



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Tuesday 20190618

Diarrhoea outbreak

Diarrhoea outbreak in Punjab village (The Hindu: 20190618)

<https://www.thehindu.com/news/cities/kolkata/diarrhoea-outbreak-in-punjab-village/article28023310.ece>

At least two people have died and over a 100 fallen ill in the past three days after a reported outbreak of diarrhoea at Bathonian Khurd village in Patiala district.

Two patients, suffering from acute stomach illness on account of contaminated water, have died at the Rajpura civil hospital. Eighteen-year-old Preeti died last Saturday while Satwinder Singh, 30, died on Sunday.

Post-mortem reports

A civil surgeon at the hospital, Harish Malhotra, said the post-mortem reports were awaited and anything definite could be said only after that.

As the number of patients suffering from diarrhoea started increasing, health officials on Monday organised an outreach camp at Bathonian Khurd and surrounding villages to treat people.

Local health officials said about 90 cases of diarrhoea were reported on Sunday while 30 more cases surfaced on Monday in and around Bathonian Khurd village.

Encephalitis rises to 104

Death toll in Muzaffarpur due to encephalitis rises to 104(The Hindu: 20190618)

<https://www.thehindu.com/news/national/other-states/death-toll-in-muzaffarpur-due-to-encephalitis-rises-to-104/article28022564.ece>



Bihar schools to remain shut till June 24 as heatwaves, separately, claim 90 lives

The number of children who have succumbed to suspected Acute Encephalitis Syndrome (AES) in Bihar's Muzaffarpur rose to 104 on Monday even as the National Human Rights Commission issued notices to the Union Health ministry and the State government over the increasing number of deaths due to encephalitis.

Separately, the State government ordered the closure of all schools till June 24 as it tries to minimise the toll from a heatwave that has claimed as many as 90 lives till Monday. In Gaya, the district administration enforced Section 144 of the Code of Criminal Procedure to ensure people stay indoors and are not exposed to the blistering heat.

Chief Minister Nitish Kumar held meeting with top State and health department officials to take stock of the situation soon after his return from New Delhi. Earlier, Mr. Kumar had announced an ex-gratia of ₹4 lakh to the families of those who had died due to encephalitis and heat stroke in the State.

A team of doctors from the All India Institute of Medical Sciences (AIIMS) is likely to visit Muzaffarpur on Tuesday to monitor the treatment of children hospitalised with AES.

Meanwhile, the death toll due to heat stroke in the districts of the State's Magadh region including Aurangabad, Nawada, Gaya, Jehanabad, Rohtas and Arrah climbed to almost 90.

“Though there is no official figure on this yet, but, yes not less than 90 people have died in these districts in last four days due to intense heatwave,” said a health department official, speaking on condition of anonymity. Aurangabad and Gaya have been worst hit. State health minister Mangal Pandey visited the government hospital in Gaya and met patients suffering from heat stroke. More than two dozen people have died in Gaya district alone due to the heatwave.

Gaya district magistrate Abhishek Singh also issued prohibitory orders under Section 144 to compel the public to stay indoors in order to avoid the heatwave. The district administration also banned construction and other outdoor activities that involve intense manual labour between 11 a.m. and 4 p.m. in the district. “Any work related to MGNREGA too will not be done after 10:30 a.m.”, the Gaya district administration said in its order.

“Situation in other districts of south-west Bihar too is alarming as government hospitals there are crammed with patients suffering heat stroke,” the health department official added.

For the last four days, south-west parts of Bihar, including Patna, have been reeling under 45° Celsius heat and meteorology department official Anand Shankar told The Hindu over phone that “heatwave is likely to continue in these districts until June 22... after that some rain showers may bring in some relief.”

Health Care Services

Doctors’ strike: nearly 3,000 elective surgeries postponed in Mumbai (The Hindu: 20190618)

<https://www.thehindu.com/news/cities/mumbai/doctors-strike-nearly-3000-elective-surgeries-postponed-in-mumbai/article28023693.ece>

Patients queue up at the OPD section of the State-run JJ Hospital in Mumbai on Monday, after private hospitals shut their OPDs in support of the strike on Monday.

Patients queue up at the OPD section of the State-run JJ Hospital in Mumbai on Monday, after private hospitals shut their OPDs in support of the strike on Monday. | Photo Credit: Arunangsu Roy Chowdhury

Protesters demand Central legislation for their protection

An estimated 3,000 major and minor elective surgeries were postponed in Mumbai on Monday due to the nationwide doctors’ strike in protest of the recent assault on doctors in West Bengal.

Most private Out Patient Departments (OPDs) remained shut, but emergency, casualty and in-patient services functioned across A resident doctor at KEM Hospital in Lower Parel administers polio drops to a child on Monday.

A resident doctor at KEM Hospital in Lower Parel administers polio drops to a child on Monday. | Photo Credit: Arunangsu Roy Chowdhury

“We have received unprecedented support this time and many top corporate hospitals too joined in,” said Dr. Lalit Kapoor, a senior member of the Association of Medical Consultants (AMC), a body of 11,600 doctors from Maharashtra and Karnataka. “We want the law to become stringent so that such incidents are not repeated,” he said.

Mumbai’s top private hospitals like Lilavati, Asian Heart Institute, Jupiter and Fortis, and charitable hospitals like Holy Spirit also supported the strike. “We were fully operational for emergency and in-patient services,” said Sister Sneha, executive director of Holy Spirit Hospital in Andheri. But OPDs, where the hospital gets nearly 600 patients, remained shut. “The hospital deferred 10 elective surgeries,” she said.

All OPDs at Bandra’s Lilavati Hospital, which tends to nearly 1,000 patients, remained shut too. “We did not postpone any surgeries as they would have overlapped with the procedures planned for the next day,” Ajaykumar Pande, vice president of the hospital, said. “Many patients come to the OPDs from outside Mumbai. They were inconvenienced, but we had to be in solidarity with our medical staff,” he said.

Patients struggle at the Thane Civil Hospital on Monday.

Patients struggle at the Thane Civil Hospital on Monday. | Photo Credit: Vibhav Birwatkar

The protesting doctors are demanding Central legislation for protection against violence. “If doctors become paranoid thinking that every other patient or relative may assault them, they cannot function with a calm mind. The self-respect of a doctor is thrashed with that one slap. How can the doctor gather himself up to work again?” Dr. Suhas Pingle, honorary secretary of Indian Medical Association, Maharashtra, asked.

“The government has to prioritise the security of doctors,” he said.

Dr. Mukesh Gupta, president of AMC, said there are always three victims who suffer in such assaults: the doctor, the other health care workers and all patients admitted to the hospital.

Doctors at Maditrina Hospital in Nagpur wear black bands to support the strike.



Encephalopathy - Encephalitis

The litchi link?: on Bihar encephalitis deaths(The Hindu: 20190618)

<https://www.thehindu.com/opinion/editorial/the-litchi-link/article28022573.ece>

In Bihar, authorities failed at several levels in preventing deaths due to encephalopathy

The death of over 90 children in about a month in Muzaffarpur district of north Bihar due to low blood sugar level could have easily been prevented with some foresight and early care. Six years ago, a two-member team invited by the State government suspected that a toxin (methylenecyclopropylglycine, MCPG, also known as hypoglycin A) naturally present in litchi fruit was responsible for the mysterious deaths; a large Indo-U.S team confirmed it in 2017. The two-member team found that undernourished children who ate the fruit during the day and went to bed on an empty stomach presented with serious illness early the next morning. In 2014, the team saved 74% of sick children through a simple intervention — infusing 10% dextrose within four hours of the onset of illness. The recommended prevention strategy — making sure that no child goes to bed without eating a meal — adopted from 2015 ensured a sharp drop in the number of children falling sick. It is appalling that this year the government failed to raise awareness on this strategy. Worse, some doctors came up with alternative explanations for the illness and even pointed to the heat wave.

While the most common causes of acute encephalitis syndrome are traced to a bacteria or a virus and it takes at least a few days before presenting serious symptoms and deaths, the toxin in litchi causes serious problems overnight. While well-nourished children who eat the fruit remain unaffected even if they go to bed on an empty stomach, the under-nourished ones are at grave risk. Blood glucose falls sharply causing severe brain malfunction (encephalopathy), leading to seizures and coma, and death in many cases. This is because under-nourished children lack sufficient glucose reserve in the form of glycogen and the production of glucose from non-carbohydrate source is blocked midway leading to low blood sugar level. This causes serious brain function derangement and seizures. While 5% dextrose infusion serves the purpose in cases of general low blood sugar, children suffering from acute hypoglycaemic encephalopathy can be saved only by infusing 10% dextrose within four hours of illness onset. Recovery is rapid and complete if 10% dextrose is infused within the golden hours. Infusing a higher concentration of dextrose is necessary to completely stop the attempt by the body to produce glucose from non-carbohydrate source. If encephalopathy was indeed the cause of death, this simple medical intervention could have saved many lives. Dextrose infusion could have been done even as children were being transported to hospitals in ambulances. The failures were at the stages of both prevention and care.

Virtual Biopsy Device

Discovery of a Virtual Biopsy Device Can Detect Skin Tumours Non-Invasively (The Hindu: 20190618)

<https://www.news18.com/news/lifestyle/discovery-of-a-virtual-biopsy-device-can-detect-skin-tumours-non-invasively-2190121.html>

The device use sound waves and infrared light to test the stiffness of cells since cancer cells are stiffer than healthy cell

Scientists have developed a 'virtual biopsy' device that can quickly and non-invasively determine whether a skin tumour is cancerous and needs to be removed surgically.

Using sound vibrations and pulses of near-infrared light, the device can determine a skin lesion's depth and potential malignancy without using a scalpel, according to the researchers from a Rutgers University in the US.

The ability to analyse a skin tumour non-invasively could make biopsies much less risky and distressing to patients. Currently, physicians who perform surgical biopsies often do not know the extent of a lesion — and whether it will be necessary to refer the patient to a specialist for extensive tissue removal or plastic surgery — until surgery has already begun.

The first-of-its-kind experimental procedure, called vibrational optical coherence tomography (VOCT), creates a 3D map of the lesion's width and depth under the skin with a tiny laser diode.

It also uses soundwaves to test the lesion's density and stiffness since cancer cells are stiffer than healthy cells. An inch-long speaker applies audible soundwaves against the skin to measure the skin's vibrations and determine whether the lesion is malignant.

"This procedure can be completed in 15 minutes with no discomfort to the patient, who feels no sensation from the light or the nearly inaudible sound," said Frederick Silver, a professor at Rutgers University.

"It's a significant improvement over surgical biopsies, which are invasive, expensive and time consuming," said Silver.

The study found that a prototype device is able to accurately distinguish between healthy skin and different types of skin lesions and carcinomas.

The researchers tested the device over six months on four skin excisions and on eight volunteers without skin lesions.

Further studies are needed to fine-tune the device's ability to identify a lesion's borders and areas of greatest density and stiffness, researchers said, which would allow physicians to remove tumours with minimally invasive surgery

Bihar: Encephalitis

Heat, lack of nutrition, awareness add to AES, Bihar kids toll over 100(The Indian Express: 20190618)

<https://indianexpress.com/article/india/heat-lack-of-nutrition-awareness-add-to-aes-bihar-kids-toll-over-100-5785552/>

On Monday, the National Human Rights Commission (NHRC) sent notices to the central and state governments over reports of increasing AES-linked deaths of children in Muzaffarpur, and sought a report within four weeks.

Explained: What causes AES? What makes Bihar so vulnerable?

Bihar: Encephalitis death toll rises to 103, NHRC points to 'flaw' in vaccination schemes

Bihar: Death toll due to AES rises to 83, Nitish Kumar announces Rs 4 lakh aid

Bihar AES deaths, Bihar encephelatis deaths, bihar children deaths, Muzaffarpur deaths, Acute Encephalitis Syndrome, aes deaths, bihar, aes india,

Children showing symptoms of Acute Encephalitis Syndrome (AES) undergoing treatment at Sri Krishna Medical College and Hospital (SKMCH), in Muzaffarpur (PTI)

FROM THE intense summer heat this year to lack of nutrition programmes, effective awareness campaigns and a full-fledged local health facility.

According to medical experts and officials, these are the key reasons behind a spurt in cases of Acute Encephalitis Syndrome (AES) in north Bihar — from seven deaths in 2018 to 103 so far this year, most of them children below 10 years of age.

On Monday, the National Human Rights Commission (NHRC) sent notices to the central and state governments over reports of increasing AES-linked deaths of children in Muzaffarpur, and sought a report within four weeks.

On Sunday, Union Health Minister Harsh Vardhan visited the Sri Krishna Medical College and Hospital (SKMCH) in Muzaffarpur, from where 85 deaths were reported. Officials said 18 deaths were reported from Kejriwal Matrisadan, a trust-run hospital in Muzaffarpur.

Of the 440 AES-linked hospital admissions so far this summer, 154 patients are under treatment. Most of them hail from low-income families of Muzaffarpur, East Champaran, Vaishali, Sitamarhi and Samastipur. Since the massive outbreak of 2014 that led to 355 deaths in the region, official AES figures show 11 deaths in 2015, four in 2016 and 11 in 2017. And experts say the annual cycle will continue unless urgent steps are taken to address the reasons behind the spike:

SOARING HEAT: Since June 1, the temperature in Muzaffarpur has remained above the 40-degree Celsius mark. Experts cite studies to point out that excessive heat, with no rains in between, has fuelled AES cases. Between 2011 and 2014, there were 970 AES-linked deaths, with heat and humidity emerging as the common element. The number dipped after rains set in, they say. "Heat, humidity, poor hygiene and malnutrition are the key reasons. Multiple studies have failed to come up with any one conclusion but have attributed all these factors to the spread," said Dr Arun Shah, executive committee member, Indian Academy of Paediatrics Association.

NUTRITION PROGRAMMES: The Bihar Health Department appears to have failed in coordinating effectively with Integrated Child Development Services (ICDS) in carrying out nutrition programmes in Muzaffarpur and surrounding areas.

Asked if the government has identified AES-affected areas for such programmes, Bihar Health Minister Mangal Pandey said: “There is no specific or devoted nutrition programme for AES-affected areas. As hypoglycaemia (low sugar levels in blood) is cited as the main reason for AES deaths, we are discussing ways to do it. So far, we are depending on anganwadis to carry out programmes uniformly in all areas under ICDS.”

BEST OF EXPRESS

Draft law seeks 10-year jail, fine of Rs 5 lakh for attacks on doctors

What new ISI chief's appointment signals to world, India

Junior ministers set to get bigger role, files to be routed through them

Paediatrician Shah said: “The liver is a rich source of glycogen in a normal person but not among the poor and malnourished children in the region. They are always borderline cases of malnutrition. Most AES deaths are reported in mornings, which shows that the children went without food the previous night, making sugar levels dip.”

AWARENESS CAMPAIGNS: Health Minister Pandey claimed that awareness campaigns are carried out in March-April, but several Muzaffarpur residents and local experts said they were not conducted over the last few months due to the Lok Sabha elections. Such campaigns usually advise parents to make their children wear full-sleeved cotton clothes, not expose them to the sun, and not allow them to go to bed without food. ORS packets are also distributed. A district official admitted that the administration was not vigilant this time, given the few AES deaths reported in the last four years.

Acute encephalitis syndrome (AES) explained: Definition, cause, and its contrary theories

PRIMARY HEALTHCARE CENTRES: The PHCs, which are the first point of healthcare for most AES patients, are often ill-equipped to deal with AES cases. Most PHCs do not have a glycometer, which is crucial for patients with low sugar levels. By the time the cases are referred to SKMCH, most patients develop complications. SKMCH medical superintendent Dr S K Shahi said: “Most patients come to us via PHCs and private doctors while they should be brought immediately after they show symptoms of vomiting and high temperature.” Union Minister Harsh Vardhan said the Centre would ensure that each PHC in the region would have 10 beds and a glycometer.

NO FULL-FLEDGED HOSPITAL: The SKMCH at Muzaffarpur is not yet fully equipped to deal with AES despite being the designated hospital in the region for treatment. The hospital does not have a virology lab or adequate number of paediatric ICUs. Harsh Vardhan has announced the setting up of a 100-bed children's ward, and work is on to construct seven paediatric ICUs.

On Monday, the Union Health Minister said that an inter-disciplinary, high-quality research team has been set up to work with children suffering from AES. He said five virology labs will be set up in different districts of Bihar.

India population

By 2027, India population to cross China's: UN (The Indian Express: 20190618)

<https://indianexpress.com/article/india/2027-india-population-to-cross-chinas-un-5785565/>

The report stated that in 2019, India has an estimated population of 1.37 billion and China 1.43 billion and by 2027, India's population is projected to surpass China's.

Telling numbers: India population growing as fast as world's, has fewer teen birth and maternal death rates

China population rises 15.23 million in 2018, but rate slows

What is ailing India's anti-population drive?

Following the India-China re-ordering in 2027, the ranking of the five largest countries is projected to remain the same until the end of the century. (File)

In just eight years, India is projected to surpass China as the world's most populous country. According to estimates in a new United Nations report released Monday, India is also expected to add 273 million people by 2050 and will remain the most populated until the end of the century.

The report stated that in 2019, India has an estimated population of 1.37 billion and China 1.43 billion and by 2027, India's population is projected to surpass China's.

The global population is projected to increase by another 2 billion people by 2050, from 7.7 billion in 2019 to 9.7 billion thirty years down the line, according to 'The World Population Prospects 2019' published by the Population Division of the UN Department of Economic and Social Affairs. Between now and 2050, 55 countries are estimated to see their populations shrink by at least one per cent. Incidentally, since 2010, 27 countries have recorded a minimum one per cent reduction in population. This trend of a growing number of countries experiencing a decline in population has been attributed to sustained low levels of fertility and, in some cases, high rates of emigration. In China, the largest of these 55 countries, the population is projected to shrink by as much as 2.2 per cent or 31.4 million by 2050. In the same period, India is expected to add 273 million people more to its headcount. India leads the set of nine countries that will make up for more than half the projected growth of the global population by 2050.

Following the India-China re-ordering in 2027, the ranking of the five largest countries is projected to remain the same until the end of the century.

India is expected to remain the world's most populous country with nearly 1.5 billion inhabitants, followed by China at 1.1 billion, Nigeria with 733 million, the United States with 434 million, and Pakistan with an estimated population of 403 million.

Overall, it states, the world's population is ageing, with the age group of 65 and above growing at such a fast rate that by 2050, one in six people in the world will be part of it as compared to one in 11 in 2019. By the end of the century, the world population is set to peak at a level of about 11 billion.

Low Blood Sugar and AES

Explained: What causes AES? What makes Bihar so vulnerable? (The Indian Express: 20190618)

<https://indianexpress.com/article/explained/acute-encephalitis-syndrome-low-blood-sugar-bihar-5785453/>

Most deaths due to Acute Encephalitis Syndrome in Bihar's Muzaffarpur this year have been attributed to hypoglycaemia. Why does blood sugar drop in AES patients? What makes this region so vulnerable?

Tip for Reading List: When race is taken as 'science'

Countries reducing n-warheads but modernising arsenals: report

New ISI chief Lt General Faiz Hamid: his rise to post, what his appointment signals to world, India

Explained: What causes AES? What makes Bihar so vulnerable?

One of many children admitted at SK Medical College, Muzaffarpur. (Express Photo: Santosh Singh)

In the outbreak of acute encephalitis syndrome (AES) in Bihar, which has witnessed close to 350 cases and 103 deaths until Monday evening, most of these deaths have been attributed to hypoglycaemia, or low blood sugar. Hypoglycaemia is a commonly seen sign among patients of AES, and the link has been the subject of research over the years.

What causes AES?

Advertising

AES is a broad term involving several infections, and affects young children. The syndrome can be caused by viruses, bacteria or fungi. In India, the most common cause is the virus that causes Japanese encephalitis (JE). Health Ministry estimates attribute 5-35% of AES cases to the JE virus.

In Bihar, the Directorate of Health Services (DHS) claimed that the JE virus had caused only two of the AES cases this year (this assessment came at a time when the total cases were 342). The syndrome is also caused by infections such as scrub typhus, dengue, mumps, measles, and

even Nipah or Zika virus. In the latest outbreak in Muzaffarpur, the cause is yet to be clinically identified in most of the children.

How is hypoglycaemia linked to AES?

The combination of AES with hypoglycaemia is unique to Muzaffarpur, Vietnam and Bangladesh. “Hypoglycaemia is not a symptom but a sign of AES. In Bihar, convulsions in children (which is AES) are found in combination with hypoglycaemia. This hypoglycaemia is caused by malnourishment and lack of proper diet,” said Dr Kavinder Sinha, former Director of Health Services in Bihar. With 98% of AES patients in Bihar also suffering hypoglycaemia, doctors are attributing deaths to the latter. A 2014 study in Muzaffarpur by Dr Arun Shah and T Jacob John suggested that hypoglycaemia was the trigger that led to diagnosis of encephalitis.

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What explains the connection?

In 2014, a research paper, ‘Epidemiology of Acute Encephalitis Syndrome in India: Changing Paradigm and Implication for Control’ drew a parallel between cases in Bihar’s Muzaffarpur and in Vietnam’s Bac Giang province. In both places, there were litchi orchards in the neighbourhood. “The possible association with some toxin in litchi or in environment needs to be documented. Methylene cyclopropyl glycine (MCPG) which has been known to be a content of litchi fruit has been shown to cause hypoglycaemia in experimental animals,” the study said.

Dr Sinha said when litchi harvesting starts in May, several workers spend time in the fields. “It is common for children to feed on fallen litchis and sleep without food. The toxin in litchi lowers blood sugar level during night, and these children are found unconscious in the morning,” Dr Sinha said.

Junior ministers set to get bigger role, files to be routed through them

However, this remains a subject of debate. “If toxins from litchi were causing hypoglycaemia, then these cases should have remained consistent each year and affected children of all socio-economic strata. This year, all deaths have all been recorded in the lower income groups,” said Dr Ragini Mishra, Bihar state surveillance officer. She added that while the cause of AES is still being researched, hypoglycaemic AES may be caused by malnutrition, heat, lack of rain, and entero-virus.

Read | Heat, lack of nutrition, awareness add to AES, Bihar kids toll over 100

What is the history of AES in this region?

The first AES case was recorded in 1995 in Muzaffarpur. Eastern UP too sees frequent outbreaks. There is no fixed pattern, but a year with high temperature and scanty rain usually witnesses high cases. “Last year we had very few cases (in Muzaffarpur). A few days of high temperature was usually followed by rain showers. This year, the heat has been prolonged with no spells of rain,” said Dr Mishra. There were 143 deaths in 2013 and 355 in 2014, which dropped to 11 in 2017 and 7 in 2018.

What makes this region so vulnerable?

Malnutrition is high in both states, and malnourished children are prone to infection. Ministry of Health and Family Welfare data show UP and Bihar together account for over 35% of child deaths in country. National Family Health Survey-4 data show that in 2015-16, 48% children aged less than five in Bihar were stunted — the highest in India.

A team from the Centers for Disease Control, Atlanta, and Christian Medical College, Vellore, has concluded that heat, humidity, unhygienic conditions and malnutrition, unique to these areas, together contribute to the rise in AES. Incidence is higher in litchi fields around which malnourished children live.

How is the government tackling AES?

The Bihar government introduced free vaccines at all primary health centres. The current coverage is 70%. The central and state governments have conducted awareness campaign since February asking people not to expose their children to sun, ensure a proper diet and increase fluid intake. Dr R D Ranjan, DHS director, said early hospital referral and standard treatment for convulsions, high fever and vomiting can save lives.



NHRC notice

NHRC notice to Bihar on child deaths, toll 103(The Tribune: 20190618)

<https://www.tribuneindia.com/news/nation/nhrc-notice-to-bihar-on-child-deaths-toll-103/789380.html>

Seeks report from Centre too I Vardhan promises five virology labs in Muzaffarpur

Children undergoing treatment at Sri Krishna Medical College and Hospital.

The National Human Rights Commission (NHRC) on Monday issued a notice to the Bihar government and the Union Health Ministry seeking a report on the growing number child deaths caused by the encephalitis virus in the state's Muzaffarpur district.

The NHRC has taken suo motu cognisance of media reports about the rising number of deaths of children due to Acute Encephalitis Syndrome (AES) in Muzaffarpur since the past few days. The human rights body said the Bihar encephalitis death toll had reportedly gone up to 103 by Monday. It is also reported that, apart from Muzaffarpur, some other districts of the state have also been affected.

The Commission has sought a detailed report in the matter, including the status of implementation of the National Programme for Prevention and Control of Japanese Encephalitis Virus/ Acute Encephalitis Syndrome and other steps taken to deal with the current grim situation. It also wanted to know about the status of the treatment being provided to the hospitalised children and the relief provided by the state to the aggrieved families. The response to the notice is expected within four weeks.

The Commission has observed that in spite of reported measures taken by the government agencies, deaths of children in such a large number point to possible flaws in implementation of the vaccination and awareness programmes. Not only vaccination but all precautionary measures, such as cleanliness and hygiene, among others, are also required to be taken sincerely to ensure that children do not fall prey to the fatal disease, it observed.

Meanwhile, Health Minister Harsh Vardhan today said five virology labs would be set up in Muzaffarpur to address the challenge of child deaths due to AES and Japanese Encephalitis.

The minister has directed a high-level multi-disciplinary team to be sent to Bihar immediately. "To establish the cause of the disease, there is urgent need for an inter-disciplinary, high-quality research team. The research team shall work with the children suffering from encephalitis," he said.

'Flaw in vaccination'

The NHRC has observed that despite reported measures taken by govt agencies, deaths of children in such a large number indicate a 'possible flaw' in implementation of vaccination and awareness programmes

Brain-stroke'

Every 20 seconds, 1 Indian suffers a brain-stroke'(The Tribune: 20190618)

<https://www.tribuneindia.com/news/health/-every-20-seconds-1-indian-suffers-a-brain-stroke/788381.html>

Personal care products harmful for children: Study

TikTok suicide, PUBG death: Here's how to fight digital addiction

Braces won't guarantee happiness, self-confidence

A labour of love

Breathe easy with yoga

'Every 20 seconds, 1 Indian suffers a brain-stroke'

The lifetime risk of stroke after the age of 55 is 1 in 5 for women and 1 in 6 for men.

Every 20 seconds, one Indian suffers a brain stroke, or three every minute, and the numbers are increasing alarmingly due to changing lifestyles.

At this rate, around 1.54 million Indians are affected by strokes every year and the worse is 90 per cent of stroke patients failed to reach hospital on time.

The lifetime risk of stroke after the age of 55 is 1 in 5 for women and 1 in 6 for men.

These revelations came at the ongoing 3-day Fourth Congress of Society of Neuro Vascular Intervention (SNVICON) Mumbai 2019, with international participation, here on Saturday.

Prominent speakers said the message was simple but alarming - that in India, the numbers of brain strokes are increasing and it would not be wrong to say they are "life-style related".

Two top Bollywood actors - Jackie Shroff and Sanjay Dutt - came out in support of India's neurological fraternity to spread the message and awareness that "stroke is beatable".

Breach Candy Hospital's Senior Consultant Neurosurgeon and Interventional Neurosurgeon Dr Anil P. Karapurkar said that like a healthy heart, a healthy brain is important, for which precautions need to be taken.

"In case of a heart attack, it is either you are gone or you recover. In case of a brain stroke, you may be gone, you may recover and come to normal, or you become dependent for life," Karapurkar warned.

He explained that in case of a heart attack, there are half a dozen basic symptoms such as chest pain, breathlessness, pain in left shoulder and upper abdomen, but in case of strokes, symptoms may vary depending on which side of the brain is affected.

"Stroke is a sudden loss of function of a part of the body. It can happen out of the blue. The simple rule to follow in case of a stroke is - 'BE FAST' - Balance, Eyes, Face, Arms, Speech, Time," he advised.

If a person suffers from problems in balancing, hoarseness in voice, sudden loss of vision, drops an object, giddiness, the first thing is to rush him to hospital without wasting time.

Karapurkar cautioned that treatment for brain strokes cannot start at home and a CT Scan or a MRI Scan is necessary, and since 2015, doctors follow a protocol of CT plus angio or MRI plus angio to tackle such cases.

The neurological fraternity is now contemplating launching a massive outreach programme with family doctors and general practitioners to create more awareness about how to deal with brain stroke emergencies.

Some of the other prominent speakers included medicos P. S. Ramani, Dileep R. Yavagal, Orlando Diaz, Abhidha Shah, Sukhdeep Khawar, Philippe Mercier and Nitin N. Dange.

The SNVICON also saw the latest technologies being deployed for treatment of stroke. A new web device was also launched.

Some of the major subjects covered are neurovascular anatomy, understanding of cerebral artery and 3D anatomy to understand a person's condition and treatment better, 3D spine vascular anatomy as a booming field with more to come. — IANS

Pregnancy

A labour of love (The Tribune: 20190618)

<https://www.tribuneindia.com/news/health/a-labour-of-love/787929.html>

Prenatal yoga through simple asanas and breathing and relaxation methods can ease problems during labour pains and promote a natural birth

Also in this section

Personal care products harmful for children: Study

TikTok suicide, PUBG death: Here's how to fight digital addiction

Braces won't guarantee happiness, self-confidence

'Every 20 seconds, 1 Indian suffers a brain-stroke'

Breathe easy with yoga

A labour of love

Previous ImageNext Image

Dr Ritambhara Bhalla

Yoga is an ancient scientific system of physical and mental practices. It remains significant even in modern times. From lifestyle problems to natural processes like pregnancy, yoga is beneficial. Many of us erroneously believe that stretching or exercising during pregnancy should be avoided. However, prenatal yoga through simple asanas and breathing and relaxation methods help to alleviate pain during labour and promote a natural birth.

Benefits during and after pregnancy

Yoga can help you prepare your body and mind for labour and the birthing process. It is an effective way to keep your body active and supple during and after pregnancy.

Benefits during pregnancy

Prenatal yoga offers many benefits to expectant mothers and developing babies. Research has shown that prenatal yoga can alleviate stress, reduce anxiety, build up strength, enhance sleep, augment flexibility and bolster muscles vital for childbirth. In addition to these benefits, it can also help in minimising nausea, headaches, breathlessness, etc. Most significantly, prenatal yoga can substantially lower the risk of premature labour, hypertension and intrauterine growth restriction.

Benefits of prenatal yoga

Breathing: Yoga can help you tailor your breathing to do a range of activities. Yoga prepares you for labour, helping you breathe consciously, relaxing your muscles and channelling your pain through paced pranayamas.

Pelvic floor strengthening: The pelvic floor is a canopy of muscles that line the pelvis. This muscular band plays a critical role within the female reproductive system, supporting a baby all the way through pregnancy. Pregnancy can cause a strain on the pelvic floor, weakening its muscles as the foetus grows. A weak pelvic floor could lead to urinary incontinence, constipation, irritable bowels, reduced libido, painful intercourse, abdominal pain and uterine prolapse. In light of these factors, it is important that these muscles be fortified through scaled exercises during pregnancy. With yoga, this is possible.

Posture: The centre of gravity shifts as pregnancy advances. Luckily, your back and abdominal muscles have you covered, balancing each other out to hold you upright. Sometimes, weak abdominal muscles can cause unnecessary strain on the lumbar region, giving rise to aches and pains. Pregnancy unwittingly expands these abdominal muscles. The chakrasana is a wonderful asana to bolster your abdomen and deepen your core. Prenatal yoga exercises can also pave the way for you to regain your pre-pregnancy body after childbirth.

Feet: As a result of the postural shift that often occurs during pregnancy, the feet are left to support an inordinate amount of weight. The natural movement of the feet may be hampered as a result, leading to swelling, cramping, pain, varicose veins and weight gain. Prenatal yoga can help prevent these problems.

Hips: Much of the baby weight that you gain during pregnancy can hinder your flexibility. Through yoga, you can regain much of your lost flexibility, creating a cushion for the muscles and bones that fringe your hips.

Yoga helps you in dealing with the common problems like morning sickness and mood swings and ensuring smoother and easier delivery, and faster recovery after childbirth. So, if you want to make your pregnancy and childbirth a peaceful and easy journey, you must go for a prenatal yoga class during and after your pregnancy. Look for a prenatal yoga program where you are comfortable with the activities, style, and the yoga class environment. Always remember doing “Lamaze” which is a simple breathing yoga techniques, it always encourages you to be active throughout your pregnancy and increases your sense of wellbeing.

All yoga exercises should be started pre-pregnancy so as to have the best result during pregnancy. Do not start exercise for the first time in the first trimester except the breathing exercises.

Some easy prenatal asanas

Marjaryasana & bitilasana (cat and cow pose): It strengthens the spine and eases back pain.

Virbhadrasana (warrior pose): It is good for entire body. It works the back, chest and hip muscles.

It is a great pose for strengthening lower body as well.

Trikonasana (triangle pose): It eases pregnancy-related digestive disorders. It is better to start this asana 20 weeks and beyond.

Utkatasana (chair pose): It helps in strengthening hips and thighs.

Titli asana (butterfly pose): It is good for perineal muscle strength.

Vajrasana (thunderbolt pose): It helps to improve digestion and prevents constipation.

Tadasana (palm tree pose): It is good for relaxation and helps to loosen the spine.

Prasarita balasana (wide knee child's pose): It helps in relieving belly weight.

Poses to avoid

Over-stretching

Twists especially around the belly

Jumps

Weight lifting

Fast breathing

Inversions

Backbending

Abdominal work

— The writer is a gynaecologist and obstetrician, Cloudnine group of hospitals, Chandigarh

Yoga and Physical Fitness

Breathe easy with yoga (The Tribune: 20190618)

<https://www.tribuneindia.com/news/health/breathe-easy-with-yoga/787928.html>

Yoga can help ease COPD and provide long-term benefits for lung health

Personal care products harmful for children: Study

TikTok suicide, PUBG death: Here's how to fight digital addiction

Braces won't guarantee happiness, self-confidence

'Every 20 seconds, 1 Indian suffers a brain-stroke'

A labour of love

Breathe easy with yoga

Breathe easy with yoga

Breathe easy with yoga

Previous ImageNext Image

Chronic Obstructive Pulmonary Disease (COPD) is a set of inflammatory diseases that obstruct the airflow from the lungs and cause difficulty in breathing. COPD is today the largest cause of deaths in India after heart disease.

According to the Global Burden of disease study 2018, COPD claimed almost 1 million lives in India in 2017. Progressive conditions like chronic bronchitis, emphysema, refractory asthma contribute most to the COPD burden. Long-term exposure to tobacco, indoor or outdoor air pollution and particulate matter is associated with the development of this disease.

Unfortunately, COPD is an incurable condition which worsens over time and symptoms include difficulty in breathing, excess mucus production and wheezing.

The modern medicine treats COPD by using bronchodilators and steroids. On the other hand, a naturopathy-based approach involves stress management, yoga and lifestyle changes that can offer a more holistic solution. Unlike medicines which only manage symptoms, yoga also helps in improving long-term lung function thereby helping reduce the progression of the disease. Adopting a naturopathy based approach can help patients reduce their dosage of drugs. It is

also a highly cost-effective way to manage the condition. As deteriorating air quality becomes a major contributor to rising incidence of COPD in India, the importance of naturopathy and yoga-based approach must be encouraged.

Yoga is an excellent remedy for COPD. It helps lower the blood pressure, reduce stress, improve fitness, loosen the mucus and facilitate its passage through the airways. It also helps in controlling your breathing and trains you to help use your lungs fully.

Globally, experts are accepting the importance of yoga in improving lung function and relieving symptoms in patients with COPD. A study conducted at the Vermont Lung Center at the University of Vermont, USA, showed that yoga breathing exercises like prayanama helped increase lung function and breathability in COPD patients.

Yogic kriyas that can help

Yogic kriya are cleansing rituals that help clear up the airways and flush out the mucus. These should be performed in conjunction with the aforementioned asanas for effective relief from COPD symptoms.

Pranayama: Pranayama is a set of breathing exercises that allow the performer to enhance the use of his/her lungs' capacity. Anuloma/viloma or alternate nostril breathing exercise is a popular breathing exercise or pranayam that helps regulate breathing and improves lung function. Similarly, kapalbhati is another breathing technique that improves the efficiency of the muscle involved in breathing. It also removes impurities from the respiratory tube.

Kunjali kriya: Boil water with cardamom and fennel seeds. Once it cools down, add salt to the solution. Quickly gulp it down without pausing in between. It may taste unpleasant, but this is how it needs to be done to clear out the mucus and open up the airways. Lean forward, and use your index and middle fingers to rub the back of your tongue till you feel the urge to vomit. Make sure you keep vomiting until your stomach is empty. Do not eat anything for half an hour, and when you do, make sure that you stick to food that is easily digestible. Practice this kriya twice a week to alleviate your symptoms.

Jal neti kriya: Prepare lukewarm salt water, and pour it into the neti pot. Insert the spout of the pot into one of your nostrils, and slowly tilt your head to the other side. While pouring the water through nostrils, breathe through your mouth. The salt water will enter one nostril and run out the other. Repeat the process from the other nostril. Once you finish, dry your nose by performing kapalbhati.

Important tip: It is essential that you perform these asanas and kriya under the supervision of a trained instructor until you master them. You will start to experience relief from COPD symptoms in just a few weeks.

Asanas beneficial for COPD patients

Tadasana: Stand erect with the feet together. Look in front at the eye level and interlock your fingers. While inhaling, raise the hands and stretch your heels up. Turn the palms upward.

Maintain this position with normal breathing for 15 to 20 seconds. Bring the hands down while exhaling.

Anuvittasana: This is to be done right after tadasana. Stand erect and keep your feet together. Place your palms on your lower back. Press your feet, pull up your kneecaps, and squeeze your hips and thighs. Press your hips forward and arch your torso backwards. If you feel safe, then let your head drop all the way back. Hold the position for 4 to 5 breaths or seconds. To release, keep your arms, legs and hips strong as you rise back up, and make sure your head and neck are the last to become vertical.

— The writer is chief yoga officer, Jindal Naturecure Institute, Bengaluru

Anti-malaria drug

Anti-malaria drug may prevent hereditary hearing loss: Study (The Tribune: 20190618)

<https://www.tribuneindia.com/news/health/anti-malaria-drug-may-prevent-hereditary-hearing-loss-study/787875.html>

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'Every 20 seconds, 1 Indian suffers a brain-stroke'

A labour of love

Anti-malaria drug may prevent hereditary hearing loss: Study

Photo for representation only.

A widely-used anti-malaria drug may help prevent hearing loss caused by heredity and genetic disorders, a study has found.

Researchers from Case Western Reserve University in the US conducted a study on zebrafish with a commonly used anti-malarial drug called artemisinin.

They found that the drug can help sensory cells of the inner ear recognise and transport an essential protein to specialised membrane using established pathways within the cell, which will help improve and restore hearing.

The ability to hear depends on these proteins reaching the outer membrane of the sensory cells in the inner ear which may be hindered due to certain types of mutations in the protein due to hereditary disorders, which prevent it from reaching those membranes.

The sensory cells of the inner ear are covered by hair-like projections, called hair cells, on the surface.

These hair cells convert vibrations from sounds and movement into electrical signals that are conveyed through the nerves and translated in the brain into information for hearing and balance.

The genetic mutation of the protein—clarin1—makes hair cells unable to recognise and transport the signals to the membrane and gets trapped inside the hair cells where they are harmful to the cells.

This faulty secretion of clarin1 most commonly occurs in the Usher syndrome, which causes hearing and vision loss.

The study, published in the Proceedings of the National Academy of Sciences (PNAS), found that artemisinin restores cell function of the inner ear—and thus hearing and balance—in genetically engineered zebrafish that have human versions of the essential hearing protein.

"We knew mutant protein largely fails to reach the cell membrane, except patients with this mutation are born hearing. This suggested to us that, somehow, at least a fraction of the mutant protein must get to cell membranes in the inner ear," said Kumar N Alagramam from Case Western Reserve University.

"If we can understand how the human clarin1 mutant protein is transported to the membrane, then we can exploit that mechanism therapeutically," Alagramam said.

The team searched for any unusual secretion pathways mutant clarin1 could take to get to hair cell membranes and created several new zebrafish models where they swapped the genes encoding zebrafish clarin1 with human versions—either normal clarin1, or clarin1 containing mutations found in humans with Usher syndrome.

"Using these 'humanized' fish models, we were able to study the function of normal clarin1 and, more importantly, the functional consequences of its mutant counterpart," said Alagramam.

The study found that majority of the mutant clarin1 got trapped in a network of tubules within the cell which helped proteins, including clarin1 to reach their destinations.

Based on this finding, they realised that liberating the protein from the tubules would be the solution they were looking for.

After testing with different drugs, they came to the conclusion that artemisinin was effective in helping the mutant clarin1 to reach the membrane and improved hearing and balance.

"Our report highlights the potential of artemisinin to mitigate both hearing and vision loss caused by clarin1 mutations. This could be a re-purposable drug, with a safe profile, to treat Usher syndrome patients," said Alagramam. — PTI

Health Care

Services hit across Delhi-NCR as private doctors join protest (Hindustan times: 20190618)

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

: Major corporate hospitals and private clinics in the National Capital Region (NCR) on Monday joined the nationwide strike called by the Indian Medical Association (IMA). This is the first time that private clinics in the area have responded to the call.

The stir in private clinics and hospitals was in addition to routine services being severely affected in almost all government hospitals across Delhi-NCR due to the strike. As a result, patients who can normally opt for the more expensive private hospitals struggled to get treatment as well.

In Delhi, the 700-bed Indraprastha Apollo Hospital had shut almost all its outpatient departments (OPDs). “All the emergency services, however, were running,” said a hospital spokesperson. Another prominent private hospital, Max Super Speciality Hospital, also had some OPDs shut, a spokesperson said.

In Gurugram, doctors boycotted non-essential health services in private hospitals as well as the city’s biggest government hospital — Civil Hospital.

Even though the OPDs wore a deserted look across Delhi-NCR, emergency, intensive care unit, casualty and the labour room in most hospitals continued to function normally. See page 6

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Encephalitis

Encephalitis toll hits 103, CM announces free medical aid (Hindustan times: 20190618)

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

Centre to send another team; Nitish holds meeting with health, disaster departments

From page 1 MUZAFFARPUR: With the death of six more children on Monday, Acute Encephalitis Syndrome (AES) has so far claimed the lives of 103 children in Muzaffarpur and its adjoining areas in north Bihar, the Muzaffarpur district magistrate said.

Children protest against AES outbreak outside Bihar ■ Bhawan in New Delhi on Monday.

Of these, 85 children died at Sri Krishna Medical College and Hospital (SKMCH), and 18 children at Kejriwal Maternity Clinic since the outbreak of AES, which causes inflammation of the membrane of the brain that leads to sudden onset fever that can cross 104 degrees F, headache, disorientation, tremors, convulsions and paralysis. If the symptoms are not treated

within hours of the first few appearing, 30% of those affected die. AES usually affects very young children who are severely malnourished.

“This year has been the worst outbreak of encephalitis cases in the state. Many of the children with the symptoms of AES or JE [Japanese Encephalitis] notably reported convulsion coupled with high fever died of hypoglycaemia, a condition of low blood sugar,” said Dr Gopal Shankar Sahni, the head of paediatric department, SKMCH, where most of the children with AES are being treated.

The deaths were confirmed by SKMCH superintendent, Sunil Kumar Shahi, and civil surgeon, Dr S P Singh. Chairing a high-level meeting to take stock of situation, chief minister Nitish Kumar announced on Monday that the government would bear the cost of treatment and also reimburse transport charges incurred in ferrying patients referred by primary health centres (PHCs).

Facing Opposition flak, the chief minister convened a review meeting of health, disaster and education departments immediately after his arrival to the state capital from Delhi.

Bihar’s already fragile health care system has been further hit by a doctors’ protest in support of the 24-hour nation-wide strike call by Indian Medical Association on Monday in solidarity with their colleagues in West Bengal.

AES cases have also been reported from Samastipur, East Champaran and Vaishali. “Eleven children with AES have so far been admitted at our health facilities in Samastipur and Vaishali each. Another six cases are admitted in East Champaran,” Manoj Kumar, executive director of Bihar’s State Health Society, said. Bihar’s industry minister, Shyam Rajak, and several leaders from the Janata Dal (United) visited children being treated for AES in SKMCH wards. Bihar CM Kumar had earlier announced an ex-gratia compensation of ₹4 lakh each to families of deceased children.

Union health minister Harsh Vardhan on Monday directed that another high-level multi-disciplinary team of experts be sent to Bihar to establish the cause of disease. He directed the state government to establish a 100-bed paediatric intensive care unit at SKMCH. The state will also come up with five virological labs in different districts within a year.

Social worker, Tamanna Hashmi, has lodged a complaint case with the Chief Judicial Magistrate, Surya Kant Tiwary, against the Vardhan, and Bihar Health Minister, Mangal Pandey, for negligence resulting in the deaths of more than 100 children; apathy in launching awareness campaigns; and flipflops in starting medical research to identify the viruses and other causes that have led to death of children. The CJM heard the complaint and fixed June 24 as the date for the next hearing.

World’s population

World’s population to go up by 2 billion in next 30 years: UN (Hindustan times: 20190618)

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

The world's population will increase to 9.7 billion by 2050, going up by 2 bn from the earlier 7.7 bn, shows a new United Nations report launched on Monday. The global population could reach its peak around the end of the current century, with an estimated population of 11 bn.

India is projected to overtake China as the world's most populous country in next 8 years, according to the report. The global fertility rate, which fell from 3.2 births per woman in 1990 to 2.5 in 2019, will decline further to 2.2 in 2050. India's current total fertility rate stands at 2.2 births per woman.

Nine countries will make up more than half of the projected growth of the global population between now and 2050: India, Nigeria, Pakistan, the Democratic Republic of the Congo, Ethiopia, the United Republic of Tanzania, Indonesia, Egypt and the United States of America.

The population of sub-Saharan Africa is projected to double by 2050, up 99%. Regions that may experience lower rates of population growth between 2019 and 2050 include Oceania excluding Australia/New Zealand (56%), Northern Africa and Western Asia (46%), Australia/New Zealand (28%), Central and Southern Asia (25%), Latin America and the Caribbean (18%), Eastern and South Eastern Asia (3%), and Europe and Northern America (2%). People are growing older due to increasing life expectancy and falling fertility levels, and that the number of countries experiencing a reduction in population size is growing.

“Many of the fastest growing populations are in the poorest countries, where population growth brings additional challenges in the effort to eradicate poverty, achieve greater equality, combat hunger and malnutrition and strengthen the coverage and quality of health and education systems to ensure that no one is left behind,” said Liu Zhenmin, UN Under-Secretary-General for Economic and Social Affairs.

In the poorest of countries, people still live seven years less than the global average.

“In 2019, life expectancy at birth in the least developed countries lags 7.4 years behind the global average, due largely to persistently high levels of child and maternal mortality, as well as violence, conflict and the continuing impact of the HIV epidemic,” says the report.

The World Population Prospects 2019: Highlights, which is published by the Population Division of the UN Department of Economic and Social Affairs, provides a comprehensive overview of global demographic patterns and prospects.

Health Care (The Asian Age: 20190618)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=13209554>

■ Over 40,000 doctors boycott work in Maharashtra, Goa

Healthcare affected across nation as docs go on strike

AGE CORRESPONDENT
NEW DELHI, JUNE 17

Healthcare services were severely affected across the country on Monday as doctors wearing helmets and forming human chains went on a strike in solidarity with their protesting colleagues in West Bengal. Union health minister Dr Harsh Vardhan, meanwhile, said that the government will "revisit" the issue of drafting a central law regarding the safety of medicos at healthcare facilities. The Indian Medical Association (IMA) had given the nationwide call to withdraw non-emergency healthcare services after junior doctors in West Bengal went on a strike against a brutal attack on their colleagues by the relatives of a patient who died during treatment.

Patients and their relatives, caught unaware of the strike, were seen waiting outside various hospi-

▶ **IMA gave nationwide call to withdraw non-emergency healthcare services after junior doctors in Bengal went on a strike against a brutal attack on their colleagues by the relatives of a patient who died during treatment**

tals, appealing to authorities for help as out-patient departments (OPD) remained closed and scheduled surgeries were postponed in many government and private hospitals across the country. Emergency services, however, remained operational.

In the national capital, doctors at government and many private hospitals boycotted work and staged protests. Doctors at the All India Institute of Medical Sciences (AIIMS),

who had earlier decided not to go on strike, too joined the stir after their colleague was allegedly manhandled by a patient's attendants. Members of several resident doctors associations also took out marches on their campuses to lodge protest.

Many patients were aware of the stir on Monday which came after many doctors in Delhi had boycotted work and held demonstrations on Friday and Saturday, but many still turned up at the facilities only to be turned away or wait for long hours.

According to IMA, more than 40,000 doctors in Maharashtra boycotted work. In Goa too, doctors observed the strike and took out a 'silent protest march' to condemn the attack on some of their colleagues in West Bengal. Similar reports came in from other states, including Assam, Bihar, Jharkhand, Odisha, Uttar Pradesh, Tamil Nadu,

Karnataka and Kerala. Dr Vardhan said that the government will revisit this problem and see if it can do something at the central level about drafting any such law.

"It was visited earlier by our law people. This is not a Centre versus state issue, while stressing that the safety of doctors was not debatable. Doctors should not be beaten by anybody in the premises of the hospital or outside and there is no difference of opinion on this," the health minister told reporters outside Parliament.

Asked if any proposal on drafting a central law in this regard can come up in this session of Parliament, Dr Harsh Vardhan said, "This is not something that can be made overnight. It will obviously require time to study. I have to get old records. This matter had come up in 2017 also and deliberations had taken place.

Social Status of Women (The Asian Age: 20190618)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=13209681>

Women who lose their husbands: Do they also give up the right to live?



Archana Datta

focus

■ If we go by numbers, the 2011 Census said that India is home to about 5.6 crore widows, about 7.37 per cent of our female population: the largest in the world

The 2019 election didn't spare anyone — dead or alive! Ishwar Chandra Vidyasagar was dragged into political mud-slinging when his bust was vandalised in a political crossfire.

Dr Sarmila Bose, an Oxford researcher, in an opinion piece, wondered how Vidyasagar could "set an example of enlightened leadership and spearhead very modern reforms against child marriage, polygamy and the mistreatment of widows... being a traditional Sanskrit scholar in a patriarchal society...".

Enfortunably, Vidyasagar, a forgotten icon, reappeared in the Indian consciousness for all the wrong reasons.

Now, much water has flowed after the passage of the widow remarriage act piloted by Vidyasagar in colonial India. Sadly, the social standing of widows

in India in the new millennium has not improved much in the face of conflicting and multiple social expectations and high rates of deprivation. No wonder that successive Census data corroborated that mortality rates have been found to be 86 per cent higher among widows than among married women.

Just a couple of years back, horrifying details unravelled as to how "the dead bodies of widows in government-run shelter homes in Vrindavan are taken away by sweepers at night, cut into pieces, put into jute bags... and this too... after the inmates give money to the sweeper". The traditional holy city, now more known as the "city of widows", brings to its fold a thousand widows in search of salvation and survival. In a book titled *Living Death: Trauma of widowhood in India*, Dr Vasantha R. Parri, a Delhi psychologist and the chairperson of the Institute of Counselling, described their plight as being "physically alive but socially dead".

Well, such spilling of the beans about the "city of temples" brought in its wake several PILs, and in one such PIL, the Supreme Court (SC) in 2012 pulled up the National Commission of Women (NCW) and its Uttar Pradesh counterpart, "for doing nothing... except preparing some reports" and asked for a "roster of widows" in Vrindavan, while in another in 2017, it asked the Centre and the Uttar Pradesh government to take "all steps to rehabilitate them... including the prospects of remarriage to rescue them from the modern-day stigma of widowhood... and also constituted a committee of experts to study the status of widows.

Many recent research



Elderly widows chat while waiting for lunch at Mahila Ashram, a shelter home for widows in Vrindavan some 150 km south-east of New Delhi

—AFP

efforts say that the influx of widows from different parts of India and even from Bangladesh to the ashrams of Vrindavan, Mathura and Varanasi in the hope that, "God will not allow them to starve", remains unabated. An NCW 1992 study also revealed that "the flesh trade flourishes in Vrindavan and Mathura in the full knowledge of the police, the administration, holy men and politicians... and diseases such as tuberculosis, dysentery and STDs are common, but medical help is virtually non-existent... the poor widows save their meagre earnings for their own last rites".

If we go by numbers, the 2011 Census said that India is home to about 5.6 crore widows, about 7.37 per cent of India's female population — the largest in the world. It has 10 per cent of the world's 115 million poor widows. A joint study by the UNPF and HelpAge India in the states of Kerala, Tamil Nadu, Maharashtra, Odisha, West Bengal, Punjab and Himachal Pradesh projected a hike in India's elderly population to about 173 million

by 2026, in which elderly women are likely to outnumber elderly men, which implied a greater number of widows, the study commented. India, however, in tune with its goal of welfarism, does have a number of pension, free food grains distribution schemes, etc

World Widows Day falls on Sunday, June 23

for elderly persons and widows in rural and urban BPL households, which are now mostly done through direct benefit transfer (DBT) to their bank accounts, etc. But many dubbed them as "too meagre in amounts, but bountiful in bureaucratic requirements" which thus made "less than 10 per cent of all widows actually receiving the State's largesse". The Guild's study on "Dimension of poverty of widows in Vrindavan" in 2010 also found that "just a little of over 25 per cent of the widows... only those staying in a home... who have somebody to do the running around and push them through the UP

administration... could avail of such facilities". Another Delhi-based NGO said that "they often don't have any documents to prove their identity and without ID cards, they can neither access any government pension scheme or healthcare."

Of course, widows in

women, which is psychologically unacceptable to most people in patriarchal societies". A women's right activist also rued about the "societal double standard, like when a man loses his wife... nobody asks him to change his lifestyle... he is free to find a new wife... while a woman is cannot live a good life without her husband". However, Arti Dhar, a freelancer who wrote a series of articles on widows, said that "India is going through a transition, when it comes to women... breaking or changing traditions is difficult and time taking...".

Dr Bindeshwar Pathak, the founder of Sulabh International, which has supported more than 850 widows in places like Vrindavan, Varanasi and Gupta-Kasi in Uttarakhnad since 2012, felt that "it is a question of choices... If a widow wants to get remarried, she must be allowed, like other women," and informed that Sulabh had facilitated many such marriages in the past. He said that apart from providing facilities and a helpline, Sulabh is keen "to bring back colours and joy to the

lives of these white-sari clad women, free them from social isolation".

Dr Mohini Giri, the founder and chairperson of the Guild of Service, commented that "stigmatisation of widows is not restricted to any particular part of India... Rather, it is a global issue" and added that "it is a cause of worry that now even a greater number of young abandoned widows, not only from the state of Bengal, but also from other states like UP and MP... are coming for shelter". Dr Giri, however, was categorical that "capacity building and not cash doles" would benefit them in the long run. A 75-year old widow, Savita Chakravarty, now a caretaker at the Guild office in Delhi, who lost her husband at the age of 28, and was an inmate at the Guild's shelter home in Vrindavan for a long time, said that "it was her professional training as a trained nurse that changed the course of her life".

Meanwhile, the 2017 SC-appointed expert committee has come out with several long-term and short-term measures for widows in different situations like those living with families, living independently or in shelter homes, which include prevention of child marriages, protection from domestic violence and promotion of single-woman networks, etc while allowing easy access to social security, health services, legal aid, skill development and systematic monitoring of shelter homes. One can only hope that they are put into action soon.

Now, on a larger canvas, with 288 million widows around the world, nearly one in ten living in extreme poverty, the UN has finally acknowledged the seriousness of the issue, and since 2011, a day — June 23 — has been designated for action for those who remained so far "invisible, uncounted and ignored".

The writer is a former director-general of Doordarshan and All India Radio and a former press secretary to the President of India

AS System (The Asian Age: 20190618)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13210023>

Scientists develop AI system that can see objects using touch

Boston: Researchers at MIT on Monday unveiled an artificial intelligence (AI) system that can visualise by touching and feel by seeing, paving the way for robots that can more easily grasp and recognise objects. While our sense of touch gives us a channel to feel the physical world, our eyes help us immediately understand the full picture of these tactile signals.

Robots that have been programmed to see or feel can't use these signals quite as interchangeably.

To better bridge this sensory gap, researchers from Massachusetts Institute of Technology (MIT) in the US have come up with a predictive AI that can learn to see by touching, and learn to feel by seeing.

The system can create realistic tactile signals from visual inputs, and predict which object and what part is being touched directly from those tactile inputs. They used a robot arm with a special tactile sensor called GelSight. Using a simple web camera, the team recorded

The system can create realistic tactile signals from visual inputs, and predict which object and what part is being touched directly from those tactile inputs

nearly 200 objects, such as tools, household products, fabrics, and more, being touched over 12,000 times. Breaking those 12,000 video clips down into static frames, the team com-

Recent work to equip robots with more human-like physical senses use large datasets that are not available for understanding interactions between vision and touch

plied "VisGel," a dataset of over three million visual/tactile-paired images. "By looking at the scene, our model can imagine the feeling of touching a flat surface or a sharp edge,"

said Yunzhu Li, a PhD student and lead author on a new paper about the system.

"By blindly touching around, our model can predict the interaction with the environment purely from tactile feelings," Li said. "Bringing these two senses together could empower the robot and reduce the data we might need for tasks involving manipulating and grasping objects," he said.

Recent work to equip robots with more human-like physical senses use

large datasets that are not available for understanding interactions between vision and touch.

The technique gets around this by using the VisGel dataset, and something called generative adversarial networks (GANs). GANs use visual or tactile images to generate images in the other modality. They work by using a "generator" and a "discriminator" that compete with each other, where the generator aims to create real-looking images to fool the discriminator. — PTI

Clean Air (Hindustan: 20190618)

http://epaper.livehindustan.com/imageview_79157_49926416_4_1_18-06-2019_i_4.pagezoomsinwindows.php

विज्ञान एवं पर्यावरण केन्द्र ने दिल्ली समेत कई शहरों में प्रदूषण का अध्ययन किया, 'एट द कास रोड' नामक रिपोर्ट में देश के 43 शहरों में प्रदूषण की स्थिति पर चिंता जताई

साफ हवा चाहिए तो दिल्ली 76 फीसदी प्रदूषण घटाए

चेतावनी
बर्ड दिल्ली | संजय कुशवाहा

स्वस्थ हवा में साँस लेने के लिए दिल्ली को 76 फीसदी तक प्रदूषण कम करने की जरूरत है। पर्यावरण के क्षेत्र में काम करने वाली संस्था विज्ञान एवं पर्यावरण केन्द्र ने दिल्ली समेत देश के कई शहरों में तीन साल के औसत प्रदूषण के आधार पर यह निष्कर्ष निकाला है। दिल्ली-पटना और

वेतन को देश के सबसे ज्यादा प्रदूषित शहरों में शामिल किया गया है। यहां पर खासतौर पर शहरी के बीच माइनें लोगों के लिए साँस लेना भी दुख खड़ा है। लेकिन, देश के अन्य शहरों में भी स्थिति कुछ अलग नहीं है।

विज्ञान एवं पर्यावरण केन्द्र ने हाल ही में जारी रिपोर्ट 'एट द कास रोड' में देश के 43 शहरों में प्रदूषण की स्थिति पर चिंता जताई है। इन शहरों की हवा में पीएम-10 की मात्रा सामान्य से तीन से चार गुना तक ज्यादा पाई गई है। हवा में पीएम-10 का मानना औसत 60 माइक्रोग्राम प्रति घन

मीटर से ज्यादा नहीं होना चाहिए। लेकिन, इन शहरों में औसत तौर पर हवा में पीएम-10 का सालाना औसत 200 माइक्रोग्राम प्रति घन मीटर से ज्यादा पाया गया है। इसी आधार पर संभव है अलग-अलग शहरों के लिए प्रदूषण कम करने का लक्ष्य (पोल्सुयन टिकसून टारगेट) निर्धारित किया है। इस आधार पर साफहवा के लिए दिल्ली को 76 तो गाजियाबाद को 77 फीसदी तक प्रदूषण घटाने की जरूरत है।

के लिए प्रदूषण कम करने का लक्ष्य (पोल्सुयन टिकसून टारगेट) निर्धारित किया है। इस आधार पर साफहवा के लिए दिल्ली को 76 तो गाजियाबाद को 77 फीसदी तक प्रदूषण घटाने की जरूरत है।

इस तरह निष्कर्ष निकाला
संस्था ने इस शहरों में वर्ष 2015-2017 में औसत सालाना पीएम-10 स्तर का विश्लेषण किया है। इसी आधार पर प्रदूषण कम करने का लक्ष्य रखा गया है। पीएम-10 की मात्रा इंसानों के शरीर से नीचे खसती जातिगी। स्टीमिंग, वाजिनाबाद में तीन साल के औसत में एक 253 के स्तर पर लगी है। इसलिए गाजियाबाद को सबसे ज्यादा 77 फीसदी तक प्रदूषण कम करने की सलाह दी गई है।

पीएम-10 सेहत के लिए खतरनाक
प्रदूषण का पीएम 10 नहर के लिए बंद रहनेवाला कण कहते हैं। हवा में मौजूद इसकी मात्रा जल के जैसा है। इसी कारण से शरीर में जमाव करती है, और रक्त में हड्डि मजबूत बनाने में मदद करती है। इसके अलावा इसे खर्राटा, आँसू और नाक में जलन जैसी समस्याएं हो सकती हैं।

कहां किरना कम लेना चाहिए प्रदूषण

गाजियाबाद	77%	इलाहाबाद	69%
दिल्ली	76%	आगरा	68%
बाराक	72%	राजी	68%
कानपुर	72%	पटना	67%
बकाद	72%	मेरठ	61%
लखनऊ	71%	फरीदाबाद	43%

दिल्ली-पटना और समेत तमाम शहरों को प्रदूषण कम करने को सार्वजनिक परिवहन पर जोर से लेकर निर्माण कार्यों में धिमा-निंदी को सख्ती से पालन की जरूरत है। ऐसा नहीं होने से द्वितीय स्तर के शहरों में भी प्रदूषण तेजी से बढ़ रहा है।

शुद्धि चार्टरफ्लाइट (विज्ञान एवं पर्यावरण केन्द्र)

इसलिए बढ़ रही समस्या

1. निर्माण कार्यों पर ज़ोर देकर निर्देशों का पालन नहीं। धुएँ, गैस-नीलेटि उभरती रहती है।
2. समय पुराने कार यूके वाहन को सड़क से बाहर करने पर समुचित काम नहीं।
3. सार्वजनिक परिवहन में अभी भी डीजल वाहन का ही खा इस्तेमाल, डीजल जेनरेटर का भी इस्तेमाल।
4. इंटर स्ट्रीट में भारी प्रदूषण, बिग जेब तकनीक पर अभी भी पूरी तरह से अग्रसर नहीं।
5. जगह-जगह कचरा-प्लास्टिक जालने की प्रवृत्ति पर रोक नहीं लग रही।
6. सार्वजनिक परिवहन को नहीं नियंत्रित या रोक है बढ़ता, निजी वाहनों पर जोर।
7. उद्योगों में स्वच्छ ईंधन की कमी ज्यादा प्रदूषण फैलाने वाले ईंधन का ही खा प्रयोग। इसके अलावा गैसों में एली के करण प्रदूषण में इजाजत।

Bimaru Medical System ((Hindustan: 20190618)

http://epaper.livehindustan.com/imageview_79169_50065314_4_1_18-06-2019_i_14.pagezoomsinwindows.php

बीमार चिकित्सा तंत्र में हड़ताल

अच्छा होता कि डॉक्टरों की हड़ताल के बहाने स्वास्थ्य क्षेत्र पर गंभीर विमर्श होता, पर लगता नहीं कि राजनीति की तात्कालिकता से अपर उठकर कोई कुछ करेगा।

पश्चिम बंगाल में पिछले कुछ दिनों से डॉक्टरों के साथ जो कुछ हो रहा है, वह तो देश के किसी हिस्से में कभी भी हो सकता है या कर्मोवेश हर जगह होता रहा है। राजधानी दिल्ली समेत अलग-अलग शहरों में सरकारी या निजी अस्पताल में इलाज के दौरान किसी मरीज की मृत्यु होती है, तो मरीज के साथ भौजूद तीमारदार डॉक्टरों पर इलाज के दौरान लापरवाही का आरोप लगाते हैं और फिर दोनों पक्षों में मारपीट होती है। कभी डॉक्टर घायल होता है, कभी मरीज का कोई साथी या परिवारी। नतीजतन डॉक्टर हड़ताल पर चले जाते हैं। यह हड़ताल एक अस्पताल से लेकर पूरे जिले, प्रदेश या अगर भड़काने वाली राजनीति साथ दे, तो देश भर में फैलाई जा सकती

है। कुछ हड़तालों में न्यायालय के हस्तक्षेप से मामला सुलटा है, कुछ में सरकार की सखी काम आ जाती है, तो कुछ सरकार के समर्पण के साथ वापस होती है।

कोलकाता के एनआरएस मेडिकल कॉलेज और अस्पताल में 10 जून की रात यही सब हुआ। इलाज के दौरान एक चुनुर मरीज की मृत्यु के बाद उसके साथियों ने आरोप लगाया कि बार-बार आग्रह के बावजूद डॉक्टरों ने मरीज को समय से नहीं देखा; और डॉक्टरों के अनुसार, उनके लाख प्रयास के बावजूद जब मरीज नहीं बच सका, तो उसके साथ आए लोगों ने उन पर हमला कर दिया, जिससे कई डॉक्टर गंभीर रूप से घायल हो गए। कुछ तो आज भी अस्पताल में दाखिल हैं।

पश्चिम बंगाल में कुछ महीनों के बाद चुनाव होने हैं और ममता बनर्जी कमजोर विकट पर खड़ी हैं। वह चुनाव जीतने के लिए कुछ भी कर सकती हैं। मरने वाला मरीज सुसलमान था, इसलिए सबसे आसान था इस मामले को सांप्रदायिक रंग देना। उन्होंने यही किया, पर वह भूल गई कि इस बार जिस प्रतिद्वंद्वी से पाला पड़ा है, उसे इस मैदान में शिकस्त देना मुश्किल है। डॉक्टरों को सुखा देने का वादा करने या मार्गोद करने वालों की घर-पकड़ करनी की बजाय उन्होंने डॉक्टरों को ही धमकाना शुरू कर दिया। पहले भी उन्होंने मस्जिदों के इमामों को भत्ते देकर या सिर पर पल्लू ढक नमाज पढ़ने की दिलचस्प कोशिश करके सांप्रदायिक धुवीकरण किया है, पर इससे हालिया लोकसभा चुनाव में उनका नुकसान ही हुआ है। इस बार भी कुछ ऐसा ही हो रहा है। उनके विरोधी पूरे देश के डॉक्टरों की संगठित करने में सफल हो गए हैं।

हड़ताल तो दो-तीन दिनों में समाप्त हो जाएगी, पर वह एक अवसर है, जब हमें समय-समय पर होने वाली ऐसी हड़तालों के पीछे छिपे बड़े कारणों की

राय की राय

विभूति नारायण राय
पूर्व आईएचएर अधिकारी



पड़ताल करने चाहिए। एक समय सेवा से जुड़ा और आदर्श समझा जाने वाला चिकित्सक समाज अब सिर्फ पैसा कमाने वाली मशीन माना जाने लगा है। ज्यादातर निजी अस्पताल लूट और सरकारी अस्पताल अव्यवस्था के लिए बदनमा हो गए हैं। संवेदनहीनता दोनों क्षेत्रों में प्रचुर मात्रा में दिखेगी। मोटी रकम खर्च करके डॉक्टर बनने वालों से अपेक्षा भी यही की जा सकती है कि वे जल्द से जल्द अपना निवेश मय सुद वापस पा सकें। यह एक आम जानकारी है कि गैर-सरकारी मेडिकल कॉलेजों में शुरुआती प्रवेश के लिए लाखों में और यदि परास्नातक पाठ्यक्रमों में दाखिला चाहिए, तो करोड़ों में खर्च करना पड़ता है। इसी तरह, सरकारी मेडिकल कॉलेजों में प्रवेश चाहिए, तो परचा लोक करण से लेकर मुन्ना भाइयों द्वारा परीक्षा दिलाने तक का एक खर्चीला तंत्र है, जिससे गुजरकर बड़ी संख्या में लड़के-लड़कियां इस चक्रव्यूह को पार करते हैं। बहुत कम अभ्यर्थी अपनी प्रतिभा के बल पर डॉक्टरी की पढ़ाई शुरू करते हैं। फिर इसमें किसी को क्यों आश्चर्य होना चाहिए कि कॉलेजों से निकलने के बाद वे एक ऐसी असंवेदनशील भीड़ का हिस्सा बन जाते हैं, जिसके लिए मरीज नोट छापने की मशीन से अधिक कुछ नहीं।

भारत में डॉक्टर को लगभग भगवान का दर्जा मिला हुआ है। ऐसे में, अमतौर से उन पर हमला किसी ऐसे असहाय की प्रतिक्रिया के रूप में देखा जाना चाहिए, जो तंत्र की निरंकुशता और असंवेदनशीलता से हारकर

अपनी आंखों के सामने किसी प्रियजन को मरते देखा है। उसकी हिंसा का समर्थन नहीं किया जा सकता, पर इसे किसी शून्य की उपज भी नहीं कह सकते। इसे भारत के भीड़-न्याय से जोड़ा जाना चाहिए। सड़कों पर अक्सर हमें त्वरित इंसाफ करती भीड़ दिखती है, जिसकी अनुभव जन्य समझ कहती है कि देश में न्याय हासिल करने के सांविधानिक तरीके थकाऊ, उबाऊ और खर्चीले होते हैं। उसे यह नहीं पता कि डॉक्टर की असावधानी या असंवेदनशीलता के लिए किस संस्था के पास जाया जाए। वह इससे भी आरवस्त नहीं है कि वहां जाने पर उसे न्याय मिलेगा ही। मिला भी, तो किस कीमत पर या कितने समय में?

कई बार अपने ऊपर हुई हिंसा के प्रतिकार में जूनियर डॉक्टर मरीजों या उनके तीमारदारों पर टूट पड़ते हैं या उनके प्रतिनिधि संगठन हड़ताल का आह्वान करते हैं। चिकित्सा संस्थाओं में हड़ताल भी एक तरह का हिंसा ही है। किसी भी सभ्य समाज में ऐसी स्थिति नहीं आनी चाहिए कि जीवन-मृत्यु के बीच हिलोरीं खाते मरीज को डॉक्टर देखने से मना कर दें। कई बार हड़ताल के दौरान सामान्य मरीजों के लिए ओपीडी को सुविधाएं तो हड़ताली डॉक्टर प्रदान कर देते हैं, पर मुसीबत तो गंभीर मरीजों को होती है, जिन्हें जीवन रक्षक ऑपरेशन या विशेषज्ञ इलाज की जरूरत होती है और उन्हें देखने वाला कोई नहीं होता। शायद ही डॉक्टरों के संगठन इस हिंसा के खिलाफ आवाज उठाते हैं।

कोलकाता की घटना से हमारा ध्यान सरकारी अस्पतालों में डॉक्टरों और संसाधनों की कमी को तरफ भी जाना चाहिए। देश की तीन-चौथाई जनता इन्हीं पर निर्भर करती है। वे अस्पताल अपनी क्षमता से कई गुना अधिक लोगों को देखभाल कर रहे हैं। एम्स जैसे अस्पताल में तो मरीजों को महीनों बाद की तारीखें मिलती हैं। यदि औसत निकालें, तो इन अस्पतालों में डॉक्टर और मरीज की संगत कुछ मिनटों से अधिक शायद ही हो पाती है। संसाधनों के अभाव और भीड़ से घिरे डॉक्टर के लिए चिड़चिड़ा हो जाना स्वाभाविक है। अच्छा होता कि हालिया हड़ताल के बहाने देश के स्वास्थ्य क्षेत्र पर कुछ गंभीर विमर्श होता, लेकिन लगता नहीं कि राजनीति की तात्कालिकता से ऊपर उठकर कोई कुछ करेगा।

(ये लेखक के अपने विचार हैं)



विशोकन - डी. शीनलस