



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Thursday 20190523

TB, HIV

TB, HIV biggest killers in packed state jails: Study (The Tribune: 20190523)

<https://www.tribuneindia.com/news/punjab/tb-hiv-biggest-killers-in-packed-state-jails-study/776941.html>

Tuberculosis, HIV and Hepatitis-C are the biggest killer in jails in the state. The fact came to the fore in a recent study.

As per a study on custodial deaths conducted by Amritsar Medical College's Department of Forensic Medicine & Toxicology, TB along with HIV and Hepatitis-C was the cause of death in 22 per cent cases, which were recorded as natural deaths.

The study 'A Two-Year Prospective Study of Custodial Deaths from Punjab Region of India' published in Medico Legal Update studied the cause of death of 135 inmates (119 male and 16 female), who died in Punjab jails between October 2014 and September 2016 and were brought to the hospital for postmortem. Of these, 100 (74.07%) died in jail custody, 33 (24.45%) died in mental hospital custody and in two cases (1.48%) death occurred in police custody.

Among 92 cases (out of 135), final cause of death was declared natural (95.65 per cent), while in 4.35%, it was unnatural. Of total 102 cases of judicial/police custody deaths, 53 cases (51.96%) were suffering either from TB, HIV, HCV or multiple infections.

The study found that pulmonary tuberculosis was the most common natural cause among prison custodial deaths (22.8%). In mental hospital custody, coronary artery disease (12.8%) was the leading cause of natural death.

Among natural deaths most were due to pulmonary system involvement, pulmonary tuberculosis being the leading cause. "The main reason behind this was overcrowding, closed living conditions, insufficient ventilation and poor nutrition in Indian jails as compared to western countries," said Dr DR Mittal, who did this work while studying at Amritsar Medical

College and now works as demonstrator at Maharaja Agrasen Medical College, Agroha (Haryana).

The availability of quality healthcare facilities to inmates has also emerged as a big issue in the jails. A total of 104 (77.04%) persons received medical care before their death, while 31 (22.96%) died at their place of confinement and had not received medical care before their death.

Among those dying in jail custody, 50% were convicted prisoners, 47% were undertrials and 3% were internee. When it comes to age group of the victims, the proportion of overall custodial deaths was highest in 26-35 years (26.7%) age group followed by 36-45 years (21.50%) and 46-55 years (16.30%) age groups.

The study has expressed concern over access to various drugs and poisons to inmates inside jail and said “this could not be possible without connivance of jail officials.”

“Those involved in such practices should be warned and strict action needs to be taken. De-addiction and rehabilitation services to addict prisoners and timely medical care to sick ones should be provisioned as a matter of right,” said Dr Mittal.

What needs to be done

There should be regular health check-ups and an effective programme to screen and treat inmates.

Better maintenance of prisons, trained, sensitive and more dedicated staff and de-crowding of prisons are a few of important suggestions to be followed.

Action should be taken against officials conniving with inmates for smuggling of drugs inside the jail.

Food and Nutrition

Have plenty of curd daily to reduce anxiety (The Tribune: 20190523)

<https://www.tribuneindia.com/news/health/have-plenty-of-curd-daily-to-reduce-anxiety/776816.html>

Having probiotics can not only regulate gut bacteria—trillions of microorganisms in the gut which perform key functions in the immune system and metabolism—but also improve brain function and, thus, reduce anxiety, find researchers.

Probiotics are living organisms found naturally in some foods that are also known as "good" or "friendly" bacteria because they fight against harmful bacteria and prevent them from settling in the gut.

Recent research also suggests that mental disorders could be treated by regulating the intestinal microbiota, but there was no specific evidence to support this.

"Gut microbiota can help regulate brain function through something called the 'gut-brain axis,'" found the researchers from the Shanghai Jiao Tong University School of Medicine.

To reach this conclusion, the researchers reviewed 21 studies that had looked at 1,503 people collectively.

The team found that probiotic supplements in seven studies within their analysis contained only one kind of probiotic, two studies used a product that contained two kinds of probiotics, and the supplements used in the other five studies included at least three kinds.

Overall, 11 of the 21 studies showed a positive effect on anxiety symptoms by regulating intestinal microbiota, meaning that more than half (52 per cent) of the studies showed this approach to be effective.

Of the 14 studies that had used probiotics as the intervention, more than a third (36 per cent) found them to be effective in reducing anxiety symptoms, while six of the remaining seven studies that had used non-probiotics as interventions found those to be effective—a 86 per cent rate of effectiveness.

Non-probiotic interventions were also more effective.

Most of the studies did not report serious adverse events, and only four studies reported mild adverse effects such as dry mouth and diarrhoea.

"People who experience anxiety symptoms might be helped by taking steps to regulate the microorganisms in their gut using probiotic and non-probiotic food and supplements," suggested the review of studies published in the journal *General Psychiatry*.

In addition to the use of psychiatric drugs for treatment, "we can also consider regulating intestinal flora to alleviate anxiety symptoms," said researchers.

Childhood adversity

Childhood adversity linked to teen violence, depression: Study (The Tribune: 20190523)

<https://www.tribuneindia.com/news/health/childhood-adversity-linked-to-teen-violence-depression-study/776814.html>

Exposure to adverse events as children—including physical and emotional neglect, violence, and sexual abuse—is strongly associated with adolescent depression and violence perpetrated by young people in poor urban areas around the world, including India, a study has found.

Based in multiple countries across five continents, the study, published in the *Journal of Adolescent Health*, found that boys are suffering even more than girls.

"This is the first global study to investigate how a cluster of traumatic childhood experiences known as ACEs, or adverse childhood experiences, work together to cause specific health issues in early adolescence with terrible, life-long consequences," said Robert Blum, from the Johns Hopkins Bloomberg School of Public Health in the US.

"While we found young girls often suffer significantly, contrary to common belief, boys reported even greater exposure to violence and neglect, which makes them more likely to be violent in return," Blum said.

The study catalogued the ACEs suffered by 1,284 adolescent's aged 10 to 14 in 14 "low-income urban settings" around the world.

It found remarkably common experiences with trauma—and very similar impacts—regardless of where the children lived, which included Vietnam, China, Bolivia, Egypt, India, Kenya, UK and the US.

The report is the first to include an assessment of how adversity impacts young children in multiple low- and middle-income countries, where the vast majority of the 1.8 billion 10- to 24-year-olds worldwide live—about a quarter of the global population.

The study found that 46 per cent of young adolescents reported experiencing violence, 38 per cent suffered emotional neglect and 29 per cent experienced physical neglect.

However, boys stood out in several categories. They were more likely to report physical neglect, sexual abuse and violence victimisation.

For both boys and girls, the more adversity they experienced, the more likely they were to engage in violent behaviours, such as bullying, threatening or hitting someone.

The effect of the adversity was more pronounced for boys than girls, with boys 11 times more likely to be engaged in violence, and girls four times more likely to be violent.

The study also found that, in general, the cumulative effect of their traumas tended to produce higher levels of depressive symptoms among girls than boys, while boys tended to show more external aggression than girls.

The study is part of the Global Early Adolescent Study, a major collaboration of the World Health Organization (WHO) and the Johns Hopkins Bloomberg School of Public Health to

understand more about the development of gender stereotypes in early adolescence and their impact on adolescent health around the world.

It supports a key conclusion from a major new report to be released next week at Women Deliver in Vancouver, Canada based on a global coalition of adolescent health experts: that the world will never achieve gender equality "by focusing on girls and women alone and excluding boys and men."

Female firefighters

Female firefighters more likely to suffer from PTSD (The Tribune: 20190523)

<https://www.tribuneindia.com/news/health/female-firefighters-more-likely-to-suffer-from-ptsd/776804.html>

In the heavily male-dominated firefighting profession, female firefighters are more likely to suffer post-traumatic stress disorder (PTSD) and contemplate suicide, say researchers.

"Because women are such a small number of the population in each fire station, they have been somewhat overlooked when they are included in larger studies and their unique issues are lost," said Consuelo Arbona, Professor at the University of Houston in the US.

"This study begins to explore work and mental health characteristics of women firefighters who make up a population that needs better understanding," Arbona added.

For the study, the research team separately evaluated data from women and men in a large urban fire department and examined their responses against each other.

The research team evaluated the data collected from 2,639 firefighters. Of those, only 75 respondents were women and approximately 20 per cent of them scored positively for PTSD and 30 per cent reported lifetime suicidal ideation.

"Compared to male firefighters, women were at high risk for PTSD symptoms and suicide ideation," the study said.

"Women who had second jobs tended to show higher levels of stress, possibly due to having children at home" said Arbona.

The findings were published in Occupational Medicine Journal. — IANS

Placental stem cells

Placental stem cells can regenerate heart after attack: Study (The Tribune: 20190523)

<https://www.tribuneindia.com/news/health/placental-stem-cells-can-regenerate-heart-after-attack-study/776261.html>

Stem cells derived from the placenta can regenerate healthy heart cells after an attack, according to study conducted in animal models.

The findings, published in the journal Proceedings of the National Academy of Sciences (PNAS), may represent a novel treatment for regenerating the heart and other organs.

"Cdx2 cells have historically been thought to only generate the placenta in early embryonic development, but never before were shown to have the ability to regenerate other organs, which is why this is so exciting," said Hina Chaudhry, from the Icahn School of Medicine at Mount Sinai in the US.

"These findings may also pave the way to regenerative therapy of other organs besides the heart," Chaudhry said.

"They almost seem like a super-charged population of stem cells, in that they can target the site of an injury and travel directly to the injury through the circulatory system and are able to avoid rejection by the host immune system," she said.

The researchers had previously discovered that a mixed population of mouse placental stem cells can help the hearts of pregnant female mice recover after an injury that could otherwise lead to heart failure.

They showed that the placental stem cells migrated to the mother's heart and directly to the site of the heart injury. The stem cells then programmed themselves as beating heart cells to help the repair process.

The new study was aimed at determining what type of stem cells made the heart cells regenerate.

The researchers started by looking at Cdx2 cells, the most prevalent stem cell type in the previously identified mixed population, and found them to comprise the highest percentage (40 per cent) of those assisting the heart from the placenta.

To test the Cdx2 cells' regenerative properties, the researchers induced heart attacks in three groups of male mice.

One group received Cdx2 stem cell treatments derived from end-gestation mouse placentas, one group received placenta cells that did not express Cdx2, and the third group received a saline control.

The team used magnetic resonance imaging to analyse all mice immediately after the heart attacks, and three months after induction with cells or saline.

They found that every mouse in the group with Cdx2 stem cell treatments had significant improvement and regeneration of healthy tissue in the heart.

By three months, the stem cells had migrated directly to the heart injury and formed new blood vessels and new cardiomyocytes (beating heart muscle cells).

The mice injected with saline and the non-Cdx2 placenta cells went into heart failure and their hearts had no evidence of regeneration.

Researchers noted two other properties of the Cdx2 cells: they have all the proteins of embryonic stem cells, which are known to generate all organs of the body, but also additional proteins, giving them the ability to travel directly to the injury site.

This is something embryonic stem cells cannot do, and they appear to avoid the host immune response, researchers said.

The immune system did not reject these cells when administered from the placenta to another animal.

"These properties are critical to the development of a human stem cell treatment strategy, which we have embarked on, as this could be a promising therapy in humans.

"We have been able to isolate Cdx2 cells from term human placentas also; therefore, we are now hopeful that we can design a better human stem cell treatment for the heart than we have seen in the past," said Chaudhry.

"Past strategies tested in humans were not based on stem cell types that were actually shown to form heart cells, and use of embryonic stem cells for this goal is associated with ethics and feasibility concerns. Placentas are routinely discarded around the world and thus almost a limitless source," she said.

"These results were very surprising to us, as no other cell type tested in clinical trials of human heart disease were ever shown to become beating heart cells in petri dishes, but these did and they knew exactly where to go when we injected them into the circulation," said first author Sangeetha Vadakke-Madathil, a postdoctoral fellow at the Icahn School of Medicine at Mount Sinai. — PTI

Diseases (The Asian Age: 20190523)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=13052904>

App to diagnose symptoms of rare diseases

■ The app can be used for the evaluation of neurodegenerative illness

London, May 22: Scientists have developed a smartphone application which they say can help diagnose early symptoms of a rare genetic disorder.

The Neural Impairment Test Suite app created by researchers at the Kaunas University of Technology (KTU) in Lithuania provides its user with a series of tests in order to check the presence of the symptoms.

If the probability of symptoms is detected, the user is informed and encouraged to contact medical professionals for further advice.

Huntington's disease, caused by an inherited defect in a single gene, is a progressive brain disorder that causes uncontrolled movements, emotional problems, and loss of thinking ability.

■ According to KTU scientists, usually in medical practice similar diagnostic tests are provided on paper, but this is the first attempt to digitalise the instrument.

■ Depending on the degree of risk, the user can take the test once a week or more often



If a parent has the gene, each son or daughter has a one in two (50/50) chance of inheriting the disease.

A d u l t - o n s e t Huntington's disease, the most common form of this disorder, usually appears in a person's thirties or forties.

Individuals with the adult-onset form of Huntington disease usually live about 15 to 20 years

after signs and symptoms begin, researchers said.

A less common form of Huntington disease known as the juvenile form begins in childhood or adolescence. It also involves movement problems and mental and emotional changes, they said.

Early signs and symptoms of the disease can include irritability, depression, small involun-

tary movements, poor coordination, and trouble learning new information or making decisions. All these are difficult to notice. "Our app is aimed at the early detection — we are attempting to diagnose the disease when visually there are no symptoms," said Andrius Lauraitis, KTU doctoral student.

According to Professor Rytis Maskeliunas of KTU, the app provides additional information and allows automatization of the process, but is not trying to replace medical diagnosis.

The app is one-of-a-kind, as the technological devices in the context of this disease have not been investigated yet.

"Due to the hereditary nature of the disease a person might know that he or she is in a risk group,

but it is not known when and if the disease will strike," Maskeliunas said.

"When the early symptoms are detected, the person is advised to contact a physician. Although there is no known treatment for Huntington's disease, it is estimated that a patient can gain 3-16 years of healthy life if the disease is diagnosed early," said Maskeliunas.

The app is a collection of various tests available to smartphone users on Google Play. The tasks on the app are designed to evaluate the user's motor, cognitive skills, to detect voice and energy consumption disorders.

The app can also be used for the evaluation of other neurodegenerative diseases such as Parkinson's, Alzheimer's or dementia.

— PTI

Pollution

Pollution body moots way to fix 'green fine' amount (Hindustan: 20190523)

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

The Delhi Pollution Control Committee (DPCC) is developing a mechanism to help it determine the extent of damage caused by a polluter – be it an industrial unit, a hospital or a restaurant – and fix the penalty accordingly.

To date, the DPCC used to impose environment compensation on polluting industries mostly arbitrarily, as a result of which many industries got the chance to challenge it.

To date, the DPCC used to impose environment compensation on polluting industries mostly arbitrarily, as a result of which many industries got the chance to challenge it.

"The DPCC has been imposing environment compensation on polluting industries as a deterrent following various court orders. But as there was no basis for calculating the

environment damage in terms of money, the amount of penalty was often challenged by the polluter. Hence, there was a need to develop a mechanism,” said a senior official of the DPCC.

A four-member committee with DPCC’s member-secretary as chairperson has been formed to develop the mechanism.

“The preparation of guideline by the DPCC for calculating compensation for environmental damages is a step in the right direction. Hope this results in adequate and appropriate compensation amounts. This would send a clear and consistent signal disincentivising pollution and would also reduce the legal challenges due to arbitrariness in calculating damages and penalties,” said Ajay Mathur director general of TERI.

The initiative was taken after the Central Pollution Control Board (CPCB) held a meeting in March this year and directed the DPCC, along with other state pollution control boards, to develop the mechanism.

“The new mechanism will take into account various aspects such as the category of industries (red, orange or green industry), its location, number of days the violation has been taking place and the scale of operation (small scale or large scale) among others,” said another official, who is also a member of the committee, but is not authorised to speak to the media.

To make it simpler, one of the committee members said that the amount would be highest if it is a red category industry (triggering highest pollution), located in a non-conforming area and is a large scale industry.

“Time has come to use fiscal instruments more innovatively for effective deterrence based on ‘polluter pays principle’. This will have to be combined with strong monitoring and surveillance for real reduction in emissions,” said Anumita Roy Chowdhury, Executive Director (Research and Advocacy) at Centre for Science and Environment.

“It was also decided that for repeated offenders the compensation would be raised on an exponential basis for each repeat violation. Even though initially we would be dealing with industrial units only, for trades such as hotels, restaurants, and hospitals the mechanism would be decided at a later stage,” said a DPCC official.

Air quality

For breathable air: Environmental data transparency and Star rating systems will improve air quality (The Times of India: 20190523)

<https://timesofindia.indiatimes.com/blogs/toi-edit-page/for-breathable-air-environmental-data-transparency-and-star-rating-systems-will-improve-air-quality/>

By Michael Greenstone and Anant Sudarshan

India's 900 million voters have completed the process of selecting their next leaders. Even as many of the country's challenges and successes are litigated in the campaign process, a question mark still hangs over how the country can tackle air pollution. More than half a billion citizens breathe air that exceeds India's air quality standards, all of whom are therefore living shorter lives.

Based on rigorous new scientific evidence, the Air Quality Life Index estimates that if every part of India were to meet national standards, life expectancies would rise by almost two years. Across the highly polluted Gangetic plain, this number ranges from four to six years. There is no question that pollution in the air is now one of India's greatest public health challenges.

How can India's next elected officials solve this problem, and by doing so substantially improve the lives of their people? And, just as important, how should they do so while also remaining focussed on the urgent need for robust economic growth?

A reasonable starting point might be to encourage better enforcement of the laws that are already on paper. Making all regulatory data on industrial air pollution transparent and publicly available could be an important part of the solution.

This would allow industries to see how they shape up compared to everyone else, making it hard to justify doing worse than their peers. And when the public learns who the worst polluters are in their neighbourhoods, they have the power to call for change.

Lessons from around the world give us good reasons to be optimistic about the potential of disclosure initiatives. The award winning Blue Map app in China, and the Program for Pollution Control, Evaluation, and Rating (PROPER) scheme in Indonesia, have both proved effective in reducing pollution.

Illustration: Uday Deb

India has begun to take the first steps along this path. The Star Rating Program is an innovative new idea being developed by state pollution control boards (SPCBs) across the country, together with researchers from the Abdul Latif Jameel Poverty Action Lab (J-PAL), the Tata Centre for Development, and the Energy Policy Institute at the University of Chicago.

The program rates industries on a scale of one to five stars based on their fine particulate pollution emissions. Industrial units with five stars are the most compliant, and those with one star are the least compliant. This information is accessible to the public through the official websites of the SPCBs. Crucially, and unlike prior efforts, information disclosure is mandatory.

A traditional challenge with air pollution is figuring out how to make information accessible to the public and non-technical stakeholders. The Star Rating scheme distils volumes of data on industry emissions, expressed in technical terms, into something that is easily understood.

Once this is achieved it becomes possible for the public to become an important agent in monitoring the pollution reduction efforts of the industries where they live. The ratings also provide a platform on which to build other ideas – introducing performance incentives for instance.

The idea of using star ratings for industry was initially launched in Maharashtra in June 2017. In less than two short years, it has gone from tracking a handful of industries to almost 300 industrial units across 12 sectors in Maharashtra. The program has also expanded geographically, now covering some of the most polluted cities in the state such as Chandrapur, Kolhapur, Nagpur, Nashik and Pune.

In step with this growth, public engagement has steadily increased. The program has been quoted by the regional and national press close to 100 times. Both the industries and public have indicated their interest and support for the program, thus enabling it to reach a wide spectrum of people.

As an ancillary activity, about 1,400 people – including local NGOs, industry professionals, engineering students and journalists – have been sensitised through focussed workshops. Hearteningly, local government has also begun to use these ratings. The yearly air action plans for five municipal corporations cited this as a tool that could be used by them to combat air pollution in their respective geographies.

But the program hasn't stopped with Maharashtra. In September 2018, Odisha launched a similar scheme, covering more than 90 industries across the state. And, last month, Jharkhand announced plans to start their own ratings scheme.

These new entrants are taking the program further by using real-time pollution data obtained from continuous emissions monitoring systems (CEMS) to rate their industries. In so doing, this has become one of the first systematic ways in which regulators are concretely using the online CEMS data that many plants now transmit.

Democratising and releasing data on the sources of pollution provides a real opportunity to move beyond the typical regime of top-down regulation. It can help to considerably raise public engagement on the issue. At the same time, it can lead polluters to look over their shoulders at peers who are complying with the standard, while being acknowledged and rewarded for their efforts. These forces complement and reinforce the work of regulators.

It would be a great accomplishment if the next time the country goes to vote, all 29 Indian states had Star Rating Programs in place.

Michael Greenstone is the Director and Anant Sudarshan is Executive Director (South Asia) of the Energy Policy Institute, University of Chicago

Gender diversity

Gender diversity: talk held on women in legal profession (The Hindu: 20190523)

<https://www.thehindu.com/news/cities/Delhi/gender-diversity-talk-held-on-women-in-legal-profession/article25139430.ece>

Panel discussion organised by Vidhi Centre for Legal Policy and Oxford University; judge, lawyer share experiences about striking work-life balance

In a bid to address concerns about gender diversity in the judiciary, the Vidhi Centre for Legal Policy and the University of Oxford organised a panel discussion on ‘Women in the Legal Profession’ here.

Justice A.K. Sikri of the Supreme Court delivered a keynote address, emphasising the continued relevance of issues at hand. He stressed on the pivotal role of the legal profession in creating necessary change within itself so that it may foster change in society.

UK battled the same

Following this, University of Oxford Vice-Chancellor Professor Louise Richardson began the panel discussion by referring to how even the United Kingdom battled against institutional bias for a long time before women could enjoy some parity.

She narrated the tribulations of Cornelia Sorabji, the first woman to receive the Bachelor of Civil Law degree at Oxford University, setting the tone for other panellists.

Justice Indu Malhotra, the first woman to be elevated to Supreme Court judgeship from the Bar, recounted her experiences as a female litigator.

Referring to the legal profession as a “jealous mistress”, Justice Malhotra stressed how women had a tougher time striking the work-life balance.

Even the briefs woman lawyers receive are stereotypical, with undue stress on family matters, and lack of trust in engaging women in commercial matters.

She also remarked on the discomfort women face in networking, a skill that is in increasing demand for success in the profession.

Advocate Madhavi Diwan remarked on how she sees herself as a “mainstream lawyer” and not as a woman lawyer who has to be pigeonholed into specific legal roles and fields.

She also looked back at her experience as a young mother who had to take breaks as a result of maternity and faced considerable barriers in re-entering the practice.

Professor Lavanya Rajamani of the Centre for Policy Research said the onus for continuing disparity cannot be laid only at the feet of women and that there would have to be a more detailed investigation into the role that institutions play in propagating structural bias.

Senior advocate Arvind Datar suggested that changes need to be made at the level of appointment bodies, like the collegium and in judicial services exams, so that this may better translate into representation at all levels.

Antiplatelet medicines

Stroke patient can continue consuming antiplatelet medicines: Study (New Kerala: 20190523)

<https://www.newkerala.com/news/read/146271/stroke-patient-can-continue-consuming-antiplatelet-medicines-study.html>

People who suffered a stroke caused by brain haemorrhage (bleeding in the brain) can safely continue to take antiplatelet medicines to reduce their risk of future heart attacks or strokes.

According to the study published in the Journal of the Lancet, doctors had thought the medicines, which include aspirin and clopidogrel might make people with stroke more likely to suffer another bleed in the brain.

Researchers found that people who took antiplatelet medicines experienced fewer recurrences of brain haemorrhage compared with those who did not take these treatments.

This suggests that the treatments reduce rather than increase the risk of further bleeding in the brain.

Around half of the participants underwent an additional brain scan using MRI at the beginning of the study. These scans are often used by doctors to check for the presence of tiny blood deposits in the brain, known as microbleeds, which can be a warning sign of future strokes.

The researchers found treatment with antiplatelet medication was not more hazardous for people who already had microbleeds in their brain.

Experts said this provides further reassurance that brain haemorrhage survivors can safely continue to take antiplatelet medicines to reduce their risk of future heart attacks or strokes.

Professor Rustam Salman, one of the researches, said, "The results of the trial are reassuring for survivors of brain haemorrhage who need to take antiplatelet medicines to prevent heart attacks and strokes. I am keen to investigate the possibility that these medicines might halve the risk of brain haemorrhage happening again."

Professor Metin Avkiran, another researcher, said, "Around a third of people who suffer a brain haemorrhage, also known as haemorrhagic stroke, do so when they are taking an antiplatelet medicine such as aspirin to reduce the risk of a heart attack or an ischaemic stroke. We now have a strong indication they can carry on taking these potentially life-saving medicines after the brain haemorrhage without increasing the risk of another one, which is crucial new information for both patients and doctors."

"Although some developments have been made, the options at our disposal for treating and preventing strokes are still far too limited. Around 36,000 people die each year in the UK after having a stroke, most commonly an ischaemic stroke. Every advance from important research such as this takes us a step closer to better stroke prevention and management," Avkiran concluded.

Mental health

Exposure to nature during childhood leads to better mental health: Study (New Kerala: 20190523)

<https://www.newkerala.com/news/read/146269/exposure-to-nature-during-childhood-leads-to-better-mental-health-study.html>

Did you remember the last time you played in nature as a child? If no, then chances are that your mental health could be affected.

In a recent study, it has been found that adults who had close contact with the environment during childhood have better mental health. The study was published in the journal, 'International Journal of Environmental Health Research'

Exposure to natural outdoor environments has been associated with several health benefits, including better cognitive development and better mental and physical health.

However, few studies have explored the impact of childhood exposure to natural environments on mental health and vitality in adulthood.

Furthermore, studies have more frequently considered green spaces (gardens, forests, urban parks) than blue spaces (canals, ponds, creeks, rivers, lakes, beaches, etc.).

This study was conducted within the framework of the PHENOTYPE project with data from almost 3,600 adults from Barcelona (Spain), Doetinchem (Netherlands), Kaunas (Lithuania) and Stoke-on-Trent (United Kingdom).

Adult participants answered a questionnaire on frequency of use of natural spaces during childhood, including purposeful hiking in natural parks- and non-purposeful playing in the backyard- visits.

They were also asked about their current amount, use and satisfaction with residential natural spaces, as well as the importance they give to such spaces.

The mental health of the participants in terms of nervousness and feelings of depression in the past four weeks, as well as their vitality -energy and fatigue levels- were assessed through a psychological test. The residential surrounding greenness during adulthood was determined through satellite images.

The results show that adults who were less exposed to natural spaces during their childhood had lower problems related to mental health as compared to those with higher exposure.

Myriam Preuss, the lead author of the study, explains that "in general, participants with lower childhood exposure to nature gave lower importance to natural environments". No association was found between childhood exposure and vitality, or the use of or satisfaction with these spaces in adulthood.

Wilma Zijlema, one of the researchers, underlines that the conclusions "show the importance of childhood exposure to natural spaces for the development of a nature-appreciating attitude and a healthy psychological state in adulthood".

Currently, 73 per cent of Europe's population lives in urban areas with often limited access to green space and these numbers are expected to increase to over 80 per cent by 2050.

"Therefore, it is important to recognize the implications of growing in up in environments with limited opportunities for exposure to nature", she adds.

"Many children in Europe lead an indoors lifestyle, so it would be desirable to make natural outdoor environments available, attractive and safe for them to play in", explains Mark Nieuwenhuijsen, one of the researcher.

In most countries, activities in nature are not a regular part of the school's curriculum. "We make a call on policymakers to improve the availability of natural spaces for children and green schoolyards", he adds.

Adolescent depression

Trauma in childhood may lead to adolescent depression, suggests study (New Kerala: 20190523)

<https://www.newkerala.com/news/read/146262/trauma-in-childhood-may-lead-to-adolescent-depression-suggests-study.html>

Children in poor urban areas who suffered physical and emotional neglect, violence, and sexual abuse are likely to be associated with both adolescent depression and violent behaviour, highlights a new study.

The study was published in the Journal of Adolescent Health.

"This is the first global study to investigate how a cluster of traumatic childhood experiences known as ACEs, or adverse childhood experiences, work together to cause specific health issues in early adolescence with terrible, life-long consequences," said Dr. Robert Blum, lead researcher.

He added, "And while we found young girls often suffer significantly, contrary to common belief, boys reported even greater exposure to violence and neglect, which makes them more likely to be violent in return."

The study incorporated ACEs suffered by 1,284 adolescents aged 10 to 14 in 14 "low-income urban settings" around the world.

It found remarkably common experiences with trauma--and very similar impacts--regardless of where the children lived.

The study found that 46% of young adolescents reported experiencing violence, 38% suffered emotional neglect and 29% experienced physical neglect. But boys stood out in several categories.

They were more likely to report physical neglect, sexual abuse and violence victimization. Also, for both boys and girls, the more adversity they experienced, the more likely they were to engage in violent behaviours, such as bullying, threatening or hitting someone.

But boys were 11 times more likely to be engaged in violence, and girls four times more likely to be violent.

In general, the cumulative effect of their traumas tended to produce higher levels of depressive symptoms among girls than boys, while boys tended to show more external aggression than girls.

Gut bacteria

Gut bacteria might play role in reducing anxiety: Study (New Kerala: 20190523)

Anxiety levels in people are on a constant rise, but regulating it might be as easy as eating. A new study has found that controlling the microorganisms in the gut using probiotic and non-probiotic foods can aid in relieving anxiety.

The study, published in the journal *General Psychiatry*, highlighted anxiety symptoms that are common in people with mental problems and a variety of physical disorders, especially those related to stress.

Research has earlier indicated that gut microbiota - the trillions of microorganisms in the gut - perform important functions in the immune system and metabolism by providing essential inflammatory mediators, nutrients and vitamins - can help regulate brain function through something called the "gut-brain axis".

For the study, researchers reviewed 21 studies that had looked at 1,503 people. 14 studies had chosen probiotics as interventions to regulate intestinal microbiota (IRIFs), and seven chose non-probiotic ways, such as adjusting daily diets.

The researchers found that probiotic supplements in seven studies within their analysis contained only one kind of probiotic, two studies used a product that contained two kinds of probiotics, and the supplements used in the other five studies included at least three kinds.

11 of the 21 studies showed a positive effect on anxiety symptoms by regulating intestinal microbiota, meaning that more than half (52%) of the studies showed this approach to be effective.

Of the 14 studies that had used probiotics as the intervention, more than a third (36%) found them to be effective in reducing anxiety symptoms, while six of the remaining seven studies that had used non-probiotics as interventions found those to be effective - a 86% rate of effectiveness.

Some studies had used both the IRIF (interventions to regulate intestinal microbiota) approach and treatment as usual.

In the five studies that used treatment as usual and IRIF as interventions, only studies that had conducted non-probiotic ways got positive results, that showed a reduction in anxiety symptoms.

Studies only using IRIF, 80% were effective when using non-probiotic interventions, while only 45% were found to be effective when using probiotic ways.

The authors state one reason that non-probiotic interventions more effective than probiotic interventions were possible due to the fact that changing diet (a diverse energy source) could have more of an impact on gut bacteria growth.

However, the studies did not report any adverse effects, only four studies reported mild effects like dry mouth and diarrhoea.

Researchers at the Shanghai Jiao Tong University said, "We find that more than half of the studies included showed it was positive to treat anxiety symptoms by regulation of intestinal microbiota."

"It should be highlighted that the non-probiotic interventions were more effective than the probiotic interventions."

They also suggest that, in addition to the use of psychiatric drugs for treatment, "we can also consider regulating intestinal flora to alleviate anxiety symptoms."

Aspirin 'safe'

Aspirin 'safe' for brain stroke patients: Study (New Kerala: 20190523)

<https://www.newkerala.com/news/read/146209/aspirin-safe-for-brain-stroke-patients-study.html>

People who have suffered brain haemorrhage can take common medicines such as aspirin without raising their risk of another stroke, suggest researchers.

Aspirin and Clopidogrel, also known antiplatelet medicines are often prescribed to older people because they can lower risk of heart attack and stroke caused by a blood clot.

Although doctors wary of recommending antiplatelet medicines for stroke patients, fearing the risk of another brain bleed, this new study called "Restart", published in The Lancet journal, has found that brain haemorrhage survivors can "safely" continue to take antiplatelet medicines to reduce their risk of future heart attacks or strokes.

"The results of the RESTART trial are reassuring for survivors of brain haemorrhage who need to take antiplatelet medicines to prevent heart attacks and strokes. I am keen to investigate the possibility that these medicines might halve the risk of brain haemorrhage happening again," said Rustam Salman, Professor at the University of Edinburgh.

For the study, the researchers analysed medical records of 537 people from across the UK who had suffered a brain haemorrhage while they were taking medicines to stop blood clotting.

The patients were assigned to either start taking antiplatelet treatment or avoid it for up to five years.

The researchers found that patients, who took antiplatelet medicines experienced fewer recurrences of brain haemorrhage as compared to those who did not take these treatments.

The study's findings indicated that treatment with antiplatelet medicines was not hazardous for people who already had microbleeds in their brain.

"Around a third of people who suffer a brain haemorrhage, also known as haemorrhagic stroke, do so when they are taking an antiplatelet medicine such as aspirin to reduce the risk of a heart attack or an ischaemic stroke," Metin Avkiran, Associate Medical Director at British Heart Foundation (BHF), UK said.

"We now have a strong indication they can carry on taking these potentially life-saving medicines after the brain haemorrhage without increasing the risk of another one, which is crucial new information for both patients and doctors," Avkiran noted.

"Every advance from important research such as this takes us a step closer to better stroke prevention and management," he concluded.

The researchers said around 36,000 people die each year in the UK after having a stroke, most commonly an ischaemic stroke.

Child Health _ WHO Guidelines (Navbharat Times: 20190523)

<http://epaper.navbharattimes.com/details/35387-58212-1.html>

ऊंची कुर्सी पर एक घंटे से ज्यादा न बैठे बच्चा

पहली बार विश्व स्वास्थ्य संगठन ने कम उम्र बच्चों के लिए गाइडलाइन जारी की है और बताया है कि उनकी अच्छी सेहत के लिए किन-किन बातों का ध्यान रखना चाहिए



नरपत दान बारहठ

हाल ही में विश्व स्वास्थ्य संगठन ने एक गाइडलाइन जारी की है जिसमें 2 से 5 साल तक के बच्चों को रोज एक घंटे से ज्यादा मोबाइल, टीवी, कंप्यूटर आदि नहीं देखने की हिदायत दी गई है। इसमें 1 से 4 साल तक के बच्चों से तीन घंटे के करीब फिजिकल एक्सरसाइज कराए जाने की बात कही गई है। यह भी कि पांच वर्ष से कम उम्र के बच्चों को ऊंची कुर्सियों पर एक घंटे से अधिक नहीं बैठना चाहिए और उन्हें रोजाना दस घंटे की नींद लेनी चाहिए।

विश्व स्वास्थ्य संगठन ने छोटे बच्चों को लेकर पहली बार इस तरह की कोई गाइडलाइन जारी की है। डब्ल्यूएचओ का कहना है कि ऐसा करके हम बच्चों को मोटापे सहित कई बीमारियों से बचा सकते हैं। हालांकि तकनीकी चीजों की उपयोगिता

को लेकर शोधकर्ता ऐसी सलाहें दे रहे हैं कि बच्चों को गैजेट्स से दूर रखना ही उन्हें बीमारियों से बचाने का सबसे प्रभावी तरीका है। गाइडलाइन के अनुसार पांच वर्ष से कम उम्र के बच्चों की शारीरिक गतिविधियों पर ज्यादा जोर तो होना ही चाहिए उनकी पर्याप्त नींद भी सुनिश्चित की जानी चाहिए। डब्ल्यूएचओ के महानिदेशक डॉ. एडनान गेबिसास के मुताबिक बच्चों का अच्छा स्वास्थ्य बने रहने के लिए जरूरी है कि परिवार की जीवन शैली उसके अनुकूल रहे।

टीवी, कंप्यूटर, स्मार्टफोन, टेबलेट आदि शारीरिक और मानसिक स्वास्थ्य पर क्या प्रतिकूल प्रभाव डालते हैं? इस पर कई शोधार्थी अध्ययन कर चुके हैं। डब्ल्यूएचओ का ताजा दिशा-निर्देश इन अध्ययनों की पुष्टि करते हुए बताया है कि बच्चों के शारीरिक-मानसिक सुधार के लिए छोटी उम्र में उन्हें तकनीकी चीजों के संपर्क में कम से कम लाना चाहिए। शारीरिक गतिविधियों पर अधिक ध्यान देने की जरूरत है। इससे पहले भी विश्व स्वास्थ्य संगठन की रिपोर्ट में बताया गया था कि गेमिंग एडिक्शन बच्चों पर मानसिक, शारीरिक, पारिवारिक और सामाजिक रूप से बुरा असर डालता है।

जाहिर सी बात है कि आधुनिक युग में दुनिया की तमाम आबादी किसी न किसी



कॉमन रूम

तकनीकी चीज जैसे मोबाइल, टीवी, कंप्यूटर आदि से काम कर रही है। यह भी सही है कि यह सब अब हमारी जिंदगी का हिस्सा बन चुका है। लेकिन हमें गौर करना है कि हम अपने बच्चों को क्या दे रहे हैं? उन्हें किस दिशा में ले जा रहे हैं?

जिस तरह से आज कम उम्र के बच्चे टीवी, मोबाइल, टेबलेट आदि से घिरे रहते हैं और इन्हें ही अपने मनोरंजन का साधन समझते हैं, ये सब उनकी सेहत के दुश्मन बन चुके हैं। 2 से 5 साल तक की उम्र के ऐसे बच्चे भी हैं जो खिलौनों के रूप में गैजेट का इस्तेमाल करते हैं और पैरेंट्स खुद उन्हें यह सब उपलब्ध कराते हैं। लेकिन माता-

पिता भी इनके साइड इफेक्ट से अनजान रहते हैं। यह खतरनाक है।

वर्तमान समय में बचपन में ही बच्चों के व्यवहार में नकारात्मक परिवर्तन का सबसे बड़ा कारण है उनका इंटरनेट पर अधिक समय व्यतीत करना। इस बात पर ध्यान देना होगा कि बच्चों में असामाजिकता, उग्रता, मानसिक रोग आदि तकनीक की लत का ही नतीजा होता है। और सबसे बड़ा दुष्प्रभाव है- बीमारियां। मनोवैज्ञानिकों की राय में गैजेट्स की लत से बच्चों में अवसाद, एंजायटी, बायलोपर डिस्ऑर्डर, डिमेंशिया, उन्माद और असामान्य व्यवहार होना सामान्य बात है। बेहतर होगा कि पैरेंट्स बच्चों को इन चीजों से दूर ही रखें।

सबसे बड़ी बात यह कि माता-पिता बच्चों से सजीव संवाद रखें ताकि उनमें भावनाएं भी उपजें। बच्चे जो देखते हैं वही सीखते हैं। वे निर्णय लेने की अवस्था में नहीं होते हैं। स्क्रीन पर बच्चे जो देखेंगे, वही करने की कोशिश करेंगे। बेहतर होगा कि उन्हें स्क्रीन से दूर रखा जाए। ज्ञानपरक चीजों से बच्चों का जुड़ाव अधिक से अधिक रखना ही बच्चों को मानवीयता की ओर बढ़ाने का उपाय हो सकता है। विश्व स्वास्थ्य संगठन की इस गाइडलाइन पर ध्यान देना होगा और लोगों को भी जागरूक करना होगा।

Surgery (Hindustan: 20190523)

http://epaper.livehindustan.com/imageview_24356_63132836_4_1_23-05-2019_i_5.pagezoomsinwindows.php

सर्जरी को मरीज फिट या नहीं एप बताएगा

पहल

जई दिल्ली | वरिष्ठ संवाददाता

एम्स आने वाले मरीज सर्जरी के लिए फिट हैं या नहीं यह जानकारी एप की मदद से हासिल हो जाएगी। एम्स में एक ऐसा एप पेश किया गया है, जिसमें मरीजों के खानपान और वजन और पोषण से जुड़ी जानकारी डालकर डॉक्टर पता लगा सकेंगे कि मरीज सर्जरी के लिए फिट है या नहीं।

एम्स में सर्जरी के दौरान खानपान और पोषण विषय पर एक राष्ट्रीय सेमिनार का आयोजन किया गया। इसमें एम्स के डॉक्टरों के लिए आईएमडब्ल्यू टूलकिट एप लॉन्च किया गया। यह सर्जरी से पहले डॉक्टरों को मरीजों की स्थिति के बारे में विश्लेषण कर यह भी बताएगा कि सर्जरी के बाद मरीजों को कोई खतरा तो नहीं होगा। एम्स के फेजियोलॉजी विभाग की प्रोफेसर डॉक्टर के.पी. कोचर ने बताया कि अस्पताल में छोटी से बड़ी सैकड़ों सर्जरी हर रोज होती हैं। हालांकि, मरीज का वजन और उसका स्वास्थ्य सर्जरी

के लायक है या नहीं, डॉक्टर के लिए यह जानना जरूरी होता है। उन्होंने बताया कि मरीज को सर्जरी के दौरान खून बहना और उसके बाद कई खतरे होते हैं। आईएमडब्ल्यू टूलकिट एप के जरिए मरीज से कुछ सवाल पूछकर डॉक्टर आसानी से पता लगा सकेंगे कि मरीज की वास्तविक स्थिति क्या है। अगर फिट नहीं हैं तो उसके शरीर में कौन से पोषक तत्वों की कमी है और उसका स्वास्थ्य कैसे बेहतर करना है, यह जानकारी जुटाने में भी एप मदद करेगा।

ये सवाल पूछकर डाले जाएंगे :

डॉक्टर मरीज का वजन, लंबाई, पिछले पांच दिनों में खाए जाने वाले भोजन की कैलोरी, ब्लड प्रेशर जैसी जानकारी एप में भरेंगे। इसके बाद यह एप मरीज के स्वास्थ्य और उसकी सर्जरी से जुड़े खतरे का स्कोर जारी करेगा। अगर खतरे वाला स्कोर मिला तो डॉक्टर इलाज की हिस्ट्री, ली जाने वाली दवाएं आदि की जानकारी एप में डालेंगे तो एप विश्लेषण करके डॉक्टरों को मरीज को होने वाले खतरों का स्कोर जारी कर देगा। एम्स की मुख्य डायटिशियन परमजीत कौर ने बताया कि सर्जरी की सफलता पोषण पर निर्भर करती है।

Sleeping ((Hindustan: 20190523))

http://epaper.livehindustan.com/imageview_24369_62967438_4_1_23-05-2019_i_18.pagezoomsinwindows.php

फोन के कम इस्तेमाल से नींद की समस्या दूर होगी

लंदन | एजेसी

किशोरों में नींद नहीं आने की समस्या आम होती जा रही है। शाम के बाद स्मार्टफोन, टैबलेट, लैपटॉप और कंप्यूटर का इस्तेमाल कम कर देने से किशोरों में होने वाली नींद न आने की समस्या को एक हफ्ते में कम किया जा सकता है।

एक हालिया शोध के अनुसार फोन का सीमित उपयोग करने पर थकावट, ध्यान की कमी, खराब मूड जैसी समस्याओं को एक हफ्ते में दूर किया जा सकता है। शोधकर्ताओं ने पाया कि जिन लोगों ने दिन में चार घंटे स्क्रीन के सामने बिताया उनके

नींद में औसतन 30 मिनट की कमी देखी गई। साथ ही उनमें देर से सोने और देर से उठने की आदत देखी गई। वहीं जिन लोगों ने दिन में एक घंटा स्क्रीन के सामने बिताया उनमें नींद की कमी नहीं पाई गई।

नीदरलैंड्स के एमस्टर्डम यूएमसी अस्पताल के शोधकर्ता ड्रिक जैन स्टेवर्स ने कहा, किशोर दिनभर में काफी समय स्क्रीन के सामने बिताते हैं जिस वजह से उनमें नींद न आने की शिकायतें बढ़ती ही जा रही हैं। इस शोध के दौरान पाया गया कि फोन का इस्तेमाल कम करने से नींद आने का समय सुधरा और जागने का समय भी 20 मिनट पहले हो गया।