last week, demographers from around the world gathered in Delhi to mark 25 years of National Family Health Surveys (NFHS). It was both a celebratory and sombre moment. Policymakers and researchers celebrated tremendous achievements of four rounds of the NFHS since 1992-93; these have provided data on Indian families and allowed for development and evaluation of public policies regarding population, health, education and the empowerment of women. It was also heartening to see the political commitment towards ensuring the continuation of this outstanding survey programme at regular and predictable intervals. Nonetheless, a single concern permeated the two-day conference. Can India's existing data infrastructure support high quality data collection or are we staring at a precipice where deteriorating data quality will lead evidence-based policy development astray?

Presentations by Dr. Amy Tsui, Professor at Johns Hopkins University, and Dr. Santanu Pramanik, Deputy Director, National Council of Applied Economic Research (NCAER)-National Data Innovation Centre, on contraceptive use highlighted the difficulties in obtaining reliable, high quality data. Between 2005-06 and 2015-16, the total fertility rate (TFR) declined from 2.68 to 2.18 births. However, instead of being accompanied by increased contraceptive use, as would happen during normal circumstances, contraceptive use also declined from 56.3% to 53.5%. Using different approaches, both Prof. Tsui and Dr. Pramanik came to the same conclusion — that this aberration must be attributed at least partially to declining quality of contraceptive use data in NFHS-4.

Much of the data quality discussions in the past have erupted when politically sensitive results around topics such as GDP growth rate or poverty rates have been released and partisan bickering allows for little room to think about data collection systems. A retrospective look at the way in which an outstanding programme of research such as the NFHS has changed over time along with the nation it chronicles, and emerging challenges facing the NFHS and other data collection efforts provide an opportunity to look at overall challenges facing our data infrastructure in a constructive manner.

As Pravin Srivastava, Chief Statistician of India, noted at the NFHS conference, there is an amazing greed for data in modern India. This greed ranges from wanting to evaluate success of Poshan Abhiyaan (nutrition programme) to measuring changes in the aspirational districts. However, he also noted that the once vaunted Indian statistical infrastructure is crumbling and is not able to fulfil even its traditional tasks, let alone meet these new demands.

### Being realistic

I would like to submit that every government over the past two decades has been complicit in this neglect. If we are to move towards developing a more robust data infrastructure, subscribing to the following core principles may be a good start. First, set realistic goals and use creative strategies. In order to obtain data at the district level, the sample size grew from about one lakh households in NFHS-3 to over six lakhs in NFHS-4. At that time the National Statistical Commission had expressed a concern that such an expansion may reduce data quality. There was a fair amount of agreement among the participants at the NFHS conference that this concern may have been prescient. The government's need for district-level estimates of various health and population parameters is legitimate, but do we need to rely on household surveys to obtain them? With a variety of small area estimation techniques available for pooling data from diverse sources to obtain robust estimates at district level, it may make sense for us to think of alternatives and to make sure that we obtain required local government directory identifiers in each aspect of government data, including Census, sample registration system, and Ayushman Bharat payment systems to ensure that these data can be pooled and leveraged.

### Ensuring quality

Second, adapt to changing institutional and technological environment for data collection. Veterans of the Indian statistical system blame deteriorating data quality on the move from regular employees to contract investigators at the National Sample Survey and use of for-profit data collection agencies in the NFHS. For better or worse, that train has left the station. Rising government salaries combined with increased technological needs of modern data collection systems make it difficult to rely on veteran investigators in the civil services to meet all of government data needs. However, if we are going to rely on outside data collectors, what do we need to do to ensure quality? Some of the initiatives undertaken by the Ministry of Statistics and Programme Implementation for developing training programmes for investigators offer a welcome improvement but stop far short of the radical restructuring of data collection oversight.

I have enormous empathy for field investigators. They work under difficult conditions and are sometimes employed by for-profit agencies that require unrealistically high levels of output. Nonetheless, this is the data that guides the policies affecting millions of Indians and must be faithfully collected. Where interviewers make a mistake, they must be retrained. Where agencies impose an unrealistic workload, they must be checked. However, discovering mistakes after data collection has been completed is far too late to take any corrective steps. Concurrent monitoring using technologically-enabled procedures such as random voice recording of interviews, judicious back checks, and evaluation of agency and interviewer performance on parameters such as skipping sections, inconsistent data and consistent misreporting may be needed to ensure quality. Academician Dr. Leela Visaria noted the declining role of State population research centres in NFHS data collection. It may be worth investigating if they can be involved in quality monitoring.

#### Need for exclusive units

Third, establish research units exclusively focused on data collection and research design. At one point in time, innovative research on the NSS was undertaken by an associated unit at the Indian Statistical Institute in Kolkata. Since the dissolution of this association, very little research on data collection techniques takes place in India. We know little about whether men or women are better responders for data on household consumption expenditure. Nor do we know the extent of discrepancy in reporting on employment data between a direct response from women in the household vis-à-vis a proxy response via the household head. Do Likert scales that ask individuals to respond on their health status in five categories work well in India or do Indian respondents avoid choosing extreme categories? How does the presence of other people bias responses on contraceptive use? And does it have an equal impact on reported pill use as it does on sterilisation?

While research on data collection methods has stagnated, research methodologies have changed phenomenally. Telephone surveys via random digit dialling or selection of respondents using voter lists are increasingly emerging as low-cost ways of collecting data. However, we know little about representativeness of such samples. Are men or women more likely to respond to telephone surveys? Are migrants from other States well represented on the voter list?

Unless we pay systematic attention to the data infrastructure, we are likely to have the national discourse hijacked by poor quality data as has happened in the past with a measurement of poverty or inconsistent data on GDP.

Sonalde Desai is Professor of Sociology, University of Maryland and Professor and Centre Director, NCAER-National Data Innovation Centre. The views expressed are personal

## **TB cases**

### **TB cases see decrease in India201901024)**

<https://www.thehindu.com/sci-tech/health/tb-cases-see-decrease-in-india/article29728676.ece>

Number of patients fall by almost 50,000 over past year, says WHO report

The tuberculosis incidence rate in India has decreased by almost 50,000 patients over the past one year, according to the World Health Organization (WHO)-2019

## **Pollution**

दिल्ली समेत देशभर की गर्भवती महिलाओं को लेकर सामने आया चौंकाने वाला अध्ययन (Dainik Jagran: 20191024)

<https://www.jagran.com/delhi/new-delhi-city-ncr-shocking-study-on-pregnant-women-across-the-country-including-delhi-jagran-special-19675005.html>

Pollution in India स्टेट ऑफ ग्लोबल एयर 2019 की अध्ययन रिपोर्ट के मुताबिक भारत में हर साल 12.4 लाख प्रदूषण की चपेट में आ रहे हैं। गर्भवती महिलाओं के गर्भपात तक हो रहे हैं।

नई दिल्ली [संजीव गुप्ता]। बिगड़ती आबोहवा से दिल्ली-एनसीआर ही नहीं, बल्कि देश भर में लोगों की सेहत तेजी से बिगड़ रही है। महिलाएं, बुजुर्ग और जन्मे बच्चे ही नहीं, अजन्मे बच्चे भी इसके प्रभाव से अछूते नहीं हैं। बहुत से बच्चे तो प्रदूषण की मार झेल ही नहीं पाते और मां की कोख में ही दम तोड़ देते हैं। महिलाओं में गर्भपात जैसी समस्याएं प्रदूषण के चलते ज्यादा बढ़ रही हैं।

भारत में हर साल 12.4 लाख प्रदूषण की चपेट

इसी को लेकर हाल ही में जारी स्टेट ऑफ ग्लोबल एयर 2019 की अध्ययन रिपोर्ट के मुताबिक, भारत में हर साल 12.4 लाख प्रदूषण की चपेट में आ रहे हैं। इस अध्ययन से यह बात साबित हो गई है कि बढ़ते वायु प्रदूषण की वजह

से न केवल गर्भपात हो सकता है, बल्कि समय से पहले जन्म और जन्म के समय बच्चों में कम वजन के लिए भी प्रदूषण जिम्मेदार है।

## 28 महिलाओं पर हुआ शोध

यह पहला मौका है जब किसी शोध में यह पाया गया है कि मां की सांसों के जरिये शरीर में गए ब्लैक कार्बन के कण अजन्मे बच्चे के अंदर तक पहुंच सकते हैं। हालांकि शोधकर्ताओं ने इस बिंदु को लेकर बेल्जियम में अध्ययन किया था। इसमें 28 ऐसी गर्भवती महिलाओं को चुना गया, जो धूमपान नहीं करती थीं। एक हाई रिजोल्यूशन इमेजिंग तकनीक का प्रयोग किया गया। इस तकनीक की सहायता से गर्भनाल (प्लेसेंटा) के नमूनों को स्कैन किया जा सकता है। इस तरह कार्बन के कण चमकदार सफेद रोशनी में बदल जाते हैं जिन्हें मापा जा सकता है।

इसमें सभी महिलाओं में भ्रूण की तरफ काले कार्बन के कण मिले जो वायु प्रदूषण के असर को इंगित कर रहे थे। इनमें से 10 महिलाएं जो अत्यधिक व्यस्त सड़कों के पास रहती थीं, उनके प्लेसेंटा में कार्बन के कण अधिक मात्रा में पाए गए। वहीं, जो महिलाएं व्यस्त सड़कों से पांच सौ मीटर की दूरी पर रहती थीं, उनके प्लेसेंटा में कार्बन के कण कम पाए गए।

## ब्लैक कार्बन पहुंचा रहे नुकसान

डॉ. नरेंद्र सैनी (पूर्व महासचिव, इंडियन मेडिकल एसोसिएशन (आइएमए)) के मुताबिक, यह बिल्कुल सही है कि मां की सांसों और रक्त नलिकाओं के जरिये अजन्मे बच्चे पर भी प्रदूषण की मार पड़ती है। इसमें भी संदेह नहीं कि ब्लैक कार्बन के कण गर्भपात, समय पूर्व प्रसव और बच्चे की कमजोर सेहत का कारण बनते हैं। इस स्थिति में सुधार के लिए प्रदूषण की रोकथाम बहुत जरूरी हो गई है।

## Heart Attack

हार्ट अटैक और दवाइयों के साइड इफेक्ट से मुक्ति दिलाएगा साधारण दिखने वाला ये पाउडर (Dainik Jagran: 20191024)

<https://www.jagran.com/news/national-medicine-for-heart-attack-prevention-jagran-special-19693173.html>

मेरठ में लाला लाजपत राय मेडिकल कॉलेज में किए गए शोध में आया सामने शतावरी का एंटीआक्सीडेंट हार्ट के लिए रामबाण।

संतोष शुक्ल, मेरठ। हार्ट की बीमारी से हर साल लाखों लोग जान गंवा देते हैं, जबकि इससे बचाव की दर्जनों औषधियां रसोई से लेकर बगिया व गमलों में उपलब्ध हैं। आयुर्वेद में अमृत कहलाने वाली शतावरी का एंटी आक्सीडेंट गुणधर्म हार्ट के लिए सुरक्षा कवच बनेगा। उत्तर प्रदेश के मेरठ में लाला लाजपत राय मेडिकल कॉलेज के

शोध में शतावरी अंग्रेजी दवाओं की तुलना में हार्ट अटैक रोकने में ज्यादा कारगर साबित हुआ। इस अध्ययन को इंटरनेशनल मेडिकल जर्नल में भी छापा गया है। कई स्थानों पर क्लीनिकल ट्रायल भी शुरू कर दिया गया।

इस तरह किया शोध

मेडिकल कॉलेज के फार्माकोलॉजी विभागाध्यक्ष डॉ. केके सक्सेना ने बताया कि शतावरी के हार्ट पर प्रभाव का पता लगाने के लिए 30 चूहों को छह ग्रुप में बांटकर शोध किया गया। एक ग्रुप में सिर्फ नमक का पानी दिया गया। अन्य ग्रुप में कैंसर की दवा डाक्सोरोबिसिन दी गई, जिसने चूहों का हार्ट डैमेज कर दिया। इसके बाद 500 मिलीग्राम प्रति किलो व 250 मिलीग्राम प्रति किलोग्राम वजन के अनुपात में चूहों को 21 दिनों तक शतावरी का चूर्ण दिया गया।

फिर शतावरी से हार्ट को किया ठीक

एक ग्रुप के चूहों को हार्ट की रिकवरी के लिए अंग्रेजी दवा दी गई। दोनों दवाओं की तुलना में शतावरी ने तेजी से हार्ट के ब्लॉकेज और अटैक का इलाज किया। जुलाई 2019 में जारी शोध-पत्र को इंटरनेशनल जर्नल ऑफ बेसिक एंड क्लीनिकल फार्माकोलॉजी में छापा गया। शोधकर्ताओं डॉ. पिकी व डॉ. मनीषा चैटर्जी की टीम ने कई वर्कशॉपों में शतावरी के हार्ट पर प्रभाव संबंधी अध्ययन को प्रस्तुत किया है।

इन वजहों से बढ़ती है दिल की बीमारियां

खानपान में गड़बड़ी, धूमपान, बीपी व कोलेस्ट्रॉल बढ़ने और रक्त आपूर्ति बिगड़ने से हार्ट पर बुरा प्रभाव पड़ता है। इनसे हार्ट डैमेज हो सकता है। ज्यादा नमक सेवन, फास्टफूड, नींद की कमी, शारीरिक श्रम में कमी, एल्कोहल सेवन, प्रदूषित एवं रसायनयुक्त खानपान, सिंथेटिक मिठाइयों के सेवन से हार्ट अटैक का खतरा बढ़ा है।

शतावरी हार्ट अटैक रोकने की दिशा में महत्वपूर्ण औषधि साबित हुई है। इसमें फैट, कैलोरी व कोलेस्ट्रॉल बेहद कम, जबकि एंटीआक्सीडेंट ज्यादा है। ये कैंसर की दवाओं से हार्ट पर पड़ने वाले विषाक्त प्रभावों को भी खत्म करती है। अंतरराष्ट्रीय मेडिकल जर्नल में शोध छपने के बाद कई कंपनियां क्लीनिकल ट्रायल करने जा रही हैं।

- डॉ. केके सक्सेना, विभागाध्यक्ष, फार्माकोलॉजी

## Polluted Water

इस गांव के पानी में मिला है खतरनाक जहर, अंदर-अंदर खोखले हो रहे यहां के लोग (Dainik Jagran: 20191024)

<https://www.jagran.com/news/national-poison-found-in-the-water-of-this-village-of-chhattisgarh-19693600.html>

गरियाबंद के सुपेबेड़ा गांव के लोग एक ऐसी बीमारी का शिकार हो रहे हैं जिसकी वजह से यहां की आबादी घटती जा रही है।

रायपुर, जेएनएन। अगला विश्व युद्ध पानी के लिए हो सकता है, ये बात कई बार सुनने को मिल चुकी है। पीने के शुद्ध पानी की समस्या आज एक विश्वव्यापी चुनौती है। इस दौर में छत्तीसगढ़ का एक गांव ऐसा है, जहां का भूमिगत पानी जहरीला है। लोग इस पानी को मजबूरी में पीते हैं और अपनी जान गंवाते हैं। एक अभिशाप की तरह लोग इस जहरीले पानी के शिकार हो रहे हैं। लोगों की मजबूरी है कि इन्हें पीने के लिए यही पानी उपलब्ध है। लोगों को पता है कि यह पानी अंदर-अंदर उनकी किडनी गला रहा है और जिस्म को खोखला बना रहा है, बावजूद इसके लोगों के पास अपनी प्यास बुझाने का कोई दूसरा विकल्प नहीं है। धीरे-धीरे यहां की आबादी सिमट रही है। लोग या तो गांव छोड़कर पलायन कर रहे हैं या फिर मौत के मुंह में समा रहे हैं। इस गांव में रह रहे युवक-युवतियों की शादियां भी नहीं हो रही, जिसकी वजह से यहां की जनसंख्या बढ़ने की बजाय कम हो रही है।

लगातार घट रही गांव की आबादी

गरियाबंद के सुपेबेड़ा गांव के लोग एक ऐसी बीमारी का शिकार हो रहे हैं, जिसकी वजह से यहां की आबादी घटती जा रही है। सुपेबेड़ा में किडनी की बीमारी को लेकर इस कदर दहशत है कि लोग पलायन कर रहे हैं। गरियाबंद जिले के इस 900 की आबादी वाले गांव में सन 2005 से लगातार किडनी की बीमारी से मौत का सिलसिला जारी है। अब तक यहां 68 मौतें हो चुकी हैं। साल 2005 में ही सुपेबेड़ा में मौतों का सिलसिला शुरू हो गया था, लेकिन सरकार ने इस पर कोई ध्यान नहीं दिया। साल 2017 में यहां 32 लोगों की मौत हुई। यह खबरें जब अखबारों की हेडलाइन बनीं, तब सरकार जागी। तत्कालीन मंत्रियों ने दौड़ लगाई। कैंप लगाए गए, डॉक्टरों को भेजा गया। कई गंभीर मरीजों को इलाज के लिए रायपुर लाया गया। गांव में अस्पताल खोला गया और अब राज्यपाल ने गांव का दौरा कर वहां प्रभावित मरीजों के एम्स और रायपुर के अन्य सुपर स्पेशियलिटी अस्पताल में मुफ्त उपचार का आश्वासन दिया है।

इस वजह से जहरीला है गांव का पानी

राजधानी रायपुर स्थित इंदिरा गांधी कृषि विश्वविद्यालय के वैज्ञानिकों ने सुपेबेड़ा की मिट्टी का परीक्षण किया था। मुम्बई के टाटा इंस्टीट्यूट और दिल्ली के डॉक्टर भी अपने स्तर पर जांच कर चुके हैं। जबलपुर आइसीएमआर की टीम भी यहां जांच के लिए पहुंची। पीएचई विभाग ने पानी की जो जांच की थी, उसमें उन्हें फ्लोराइड और आर्सेनिक की मात्रा ज्यादा मिली थी। उसके समाधान के लिए गांव में फ्लोराइड रिमूवल प्लांट लगा दिया गया था, मगर इंदिरा गांधी कृषि विश्वविद्यालय द्वारा की गई मिट्टी की जांच में हेवी मेटल पाए गए थे, जिसमें कैडमियम और क्रोमियम भी ज्यादा मात्रा में शामिल है।

सरकार ने शुद्ध पेय जल के लिए बनाई यह योजना

वर्तमान में कांग्रेस की सरकार ने सुपेबेड़ा में शुद्ध पेयजल पहुंचाने के लिए योजना बनाई है। करीब दो करोड़ रुपये की इस योजना से पास में बहती तेल नदी से पानी पहुंचाया जाएगा। तेल नदी पर पुल निर्माण और वाटर फिल्टर प्लांट के लिए 24 करोड़ रुपये भी स्वीकृत किए गए हैं। यहां के लोगों को शुद्ध पेयजल पहुंचाने के लिए पूर्व में जो वाटर फिल्टर और आर्सेनिक रिमूवेबल प्लांट स्थापित किए गए हैं, इनकी कार्यक्षमता पर सवाल उठते रहे हैं। प्लांट में पानी ठीक तरीके से शुद्ध नहीं हो पाने के कारण स्थिति में विशेष सुधार नहीं हुआ।

## Brain Strock (Hindustan: 20191024)

[http://epaper.livehindustan.com/imageview\\_336080\\_46886952\\_4\\_1\\_24-10-2019\\_6\\_i\\_1\\_sf.html](http://epaper.livehindustan.com/imageview_336080_46886952_4_1_24-10-2019_6_i_1_sf.html)

# हर छह सेकंड में हो रही स्ट्रोक से एक की मौत

नई दिल्ली | वरिष्ठ संवाददाता

दुनियाभर में हर दो सेकंड में एक व्यक्ति को ब्रेन स्ट्रोक होता है और हर छह सेकंड में एक की जान चली जाती है। लक्षणों को पहचानकर समय पर अस्पताल पहुंचाने पर मरीज की जान बच सकती है। साथ ही अपंगता से प्रभावित होने का खतरा भी कम हो जाता है।

जीवनशैली में बदलाव से 80 फीसदी मामलों में कमी लाई जा सकती है। अपोलो अस्पताल में ब्रेन स्ट्रोक पर आयोजित कार्यक्रम में बुधवार को

डॉक्टर विनीत सूरी ने यह बात कही। कार्यक्रम में ब्रेन स्ट्रोक से उबरने वाले लगभग 200 लोग और उनके परिजनों ने हिस्सा लिया। कार्यक्रम में पूर्व उप प्रधानमंत्री लालकृष्ण आडवाणी और अभिनेत्री शर्मिला टैगोर ने भी हिस्सा लिया।

**15 फीसदी में मामला :** स्ट्रोक के 10-15 फीसदी मामले युवाओं में होते हैं। धूम्रपान, नशीली दवाओं का सेवन मुख्य कारण है। ब्लड प्रेशर पर नियंत्रण, उच्च रक्तचाप और मोटापे पर नियंत्रण, नियमित व्यायाम, धूम्रपान न कर इससे बचा जा सकता है।

## **Health Record (Hindustan: 20191024)**

[http://epaper.livehindustan.com/imageview\\_336095\\_47181156\\_4\\_1\\_24-10-2019\\_21\\_i\\_1\\_sf.html](http://epaper.livehindustan.com/imageview_336095_47181156_4_1_24-10-2019_21_i_1_sf.html)

# एक क्लिक पर जीवनभर का हेल्थ रिकॉर्ड मिलेगा



अच्छी खबर

नई दिल्ली | स्कन्द विवेक धर

आपको अब अपनी जांच रिपोर्ट, डॉक्टर का प्रिस्क्रिप्शन ( दवा का पर्चा ) और पुराना हेल्थ रिकॉर्ड बार-बार खोजना नहीं पड़ेगा। जल्द ही आपको अपने मोबाइल के एक एप में अपना और परिवार के सभी सदस्यों का पूरा हेल्थ रिकॉर्ड एक क्लिक में मिल सकेगा।

सीडैक ने केंद्रीय स्वास्थ्य एवं परिवार कल्याण मंत्रालय के लिए माई हेल्थ रिकॉर्ड नाम का यह एप तैयार किया है। फिलहाल इसकी सुरक्षा जांच चल रही है। अगले दो महीने में इसे उपयोग के लिए जारी कर दिया जाएगा।

स्वास्थ्य मंत्रालय के एक वरिष्ठ अधिकारी ने 'हिन्दुस्तान' को बताया कि डिजिटल हेल्थ की ओर यह एप हमारा पहला कदम होगा। इस एप को कोई भी व्यक्ति डाउनलोड कर अपना और परिवार का एक अकाउंट बना सकेगा। इस अकाउंट में मरीज से जुड़े

## पासवर्ड डालना होगा

प्रिंट फॉर्मेट वाले रिकॉर्ड या पर्चे की फोटो खींच इस एप में स्टोर की जा सकेगी। अगर कोई व्यक्ति वेलनेस बैंड का उपयोग करता है तो मोबाइल से उसका डाटा भी एप में अपने आप स्टोर हो जाएगा। इस एप में ऐसे फीचर दिए गए हैं, जिससे उपयोगकर्ता एक तय समय के लिए अपने हेल्थ रिकॉर्ड की एक्सेस किसी को और को दे सकेगा। इसे सुरक्षित रखने के लिए वन टाइम पासवर्ड को इस्तेमाल करना होगा।

डिजिटल हेल्थ रिकॉर्ड अपने आप स्टोर हो जाएंगे।

## स्वास्थ्य से जुड़ा इतिहास :

अधिकारी ने कहा कि इस एप से आगे चलकर लोगों का एक ऐसा रिकॉर्ड बन सकेगा, जिसमें व्यक्ति का स्वास्थ्य से जुड़ा पूरा इतिहास हो। इससे डॉक्टरों को मरीज के इलाज में मदद मिलेगी। भविष्य में होने वाली समस्याओं का अनुमान भी लगाया जा सकेगा।

## Delhi's pollution

### Delhi's pollution battle: What odd-even can do, what it cannot do (Hindustan Times: 20191024)

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

It may help prevent air quality dipping from poor to severe, but can't improve it. Adopt a holistic approach

The Delhi government's odd-even programme, which rations vehicle use based on licence plates, makes a comeback this year with the chief minister's recent announcement of a seven-point Parali Pradushan Action Plan. The plan is a series of emergency measures targeted at alleviating the poor levels of air quality that mark Delhi's winter season.

Did the earlier odd-even programme have any impact on air quality? In this article, we discuss two studies to outline the methods used, the key results, and takeaways. To evaluate odd-even scheme correctly, we should compare observed air quality with what the levels could have been in the absence of the programme. Meteorological conditions greatly influence how pollution levels vary from one day to the next, and, so, any reasonable evaluation needs to figure out a way to make apple-to-apple comparisons. Different techniques have different advantages and limitations, but help piece together a comprehensive picture.

A paper co-authored by one of us (Dey) utilised satellite-based estimates of PM<sub>2.5</sub> to examine the potential decrease due to fewer traffic emissions during odd-even. The satellite-based estimates were calibrated against ground-based measurements, combined with chemical transport model simulations. The estimated PM<sub>2.5</sub> represents the level between 10:30 am to 1:30 pm, when the satellites cross this region. The study concluded that the traffic restriction between January 1-15 in 2016 reduced PM<sub>2.5</sub> by 4-6% with a maximum of up to 10%, primarily at three local hotspots in Delhi. Analysis of meteorological parameters suggested a stagnation of pollutants just before and during the programme, thereby spoiling the effort.

Another paper, that one of us (Harish) was a part of, uses government monitoring data, and a statistical technique called difference-in-differences. The analysis compares Delhi's monitors to monitors from neighbouring cities in the National Capital Region using PM<sub>2.5</sub> data before, during, and after the two pilot rounds. The analysis technique assumes that air quality changes in similar ways within and outside Delhi due to meteorology and other factors that are common to both. A relative change in trends when a programme is implemented only in one of them can then be attributed to the programme. This second analysis finds that PM<sub>2.5</sub> levels were lower by 14-16% on average during 8am-8pm during the odd-even scheme in January 2016. No impact was detected at night. No impact was detected when the programme was repeated in April.

Should the odd-even programme then be part of a series of emergency measures? Yes, it can provide some relief during the peak pollution episodes. We also need other emergency measures in Delhi, as well as in the neighbouring regions.

Is odd-even a silver bullet to avoid the winter peak? No. For one, we need to address stubble burning holistically. Data suggests that stubble burning was lower in 2018 than in previous years. These government efforts need to continue, ideally moving towards more sustainable agriculture practices in the long term.

Ultimately, we need accelerated progress on longer-term measures, targeting each of the major sources of pollution, implemented around the year. We must tackle household biomass burning, power plants, industries, waste burning, transport emissions (especially trucks), and road and construction dust in parallel. For reducing transport emissions from private vehicle use in cities, public transport investments are critical. Delhi needs more buses than it currently has. This has to be taken up on priority.

We will not see dramatic improvements in air quality because of these emergency measures. Their objective is to restrict the air quality from going from poor to severe in this period, and not to improve it to good or even moderate levels. We urge government officials, and media commentators not to rush to declare the efforts as a success or failure prematurely. PM2.5 concentrations will fluctuate depending on meteorological conditions, as they do all the time. We should learn from our experiences in 2016 to set up multiple ways to measure impact in advance, such as comparing with historical satellite and modelling derived estimates, and careful statistical analysis using regulatory monitoring data. We should expect potentially divergent results across these studies, which then require careful deliberation and reconciliation.