



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Wednesday 20190515

Haemophilia A

Quick, cheap diagnostic test for Haemophilia A (The Hindu: 20190515)

<https://www.thehindu.com/sci-tech/health/quick-cheap-diagnostic-test-for-haemophilia-a/article27130513.ece>

Lack of awareness and diagnostic facilities, high cost leading to under diagnosis of bleeding disorders: ICMR

The Indian Council of Medical Research (ICMR)'s National Institute of Immunohaematology, Mumbai, has developed a cost-effective Point-of-Care (POC) rapid diagnostic test for severe Haemophilia A and Von Willebrand Disease (VWD), a genetic disorder caused by missing or defective Von Willebrand factor (VWF), a clotting protein.

“This is the first in the world POC test for specific diagnosis of any common bleeding disorder. Working cost of these kits is less than ₹50 in comparison to existing conventional test for the diseases that costs around ₹4,000 to ₹10,000,” said a release by the ICMR here on Tuesday.

Patients with severe Haemophilia A or VWD can have life threatening spontaneous or post-traumatic bleeding like brain haemorrhage and gastrointestinal bleed or they may have bleeding into joints or superficial bleeding from the nose or gums.

In visits to about a dozen villages in Maharashtra, Rajasthan and Telangana states over five months, the Thomson Reuters Foundation found hysterectomies were routinely leaving families destitute and trapping people in modern-day slavery

Mrithasanjeevani

Mrithasanjeevani to get a fresh lease of life (The Hindu: 20190515)

<https://www.thehindu.com/news/national/kerala/mrithasanjeevani-to-get-a-fresh-lease-of-life/article25090560.ece>

Key decisions

- **Government to expand its approved panel of neurologists/ neurosurgeons/ intensivists trained in brain death certification**



- **KNOS to be infused with more funds and personnel qualified in organ procurement processes**

- **Once a patient is declared brain dead, after the first apnoea test, only trained personnel of KNOS (not doctors or hospital administrators) will approach the family about organ donation possibility.**

Brain death certification to be delinked from organ donation and made a mandatory clinical procedure in ICUs

The government is considering de-linking the process of brain death certification from organ donation so that the public do not perceive the former as an activity done only to aid organ donation.

This would mean that brain death certification becomes a mandatory clinical practice in intensive care units (ICUs), whether or not organ donation takes place.

The reluctance of neurologists and neurosurgeons to report and certify brain death in ICUs has been a major hurdle in the way of deceased donor organ donation in Kerala, after the

government tightened the norms for brain death certification and made the procedure more stringent.

With allegations flying thick and fast about the monetary compulsions of major private sector hospitals where more brain death certification and transplants have been taking place, followed by threats of litigation and police interrogation, a deeply wounded transplant community took a step back. The result was the nosediving of deceased donor organ transplantation, Mrithasanjeevani, almost grinding to a halt in the State in the past two years.

Brain death

In India, brain death has been defined only in connection with organ donation in the Transplantation of Human Organs Act 1994. Brain death certification thus has not been mandatory in the ICUs here, unless organ donation is proposed.

The public thus perceives brain death certification as an activity strictly linked to organ donation.

In the current atmosphere of mistrust, there could be apprehensions that brain death is being facilitated so that organ donation can take place.

Recommendation

The suggestion to delink brain death certification from organ donation had been one of the main recommendations that Luc Noel, a WHO expert on Clinical Practices, had made to the government last month, after a review of Mrithasanjeevani.

“We are moving that forward. Also, we are thinking of setting up a committee to ensure that all brain deaths in hospitals, both private and public sector, are reported to the government,” Additional Chief Secretary Rajeev Sadanandan told The Hindu.

At a meeting of neurologists and neurosurgeons he convened here on Friday, a few more suggestions have been proposed to revive Mrithasanjeevani.

“First, we want government medical college hospital ICUs to improve brain death reporting/certification. Haemodynamic maintenance of a potentially brain dead patient in an ICU is an intense, full-time job, which our MCHs cannot manage, given their heavy patient load. Through Kerala Network for Organ Sharing (KNOS), we will provide these hospitals an additional ICU-trained nurse just to manage such patients,” Mr. Sadanandan said.

One problem in brain death certification faced by private hospitals was that it was difficult to get government doctors, who are mandatorily required to be on the certifying panel, to come twice six hours apart for the sleep apnoea test, often at odd hours.

The State government has now clarified that it is not necessary that the same doctor be called in for the second test.

Colorectal cancer

Chewing gum additive linked to colorectal cancer (The Tribune: 20190515)

<https://www.tribuneindia.com/news/health/chewing-gum-additive-linked-to-colorectal-cancer/772897.html>

The study conducted in mice investigated health impacts of food additive E171 (titanium dioxide nanoparticles) which is commonly used in high quantities in foods and some medicines as a whitening agent. File photo

A food additive which is commonly used as a whitening agent in products such as chewing gum and mayonnaise could lead to inflammatory bowel diseases and colorectal cancer, warns a study.

The study conducted in mice investigated health impacts of food additive E171 (titanium dioxide nanoparticles) which is commonly used in high quantities in foods and some medicines as a whitening agent.

Found in more than 900 food products, E171 is consumed in high proportion everyday by the general population.

Consumption of food containing E171 has an impact on the gut microbiota—defined by the trillions of bacteria that inhabit the gut—which could trigger diseases such as inflammatory bowel diseases and colorectal cancer, said the study published in the journal *Frontiers in Nutrition*.

"It is well established that dietary composition has an impact on physiology and health, yet the role of food additives is poorly understood," said co-lead author Wojciech Chrzanowski, Associate Professor at University of Sydney.

"This study presents pivotal evidence that consumption of food containing food additive E171 affects gut microbiota as well as inflammation in the gut, which could lead to diseases such as inflammatory bowel diseases and

Pollution

Finally, a plan to tackle idol immersion pollution (Hindustan Times: 20190515)

<http://paper.hindustantimes.com/epaper/viewer.aspx>

The Delhi government is finalising an action plan to ensure that the Yamuna is not polluted due to idol immersion during the coming festive season this year.

While in the past, there have been attempts at controlling what is put into the rivers during the festivities, this is the first time that the government is planning a co-ordinated action plan to this effect.

The plan is likely to be implemented during Ganesha Chaturthi in September.

Senior officials of the state environment department said that the plan would help regulate the use of materials such as Plaster of Paris, chemicals and synthetic paints used in making idols. Authorities are also in the process of finalising the locations of artificial ponds, where smaller idols could be immersed, and the waste water could be sent to sewage treatment plants (STPs) for treatment. Delhi Police has been asked to chalk out routes and safety measures to be adopted on immersion day.

“A policy for registration of idol makers has been prepared and submitted to the High Court. The divisional commissioner of Delhi has already met civic bodies, district magistrates, police and the Delhi Jal Board (DJB). The role of every government agency has been fixed,” said a senior official of the environment department.

The National Green Tribunal(NGT)-appointed Yamuna pollution monitoring committee has directed that the divisional commissioner of Delhi should submit the detailed action plan by May 20. The divisional commissioner, however, did not receive calls for comment.

Earlier, reports prepared by the Central Pollution Control Board (CPCB) had revealed that the pollution levels in the Yamuna, including the levels of metals such as chromium, iron and nickle, shot up alarmingly

every year after immersions. This results in increasing the chance of toxins entering the food chain through vegetables grown on the floodplains, it said.

The registration of idol makers would be done by the civic bodies and would impose conditions such as the materials and paints which they can use and the consequences that would follow if the terms are violated. The Delhi Pollution Control Committee (DPCC) will issue guidelines on the materials that could be used for making idols.

“The NGT-appointed monitoring panel has directed that efforts should also be taken to stop entry of even smaller idols into Delhi from neighbouring states if they do not conform with the CPCB norms,” said an officer of the environment department.

While giving permission to puja samitis, police would incorporate a condition that they would have to purchase idols only from registered dealers whose details will be available

with the civic bodies.

The divisional commissioner has been asked to finalise the location of artificial ponds by May so that they could be prepared to hold rainwater during the monsoon. The Delhi Jal Board would also provide water for the artificial ponds through tankers.

“The remnant water after immersion should be taken to treatment plants so that there is no seepage into the ground. The whole sequence would have to be rehearsed before July so that if any changes are needed, they could be incorporated before the actual immersion takes place during the festive season starting in September,” said the environment department official.

“Plan sound good on paper. But implementing it would be difficult, particularly with small idols. The larger ones are easier to track. Ideally no immersion should take place in Yamuna,” said Manoj Misra, convener of Yamuna Jiye Abhiyan.

Heart diseases

‘Heart diseases, infection leading killers in Delhi’ (Hindustan Times: 20190515)

<http://paper.hindustantimes.com/epaper/viewer.aspx>

Cardiovascular diseases, infections and respiratory diseases accounted for two in every five deaths recorded in Delhi in 2017, the state government’s Annual Report on Registration of Births and Deaths which is based on reports of the city’s three corporations, said.

The report says there were three plague deaths and five deaths due to cholera.

Heart disease and stroke accounted for 19.25% of all deaths in 2017, which is a 1.6 percentage points increase over reported deaths in 2016. Infectious and parasitic diseases caused 14.78% of all deaths; followed by respiratory ailments, which led to 8.405% of deaths. “This is the trend that we see across the country; now fewer people are dying of infectious diseases and increasing longevity is leading to more deaths from lifestyle-related diseases. Heart diseases and strokes are accompanied with diabetes and hypertension, so it is important to address them,” said Dr Dilip Kumar, senior consultant of medicine, Safdarjung hospital.

In 2017, sixteen deaths were also reported from neonatal tetanus, which was eliminated (less than one case in every 1,000 live births) in India in 2015.

Sex ratio at birth rose to 913 in 2017, compared to 902 the previous year. “It is good to see the increase, but it is important to implement the PC-PNDT law properly to ensure that the gains made are maintained and Delhi can do better in the future,” said Sabu George, an activist who

has been working to prevent female foeticide for over three decades. The Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994, bans sex-determination of the foetus.

In infants under the age of one year, slow growth of foetus, foetal malnutrition and immaturity were the highest causes of death in 2017, with the numbers increasing threefold over 2016. In 2016, slow foetal growth, foetal malnutrition and immaturity killed 426 (5.31% of all infant deaths) newborns as compared to 1,268 (16.75%) in 2017.

In 2016, the highest newborn deaths were from suffocation from lack of oxygen and other respiratory symptoms, which accounted for 1,358 or 16.94% of all infant deaths.

“Malnutrition is always a factor for foetal malnutrition and slow growth, but it has always been a problem in India. So, for finding reasons for the sudden jump, we need to examine other reasons such as environmental toxins, pollutants or other such reasons. The other explanation for the rise could be improved diagnosis because of better imaging techniques and more people getting tested,” said Dr Subhashish Roychaudhary, professor of paediatric surgery at Lady Hardinge Medical College. Healthcare education requires serious innovations

India’s healthcare ecosystem is going through turbulence. Even though we produce the largest number of doctors in the world, we fall awfully short in the doctor-patient ratio as per WHO standards. The fact is that there are close to 60,000 doctors who graduate every year, but WHO recommends 1 doctor for the population size of 400, while we in India, have about 1 doctor for 1674 people approximately. A large number of these graduating doctors are concentrated in tier 1 and tier 2 cities, which subsequently declines as you go to smaller towns, with the number being significantly low in villages. Therefore, a majority of the healthcare service delivered in India is through community and public health centers which are run by registered medical professionals and not necessarily doctors.

Capital's silent killers

Cardiovascular diseases, infections, respiratory diseases accounted for two in every five deaths recorded in Delhi

■ 2016 (% of all deaths) ■ 2017 (% of all deaths)

Diseases of the circulatory system

(heart attack, stroke, diseases of blood vessels)



Infectious and parasitic diseases



Diseases of the respiratory system



External cause of mortality and morbidity

(accidents, assaults, self harm, complications of medical and surgical care)



Neoplasms

(tumours and cancers)



Symptoms and signs with inconclusive diagnosis



SOURCE: STATE GOVT'S ANNUAL REPORT ON REGISTRATION OF BIRTHS AND DEATHS DATA

Healthcare education

Healthcare education requires serious innovations (Hindustan Times: 20190515)

<http://paper.hindustantimes.com/epaper/viewer.aspx>

India's healthcare ecosystem is going through turbulence. Even though we produce the largest number of doctors in the world, we fall awfully short in the doctor-patient ratio as per WHO standards. The fact is that there are close to 60,000 doctors who graduate every year, but WHO recommends 1 doctor for the population size of 400, while we in India, have about 1 doctor for 1674 people approximately. A large number of these graduating doctors are concentrated in tier 1 and tier 2 cities, which subsequently declines as you go to smaller towns, with the number being significantly low in villages. Therefore, a majority of the healthcare service delivered in India is through community and public health centers which are run by registered medical professionals and not necessarily doctors.

In India's healthcare ecosystem is experiencing turbulence

Even with a large number of students enrolling to become doctors, about 15% drop out of the medical profession completely, as they would have enrolled for MBBS due to parental/societal pressure or other reasons. Another 30% to 35% prefer to take up non-clinical roles in their profession, which leaves about 40% to 60% of doctors that graduate, who are willing to practice healthcare. For this 60% to grow financially or reach heights in their careers, they require a postgraduate degree or additional certifications. When it comes to PG, India has only 28000 postgraduate seats spread across 300 specializations, so there are chances that a student who wanted to be a cardiologist, might be allotted an ophthalmologist specialization, through the PG Neet process. So essentially, for an MBBS graduate to choose their preferred specialization it becomes considerably difficult. Adding to that, if we take into account the limited number of seats and students who graduated across the last 6 years and are still applying for PG seats, the possibility of cracking PG NEET is pretty low.

The Indian healthcare system is facing a huge challenge. The rapid increase in NCD's (NonCommunicable Diseases) and the increased mortality due to trauma and infections are a reality that all of us have to deal with. Therefore, if you reflect on the availability of a skilled workforce and the impending healthcare crisis, radical and innovative methodologies are called for. A large number of doctors who want to work in a specific clinical area, but haven't been able to learn the skills through their education process, end up facing difficulties in pursuing their healthcare career aspirations.

Online learning portals help these doctors by focussing on upskilling them and providing them with the competencies within their chosen specialization. Online education platforms cannot claim to qualify the doctor or a healthcare professional as a specialist or grade their clinical competency but it gives them an opportunity to work in the specialized departments and help them develop a better understanding of the disease conditions and its management. For instance, if we can get junior doctors to better identify early signs of cancer, who can in turn drive referral to the right specialist, at the right time, it will help solve a critical problem. This is how platforms, like Medvarsity, help healthcare professionals build the right skills, that are in demand.

On an average, such platforms have courses in the duration of 6 months to 1 year and some even shorter, along with a clinical component attached to it. Furthermore, the doctors also get to be associated with a network of partner hospitals where they get trained in various clinical skills. Not only clinical health in terms of what is practiced in western medicine, but these portals have courses that are also spread across to Ayurveda and alternative medicine in order to bridge the gap between wellness institutions or professionals in the nutrition field, who are looking at solving health problems focused on wellness. Hence, the industry needs more attention to overcome the challenges associated with recent times.



Pollution dips

After rain brought relief to Delhi, pollution dips, stubble burning still a worry (The Indian Express: 20190515)

<https://indianexpress.com/article/cities/delhi/after-rain-brought-relief-to-delhi-pollution-dips-stubble-burning-still-a-worry-5727972/>

The analysis of air quality figures in the first 14 days of May in the years 2017, 2018 and 2019 shows that dust is usually the primary pollutant during this time of the year.

Weather today: Heavy rainfall lashes parts of Delhi-NCR, brings down mercury

Bangalore News May 13 Highlights: Rains make a comeback in several areas; evening peak hour traffic kicks in early

Weather forecast today Highlights: Rain lashes parts of Delhi-NCR, brings relief from scorching heat

After rain brought relief to Delhi, pollution dips, stubble burning still a worry

Stubble burning by farmers in Punjab and Haryana has often caused a drop in Delhi's air quality. (Express Photo by Kamleshwar Singh)

As the concentration of pollutants in the capital dipped after Monday's rainfall, experts are now worried about the impact of crop residue burning in Punjab and Haryana.

Officials at the System of Air Quality and Weather Forecasting and Research (SAFAR) said Delhi's air, which has so far seen minimal impact of crop residue burning, will see a more heightened effect till Friday.

Rain, which lashed several parts of the city on Monday evening, however, helped lower the concentration of particulate matter, which was the primary pollutant for the past several days, said officials.

The analysis of air quality figures in the first 14 days of May in the years 2017, 2018 and 2019 shows that dust is usually the primary pollutant during this time of the year.

In 2017, the average air quality index value of the city during the period was 280. In 2018, it improved to 194, but has deteriorated to 266 this year.

Officials at the Delhi Pollution Control Committee (DPCC) said the primary reason behind the dip is the dry season.

After rain brought relief to Delhi, pollution dips, stubble burning still a worry

"May usually sees bouts of light rain and squalls. This year, however, the first rain that the city saw was on Monday. In cities, dust from roadsides and construction sites is among the primary causes of pollution. These can be controlled by regular rains. With high temperatures, dust comes off loose and winds whip it up in the air. The wind system over the past week has also brought to the city a lot of dust from the western parts of the country. Sprinkling would be helpful at this time," said a senior DPCC official.

As per data, Delhi saw three dust storms and four squalls each in May 2017 and 2018. In 2016, there was only one dust storm and eight squalls. A squall sees strong winds and is accompanied by light rain, and sometimes dust.

Squalls are more common as compared to dust storms. This year, however, there has been no squall in the first two weeks of the month. On Monday, an IMD official had said: “The whole of this week is expected to see light rain or thunderstorms. The month of May is also when these occurrences are more common because of the interaction of hot air in the area with any cooler wind system that enters it. The clash of the two systems — local and regional — leads to thunder and dust storms,” said an IMD official.

THE DAYS

AIR QUALITY INDEX

Delhi - 153 (Moderate)

Gurgaon - 11 (Moderate)

Noida - 140 (Moderate)

FORECAST

■ Clear day expected on Wednesday

■ More dust storms expected on Thursday and Friday

Postnatal depression

People fail to recognize male postnatal depression symptoms: Study (New Kerala: 20190515)

<https://www.newkerala.com/news/read/142219/people-fail-to-recognize-male-postnatal-depression-symptoms-study.html>

People are almost twice more likely to identify signs of postnatal depression in women than in men, recent findings suggest.

The involved 406 British adults aged between 18 and 70. The participants were presented with case studies of a man and a woman both displaying symptoms of postnatal depression, a mental health issue which affects as many as 13% of new parents.

This study, published in the Journal of Mental Health, found that participants of both sexes were less likely to say that there was something wrong with the male (76%) compared to the female (97%).

Of the participants who did identify a problem, they were significantly more likely to diagnose postnatal depression in the female case study than the male case study. The study found that 90% of participants correctly described the female case study as suffering from postnatal depression but only 46% said the male had postnatal depression.

The participants commonly believed that the man was suffering from stress or tiredness. In fact, stress was chosen 21% of the time for the man compared to only 0.5% for the woman, despite identical symptoms.

Overall the study found that attitudes were significantly more negative towards the male case study compared to the female. It found that participants reported lower perceived distress towards the male case study's condition, believed that the male's condition would be easier to treat, expressed less sympathy for the male and were less likely to suggest that the male seek help.

According to the researchers, the findings suggest that the people are significantly more likely to believe that something is 'wrong' when seeing a woman displaying the symptoms of postnatal depression, and they are also far more likely to correctly label the condition as postnatal depression.

There may be a number of reasons for this gender difference. It is possible that general awareness of paternal postnatal depression still remains relatively low and there might be a perception among the British public that postnatal depression is a 'women's issue' due to gender-specific factors such as pregnancy-induced hormonal changes and delivery complications.

The research team believes that much more can be done to promote a better understanding of paternal postnatal depression, so people don't brush it off as simply tiredness or stress.

This is particularly important as many men who experience symptoms of depression following the birth of their child may not be confident about asking for help and may be missed by healthcare professionals in the routine assessments of new parents.

Eating disorders

Eating disorders linked to long-term depression risk for mothers: Study (New Kerala: 20190515)

<https://www.newkerala.com/news/read/141983/eating-disorders-linked-to-long-term-depression-risk-for-mothers-study.html>

Any kind of eating disorder and body image concerns before or during pregnancy can be associated with long-term depression risk for mothers, recent findings suggest.

"We found that women who have had an eating disorder at any point before childbirth, even if it was years earlier in adolescence, were more likely to experience depressive symptoms during pregnancy and up to 18 years after the birth of their child," said the study's lead author Francesca Solmi.

According to the researchers, this finding suggests that many people with eating disorders might not fully recover since we know that eating disorders and depression often happen at the same time.

Previous studies had suggested that depressive symptoms among mothers with eating disorders might improve after the perinatal period, but those studies didn't have such a long follow-up time to confirm that the increased risk of depressive symptoms does, in fact, persist for women who have had an eating disorder.

The research team found that women who had ever had anorexia nervosa or bulimia nervosa experienced more depressive symptoms over an 18-year follow-up than those who had never had an eating disorder.

"Depressive symptoms in mothers have been shown to be associated with a number of negative outcomes for their children, such as emotional and behavioural problems. It is therefore important, to identify and treat eating disorders early, as these could be one potential cause of the depressive symptoms. We should also identify pregnant women with an eating disorder so that they can be provided with mental health support. This could benefit both mother and child in the long run," Solmi explained.

Abigail Easter, one of the authors of the paper who developed training materials to help identify eating disorders in pregnancy, added "There is a need for more training for practitioners and midwives on how to recognise eating disorders in pregnancy, which could help to reduce the long-term impact of mental ill-health."

Dementia

Researchers find ways of detecting dementia's damaging effects before it's too late(New Kerala: 20190515)

Researchers have found an early detection method for certain forms of dementia. Patients with a rare neurodegenerative brain disorder, called Primary Progressive Aphasia (PPA), show abnormalities in brain function in areas that look structurally normal in an MRI scan.

"We wanted to study how degeneration affects the functioning of the brain," said Aneta Kielar, the study's lead author and assistant professor in the UA Department of Speech, Language and Hearing Sciences.

Structural MRI provides 3D visualisation of brain structure, which is useful when studying patients with diseases that literally cause brain cells to wither away, like PPA.

Magnetoencephalography, or MEG, on the other hand, "gives you really good spatial precision as to where the brain response originates. We want to know if the decreased brain function is coming from the areas that are already atrophied or areas in an earlier stage of decline," said Jed Meltzer, the study's senior author and an assistant professor of psychology at the University of Toronto.

The findings were published in the Journal of Neuropsychologia.

As part of the study, the researchers compared brain scans of patients with PPA to healthy controls while both groups performed language tasks. The researchers also imaged participants' brains while at rest. The functional defects were related to worse performance in the tasks, as individuals with PPA lose their ability to speak or understand language while other aspects of cognition are typically preserved.

Identifying the discrepancy between a PPA brain's structural and functional integrity could be used as an early detection method.

According to the research team, this is promising because many drugs designed to treat dementia are proving to be not really effective and that "might be because we're detecting the brain damage too late."

Often, people don't come in for help until their neurons are already dead.

"We can do compensation therapies to delay disease progression, but once brain cells are dead, we can't get them back," Kielar added.

This technique could allow patients to get ahead of the damage.