



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE Day
Tuesday 20190521

HIV

Catholic leaders to come together to end HIV in Goa (The Hindu: 20190521)

<https://www.thehindu.com/news/national/other-states/catholic-leaders-to-come-together-to-end-hiv-in-goia/article27190461.ece>

Stress need to end discrimination, work with government

Father Paul Alvares, head of the Conference of Religions of India – Goa Chapter, on Sunday said he would bring heads of various religious congregations together in an attempt to end the scourge of the human immunodeficiency virus (HIV) in the State by 2030.

Leaders of the Catholic faith got together to discuss the response from the community to HIV in Goa on the sidelines of the International AIDS Candlelight Memorial on Sunday, organised by Human Touch Foundation (HTF) at Margao.

“Religious leaders can have massive impacts within their communities in the fight against HIV. With their considerable presence and reach, the church can help shape government policies and advocate with the government for better access to healthcare,” said Peter F. Borges, Founder of HTF. “In addition, religious leaders can talk to and inform their own faith communities. The church is a powerful agent to change individual beliefs and values.” He called for faith leaders to set examples and shape attitudes about HIV.

HTF is represented in the Global HIV Strategy Group and International Reference Group of Ecumenical Advocacy Alliance, an initiative of the World Council of Churches, a global network of churches and related organisations committed to campaigning for justice and dignity.

Explaining the HTF's plans, Sr. Crina Cardozo said programmes would be aimed at reducing stigma and promoting HIV testing in Goa through the involvement of faith leaders in line with the campaign of World Council of Churches. She said faith leaders should demonstrate to the faith community that HIV does not need or deserve stigma. Further, she called on faith leaders

to preach sermons about the importance of testing and treatment, in order to prevent discrimination within their communities.

Narrating her experiences of addressing HIV during an outbreak, Sister Lourenca Marques said faith leaders have a key role to play in increasing access to HIV testing and treatment, breaking silence and stigma, promoting human rights and building bridges between people and communities.

During the dialogue, participants addressed the realities of how stigma and discrimination are perpetuated both in religious communities and the larger society.

An adolescent living with HIV also recounted her experience when she and her other friends were discriminated against and expelled from their school in 2014. She shared her challenges and called for an end to discrimination against children living with HIV.

In their concluding statement, participants called for the “renewed sense of urgency” to prioritise and strengthen the response to HIV.

They pledged to commit themselves to strengthened efforts to respond to HIV in Goa, which includes protecting human rights through collaboration and influencing local and national decision-making processes.

Here is the full text of the editorial that was published on February 1, 1948 in The Hindu after the assassination of Mahatma Gandhi by Nathuram Godse in Delhi. The death of Mahatma Gandhi last evenin

Dengue

Dengue on upswing in state (The Hindu: 20190521)

<https://www.tribuneindia.com/news/punjab/dengue-on-upswing-in-state/775854.html>

In the recent years, Punjab has become one of the worst dengue-affected states. From 472 cases in 2014 to 15,009 in 2018, the state has been going through an alarming rise in the vector-borne disease — up by around 3,000 per cent.

In fact, last year the state had the highest number of dengue cases across the country. Various awareness drives and dengue-control activities claimed by the Health Department seem to have fallen flat because there is no respite in the ascent of dengue cases.

Patiala epidemiologist Dr Sumeet said dengue mosquito aedes aegypti was a ‘synanthropic’ species, much like houseflies and cockroaches, which multiply in makeshift habitats such as

coolers, pots, etc. Another factor which contributed hugely was construction sites due to unplanned urbanisation in the recent years.

Health experts claim that it will take many years to bring down dengue cases since there had been consecutive outbreaks. In fact, it takes four to five years for dengue larvae to get terminated, say the experts. Moreover, Punjab was among the few states in the country where all four dengue strains — DENV-1 to DENV-4 — were present that affected community massively.

Experts believe since there is no cure and vaccine for dengue, therefore, prevention is the most effective method and community participation can play an important role in preventing and controlling the disease. Experts said it was impossible to check each of the households, therefore, people's participation was a must.

Last year, Health Minister Brahm Mohindra had lashed out at the Municipal Department for not discharging their duties well in checking the outbreak of the disease. Experts said dengue control activities were the responsibility of the municipal bodies. The role of the Health Department comes after a patient tests positive for the disease, said experts.

“We have already intensified our efforts to check its spread and have sought cooperation from 11 stakeholder departments in this regard. Moreover, we are fully prepared and have already started awareness drives,” Mohindra added.

Environmental toxins

Environmental toxins may impair fertility of future generations (The Tribune: 20190521)

<https://www.tribuneindia.com/news/health/environmental-toxins-may-impair-fertility-of-future-generations/775788.html>

Environmental toxins may impair fertility of future generations

We are exposed to hundreds of these pollutants in our daily lives, as they are used in the manufacture of plastics, pesticides and medicines. Tribune file

Exposure to environmental pollutants can cause alterations in brain development that affect sexual development and fertility for several generations, a study has found.

Researchers from the University of Liege in Belgium monitored the sexual development of three generations of rats.

Pregnant rats were exposed to a mixture of common endocrine-disrupting chemicals (EDCs), at doses equivalent to those commonly experienced by people.

Their offspring showed impairments in sexual development and maternal behaviour that were passed on through several generations.

The female rats born in the first and second generation showed impairments in their care for their own pups.

However, the female rats in the second and third generation exhibited a delayed onset of puberty and altered reproductive cycle and ovarian follicle development, indicating that their fertility was affected, even though they were never themselves exposed to the EDCs.

These changes were associated with altered gene expression in their brains that are known to affect how reproductive hormones are regulated.

“Our results raise real concerns about the effects of these pollutants in our environment. We found effects of EDCs in generations of animals that had not been directly exposed to the chemicals,” said Anne-Simone Parent from the University of Liege.

“We exposed the parent generation only and found long-term effects on fertility. Of course, in everyday life this would not happen and exposure to these harmful chemicals would continue, which means even more damage could be done,” said Parent.

The findings suggest that current levels of EDCs in our environment may already be causing long-lasting harm and that people and agencies should take measures to minimise exposure.

Endocrine-disrupting chemicals can interfere with the normal function of our hormones and have previously been associated with infertility and altered sexual development in animals and people, researchers said.

We are exposed to hundreds of these pollutants in our daily lives, as they are used in the manufacture of plastics, pesticides and medicines.

However, the extent of damage being done to our health and the consequences to future generations remains unclear. Rodent studies have suggested that exposure to EDCs can affect brain development through several generations but the generational effects on sexual development and reproduction have not previously been investigated.

“These findings raise questions about the legacy we are leaving future generations,” Rodriguez said. PTI

Drug regulator

Drug regulator issues alert for 3 pacemaker models (The Tribune: 20190521)

<https://www.tribuneindia.com/news/nation/drug-regulator-issues-alert-for-3-pacemaker-models/775991.html>

The Indian drug regulator has alerted patients with implants of three Medtronic pacemaker models to seek immediate medical care if they feel light-headed, dizzy or experience chest pain and loss of consciousness, saying these could be signs of the devices' sudden battery depletion.

The alert by Central Drug Standards Control Organisation came after the US Food and Drug Administration (USFDA) raised alarm over the use of the pacemaker models — Astra, Serena and Solara.

In its alert on May 7, the USFDA cited a case in which a Medtronic implantable pacemaker or cardiac resynchronisation therapy pacemaker (CRT-P) battery had fully drained because of a crack in the device's capacitor, without any warning to the patient or healthcare provider. — PTI

Traditional Chinese medicine

Plea to WHO: Don't approve traditional Chinese medicine (Hindustan Times: 20190521)

<https://www.hindustantimes.com/mumbai-news/plea-to-who-don-t-approve-traditional-chinese-medicine/story-ALhEuubcSM62WWBJoaKtuL.html>

Wildlife scientists around the globe have warned about TCM's alleged ties to the decline of wild animals, especially threatened big cats.

Wildlife scientists around the globe have warned about TCM's alleged ties to the decline of wild animals, especially threatened big cats.(HTPhotos)

Wildlife conservation groups from the city have written to the World Health Organisation (WHO), requesting it to not legitimise the use of traditional Chinese medicine (TCM). WHO plans to formally recognise TCM for the first time at the World Health Assembly to be held later this week in Geneva. If recognised, TCM will be adopted by 194 WHO member states in 2022.

Wildlife scientists around the globe have warned about TCM's alleged ties to the decline of wild animals, especially threatened big cats. City-based Wildlife Conservation Trust (WCT) and environmental investigation agency, Panthera, are among those who have written to the WHO.

"While choosing to endorse TCM, the WHO seems to have ignored compelling data that links illegal wildlife trade to high mortality rates," said Anish Andheria, president, WCT. "It is imperative that WHO aids efforts to improve the planet's natural health instead of endorsing practices that might put pressure on conservation of India's big cats."

"WHO's decision could contribute to the end of many species on the brink of extinction, like the tiger," said Dr John Goodrich, chief scientist, Panthera.

WHO had told Reuters in March that inclusion of TCM in its global medical compendium does not mean it condones the use of animal parts or endorses the scientific validity of the practice.

Population Agenda (The Asian Age: 20190521)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13038549>

Reproductive choice part of unfinished population agenda



Usha Rai
meanwhile

■ The question is what are the choices before her? Can she access contraceptives easily? It was the 1994 International Conference on Population and Development (ICPD), Cairo that emphasised putting people first and upholding their sexual and reproductive choices.

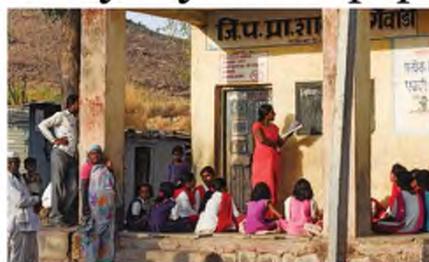
The most empowering moment for a woman is when she knows she can control her fertility and does not have to be trapped in unwanted pregnancies. After that realisation, the question is what are the choices before her? Can she access those contraceptives easily? It was the 1994 International Conference on Population and Development (ICPD), Cairo that emphasised putting people first and upholding their sexual and reproductive choices. One hundred and seventy nine governments called for comprehensive healthcare, including voluntary family planning, safe pregnancies and childbirth. "The State of World Population 2019", released recently, looks at the unfinished business of rights and choices for all, 25 years after the historic Cairo conference. Much has been achieved since 1989 when the United Nations Population Fund (UNFPA) became the UN agency to look after population growth and reproductive health needs, says the report. In India, the average number of births per woman was 3.2 in 1971, which currently stands at 2.3. Contraceptive use has increased from just 9 per cent in 1989 to 94 per cent in 2017. Yet, several challenges remain. In India, annually, 35,000 women continue to die during childbirth due to preventable causes. There are still an estimated 47 million women who want to prevent a pregnancy but

are not using a modern method of contraception, highlighting the need to improve access to family planning and comprehensive sexual and reproductive health services.

Despite the increasing availability of contraceptives over the years, hundreds of millions of women across the world still have no access to them, and to the reproductive choices that come with them, points out UNFPA executive director Dr Natalia Kanem: "Without access, they lack the power to make decisions about their own bodies, including whether or when to become pregnant."

Calling on world leaders to re-commit to the promises made in Cairo to ensure sexual and reproductive health and rights for all, Dr Kanem said the world will have a historic opportunity to complete the unfinished business of the ICPD at the Nairobi Summit on ICPD25 this November. Governments, activists and stakeholders will get an opportunity to protect the gains made so far, fulfil the promise of the ICPD agenda and ensure no one is left behind.

So what is the unfinished agenda that needs to be taken up at Nairobi? Discussing this in Delhi were A.R. Nanda, a former health secretary who formulated the National Population Policy. Dr Gita Sen, professor and director, Ramalingaswami Centre on Equity and Social Determinants of Health who has been profiled in the 2019 World Population Report as one of the champions of change, and Dr Vimala Ramachandran, managing director, ERU Consultants Pvt Ltd, who had worked to remove the discord between government and civil society and bring them on a common platform at Cairo. Ena



While more girls are now accessing secondary education, boys are dropping out

Singh of the UNFPA moderated and steered the discussions for the first look on the Unfinished Agenda. Mr Nanda, who could probably be called the feminist bureaucrat because of his empathy with women's issues, has only daughters and not having a son did not faze him. A widower, he has broken tradition and lives with his daughters. The daughter who is the principal of Miranda House, however, often tells him that despite all his support and work in promoting gender issues, mindsets still need to change. And that, Mr Nanda pointed out, was the unfinished task — changing public mindsets on sexual reproductive health and women's rights. "Control", he pointed out, was the norm in government. Targets were set for achieving "population control". The Cairo conference had removed targets but under the euphemism "expected levels of achievement" for population stabilisation, targets were back in India, Mr Nanda said. Gita Sen recalled two gentlemen walking down the

Cairo conference corridors muttering "too much sex in this conference". Several population conferences, held earlier too sidestepped sex. Yet sex was the basis of population growth and cannot be dealt with without talking about sex. Has that mindset changed? There was an almost toxic impact of inequality on women's health in India, she pointed out. Though Indian society is great, inequality was in our bones. Authoritarian mindsets still have to change, she bagged. Ena Singh pointed out that the favour of inequality was different in the 1960s and we tolerated it. Rights were missing. At Cairo, rights and inequality were looked at for the first time. Recalling the 1980s and the 1990s, when family planning was target-driven, Vimala Ramachandran pointed out that not just the health sector but those in education and rural development were given family space in the new thrust. At one level, women wanted to limit their family size, but they did not like the coercive atmosphere. They

needed to negotiate from a position of strength and this strength they derived when networking with other women's groups and institutions. Mr Nanda, who worked on the National Population Policy (NPP) of 2000, said it was difficult to convince leaders that the population policy had to be a development policy. They did not want any reference to sex or reproductive rights. In some states like Rajasthan and Gujarat, girl's secondary schools do not have maths, biology and science — limiting their work choices. Fearing sexual harassment, these girls are afraid to go to co-ed schools. On what was expected from the UN agencies, Gita Sen said 25 years after Cairo, the fragmentation between population and health issues continues. The huge populations of migrants, living on city fringes, need special attention. The gains of ICPD should be extended to them. Referring to the spike in violence, she said in addition to the traditional beating up of women and young

girls, a more insidious form of sexual harassment and violence is gaining ground through the Internet and smartphones. Violence and safety issues have to find place at the Nairobi discussions. She also highlighted the need to turn into law the amended Medical Termination of Pregnancy (MTP) Act and support women's access to abortion facilities. In many parts of the country it's just not possible to get an abortion. Of course, with new medicines, women are resorting to medical abortions which being unregulated could be dangerous. The UN system should also address the huge decline in women's participation in the workforce, she pointed out. Both male and female workforce participation has declined and even the data is suppressed. What jobs can girls leaving out of secondary education access? Ensuring jobs is not just an economic issue, it is a population, development and human rights issue, Dr Sen pointed out.

Since increased access to education has not improved work participation rate, Nations United Development Programme (UNDP) country representative Francis Pickup said to look at improving reproductive choices to improve work participation. In Haryana, the UNDP was facilitating women's access to two wheelers and getting to work becomes easier. They also promote flexible work timings, restrooms at places of work and access to social protection like health insurance. Reproductive choices enable women to contribute to the country's economic growth.

The writer is a veteran journalist based in New Delhi

Fertility (The Asian Age: 20190521)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13039057>

'Environmental toxins likely to impair fertility of generations'

London: Exposure to environmental pollutants can cause alterations in brain development that affect sexual development and fertility for several generations, a study has found.

Researchers from the University of Liege in Belgium monitored the sexual development of three generations of rats. Pregnant rats were exposed to a mixture of common endocrine-disrupting chemicals (EDCs) which showed that their offspring

showed impairments in sexual development and maternal behaviour that were passed on through generations.

The female rats born in the first and second generation showed impairments in their care for their own pups.

However, the female rats in the second and third generation exhibited a delayed onset of puberty and altered reproductive cycle, indicating that their fertility was affected. —PTI

Dietary cholesterol

Dietary cholesterol or egg consumption do not increase the risk of stroke: Study (New Kerala: 20190521)

<https://www.newkerala.com/news/read/145191/dietary-cholesterol-or-egg-consumption-do-not-increase-the-risk-of-stroke-study.html>

Consuming up to one egg per day or moderately high intake of dietary cholesterol does not increase the risk of stroke, according to a study from the University of Eastern Finland.

Furthermore, no association was found in carriers of the APOE4 phenotype, which affects cholesterol metabolism. The study was published in the 'American Journal of Clinical Nutrition'.

Findings from earlier studies addressing the association of dietary cholesterol or egg intake with the risk of stroke have been contradictory. Some studies have found an association between high dietary cholesterol intake and an increased risk of stroke, while others have associated the consumption of eggs, which are high in cholesterol, with a reduced risk of stroke.

The dietary habits of 1,950 men aged between 42 and 60 years with no baseline diagnosis of cardiovascular disease were assessed at the onset the Kuopio Ischaemic Heart Disease Risk Factor Study, KIHFD, in 1984-1989 at the University of Eastern Finland. APOE phenotype data were available for 1,015 of the men participating in the study. Of those, 32 per cent were known carriers of APOE4.

During a follow-up of 21 years, 217 men were diagnosed with a stroke. The study found that neither dietary cholesterol nor egg consumption was associated with the risk of stroke - not even in carriers of APOE4.

The findings suggested that moderate cholesterol intake or daily egg consumption are not associated with the risk of stroke, even in persons who are genetically predisposed to a greater effect of dietary cholesterol on serum cholesterol levels.

In the highest control group, the study participants had an average daily dietary cholesterol intake of 520 mg and they consumed an average of one egg per day, which means that the findings cannot be generalised beyond these levels. One egg contains approximately 200 mg of cholesterol. In this study, about a fourth of the total dietary cholesterol consumed came from eggs.

Dental care

Dental care helps drug abuse patients recover: Study ((New Kerala: 20190521)

<https://www.newkerala.com/news/read/145156/dental-care-helps-drug-abuse-patients-recover-study.html>

Oral health care not only helps drug abuse patients recover physically but also improves their quality of life, suggests a new study.

The study, published in the Journal of the American Dental Association, showed the drug abuse patients who consulted dental professionals for major oral health problems stayed in treatment almost two times longer and had recorded 80 per cent increase in chances of completing the drug abuse treatment.

"There is a powerful synergy between oral health care and substance use disorder," said Glen Hanson, the study's first author and Professor at University of Utah Health.

"Those who received comprehensive dental care had a better quality of life, measured by substantial improvements in employment and drug abstinence as well as a dramatic decrease in homelessness," Hanson said.

For the study, the researchers joined two substance use clinics -- Odyssey House and First Step House -- to develop the FLOSS (Facilitating a Lifetime of Oral Health Sustainability for Substance Use Disorder Patients and Families) programme.

The researchers compared the responses by FLOSS participants to controls.

First Step House allowed patients to self-select dental care (158 males in dental and 862 males in control), whereas Odyssey House identified participants with major oral health problems and then randomly assigned them to treatment or control (70 males and 58 females in dental and 97 males and 45 females in control).

The study's findings showed after the complete dental care, the FLOSS participants, either self-selected or randomly selected, were more likely to continue and complete their substance use treatment programme.

The researchers said providing complete oral care as part of treating the patient is critical to reviving self-esteem and is an essential first step on the long path to drug abuse recovery.

"The experience is life-changing not only for patients but also dental service providers like dental students who now know how their work can dramatically alter their patients' lives," noted Hanson.

"I think if we do the same for patients experiencing other chronic health problems, like diabetes, we could see similar positive results for treatment outcomes," he said.

Physical activities

Physical activities could reduce risk of liver-related death (New Kerala: 20190521)

<https://www.newkerala.com/news/read/145142/physical-activities-could-reduce-risk-of-liver-related-death.html>

The importance of physical activity can't be undermined and a new study has given more reasons to follow an active lifestyle.

The study has claimed that activities like walking and muscle strengthening were associated with significantly reduced risk of liver-related death.

Chronic liver disease is increasing, partly due to the obesity epidemic, and currently, there are no guidelines for the optimal type of exercise for the prevention of cirrhosis-related mortality.

The study published in 'Digestive Disease Week(r) (DDW)' hope the findings will help provide specific exercise recommendations for patients at risk for cirrhosis and its complications.

"The benefit of exercise is not a new concept, but the impact of exercise on mortality from cirrhosis and from liver cancer has not yet been explored on this scale," said Dr Tracey Simon, lead researcher on the study, Harvard Medical School and Massachusetts General Hospital, Boston.

"Our study shows that both walking and strength training contribute to substantial reductions in risk of cirrhosis-related death, which is significant because we know very little about modifiable risk factors," added Simon.

Dr Simon and her team prospectively followed 68,449 women from the Nurses' Health Study and 48,748 men from the Health Professionals Follow-up Study, without known liver disease at baseline.

Participants provided highly accurate data on physical activity, including type and intensity, every two years from 1986 through 2012, which allowed researchers to prospectively examine the association between physical activity and cirrhosis-related death.

Researchers observed that adults in the highest quintile of weekly walking activity had 73 per cent lower risk for cirrhosis-related death than those in the lowest quintile. Further risk reduction was observed with combined walking and muscle-strengthening exercises.

"In the U.S., mortality due to cirrhosis is increasing dramatically, with rates expected to triple by the year 2030. In the face of this alarming trend, information on modifiable risk factors that might prevent liver disease is needed," said Dr Simon.

This was the first prospective study in a large U.S. population to include detailed and updated measurements of physical activity over such a prolonged period, which allowed researchers to more precisely estimate the relationship between physical activity and liver-related outcomes.

Sepsis subtypes

Sepsis subtypes identified, different remedies stressed (New Kerala: 20190521)

<https://www.newkerala.com/news/read/144974/sepsis-subtypes-identified-different-remedies-stressed.html>

Sepsis is not a single syndrome but multiple distinct conditions much like cancer, suggest researchers.

Sepsis is a life-threatening condition when the body's response to an infection damages its own tissues and organs. The disease accounts for over 6 million global deaths annually.

A new study, by a team of researchers from University of Pittsburgh in the US, stresses the need of testing more therapies for the treatment of different types of sepsis.

"For over a decade, there have been no major breakthroughs in the treatment of sepsis; the largest improvements we've seen involve the enforcing of 'one-size fits all' protocols for prompt treatment," said lead author Christopher Seymour, Associate Professor at University of Pittsburgh.

"But these protocols ignore that all sepsis patients are not the same. For a condition that kills over 6 million people annually, that's unacceptable. Hopefully, by seeing sepsis as several distinct conditions with varying clinical characteristics, we can discover and test therapies precisely tailored to the type of sepsis each patient has," Seymour remarked.

For the study, published in Journal of the American Medical Association, researchers used computer algorithms to analyse 29 clinical variables found in the electronic health records of over 20,000 patients.

They noted that the algorithm clustered the patients into four different sepsis types, described as -- Alpha (most common type (33 per cent), patients with least organ dysfunction and lowest in-hospital death rate at 2 per cent; Beta: older patients, comprising 27 per cent, with the most chronic illnesses and kidney dysfunction; Gamma: similar frequency as beta, but with elevated measures of inflammation and primarily pulmonary dysfunction; and Delta: least common (13 per cent), but most deadly type, often with liver dysfunction and shock, and the highest in-hospital death rate at 32 per cent.

"Intuitively, this makes sense -- you wouldn't give all breast cancer patients the same treatment. Some breast cancers are more invasive and must be treated aggressively," said senior author Derek Angus, Professor at the University.

"The next step is to do the same for sepsis that we have for cancer -- find therapies that apply to the specific types of sepsis and then design new clinical trials to test them," Angus said.

Cancer drug

Cancer drug could be repurposed to treat brain aneurysms (New Kerala: 20190521)

<https://www.newkerala.com/news/read/144953/cancer-drug-could-be-repurposed-to-treat-brain-aneurysms.html>

Drugs used for the treatment of cancer patients can also be used to treat brain aneurysms, claims a study.

The study was published in the 'American Journal of Human Genetics'.

Brain aneurysms are a bulge in a blood vessel caused by a weakness in the blood vessel wall. As blood passes through the weakened blood vessel, blood pressure causes a small area to bulge outwards.

They can develop anywhere in the body but are most common in the abdominal aorta (the artery that carries blood away from the heart) and the brain.

It's difficult to estimate exactly how many people are affected by brain aneurysms as they usually cause no symptoms until they rupture, but experts believe it could be anywhere from 1 in 100 to as many as 1 in 20 people.

Treatment is difficult, involving complex surgery which is currently only attempted in select cases.

Researchers have found a safer and more efficient possible treatment involving 'Receptor tyrosine kinase inhibitors'; a class of drug currently used to treat cancer.

Mark O'Driscoll, Professor of Human Molecular Genetics at the Genome Damage and Stability Centre at the University of Sussex, said, "This is an extremely exciting discovery which shows how basic lab-derived observations on a genetic level can move into a clinical setting and start making big changes to public healthcare and treatments.

Using sophisticated 'next generation' DNA sequencing technologies, teams in Washington lead by Manuel Ferreira, identified a new genetic basis of a form of a brain aneurysm (mutations PDGFRB). This was unexpected, as mutations in this gene have been previously identified in completely different human developmental disorders.

O'Driscoll, then found that multiple disease-associated mutations in PDGFRB caused a specific abnormality in its encoded protein. This abnormality causes its activity to remain locked in a hyperactive form, referred to as 'gain-of-function variants' - in effect, causing the protein to always be 'turned-on'.

"Our research focused primarily on understanding the genetic and cellular mechanisms underlying a particular type of aneurysm," said O'Driscoll.

"By finding a new genetic basis in some patients, we were also able to demonstrate that a known cancer drug could counter this genetic basis in most instances," O'Driscoll added.

"Understanding the genetics behind diseases like this is crucial in identifying possible treatments and next steps - and that is exactly what our part in this new research has shown," O'Driscoll said.

Drug repurposing is not unheard of, and there are already some success stories including the use of thalidomide as a treatment for leprosy as well as a blood cancer called multiple myeloma.

Dr Manuel Ferreira, lead author of the study said "We are now very close to treating these aneurysm patients with PDGFRB variants with specific receptor tyrosine kinase inhibitors".

Diabetics

Diabetics at higher risk of liver disease: Study (New Kerala: 20190521)

<https://www.newkerala.com/news/read/144897/diabetics-at-higher-risk-of-liver-disease-study.html>

People with type 2 diabetes are at higher risk of deadly liver cirrhosis and liver cancer according to a new study.

According to the study published in the journal, 'BMC Medicine' patients in Europe are being diagnosed at the later stages of the disease, which are associated with greater risk of liver-related mortality.

The study involving 18 million people from across Europe also suggests that people living with type 2 diabetes are at particular risk of this "silent disease" and should be monitored closely to prevent life-threatening disease progression.

Non-Alcoholic Fatty Liver Disease (NAFLD) affects up to a quarter of people in the West and is the most common cause of liver diseases around the world. It is closely associated with obesity and type 2 diabetes.

For the majority, NAFLD is not a harmful condition, but one in six people will go on to develop the aggressive form of the disease, called Non-Alcoholic Steatohepatitis (NASH), leading to liver injury, scarring and eventually in some to cirrhosis, liver failure and even liver cancer.

By identifying which patients might go on to develop the more aggressive disease, interventions and treatments could be targeted to those at greatest need.

Lead researcher Dr William Alazawi said, "We were surprised that the number of patients with recorded diagnoses of Non-Alcoholic Fatty Liver was much less than expected, which means that many patients are actually undiagnosed in primary care.

"Even over the short time frame of the study, some patients progressed to more advanced, life-threatening stages of the disease, suggesting that they are being diagnosed very late."

He said it is important for the public, doctors and policymakers to be aware of this silent disease and strategies need to be put in place to tackle the root causes and avoid progression to life-threatening stages.

Naveed Sattar, one of the researchers said, "Doctors treating patients with diabetes already have a lot to check on - eyes, kidneys, heart risks - but these results remind us that we should not neglect the liver, nor forget to consider the possibility of NASH. They also remind us that perhaps more efforts are needed to help our patients with diabetes lose weight and cut alcohol."

More than 136,000 patients were identified with NAFLD/NASH and were more likely to have type 2 diabetes, hypertension and obesity than matched controls.

Looking at particular types of advanced liver disease, NAFLD/NASH patients were almost five times more likely to be diagnosed with cirrhosis and more than three and a half times more likely to be diagnosed with liver cancer.

The study also found that NAFLD/NASH patients acquired diagnoses of life-threatening liver disease within a relatively short time (around 3.3 years).

Researchers say that it is not practicable that this reflects true rates of disease progression.

The acquisition of a new diagnosis in the healthcare record does not necessarily mean that disease progression has occurred at that time, nor that the advanced disease did not exist at the time of the initial diagnosis.

The results also suggest that primary care records under-estimate disease severity and that some patients with NAFLD diagnoses actually have advanced cirrhosis already.

The research was funded by the European Union's Innovative Medicines Initiative and Dr William Alazawi was funded by the Medical Research Council.

Sleeping

Phone use limit can reverse sleep problems in a week (New Kerala: 20190521)

<https://www.newkerala.com/news/read/144902/phone-use-limit-can-reverse-sleep-problems-in-a-week.html>

evening exposure to blue-light emitting screens on smartphones, tablets and computers can reverse sleep problems and reduce symptoms of fatigue, lack of concentration and bad mood in teenagers, after just one week, says a study.

The researchers found that those who had more than four hours per day of screen time had on average 30 minutes later sleep onset and wake up times than those who recorded less than one hour per day of screen time, as well as more symptoms of sleep loss.

"Adolescents increasingly spend more time on devices with screens and sleep complaints are frequent in this age group," said study co-author Dirk Jan Stenvers from Amsterdam UMC hospital in the Netherlands.

Recent studies have indicated that exposure to too much evening blue light emitted from devices can affect the brain's clock and the production of the sleep hormone melatonin, resulting in disrupted sleep time and quality.

The lack of sleep does not just cause immediate symptoms of tiredness and poor concentration but can also increase the risk of more serious long-term health issues such as obesity, diabetes and heart disease.

"Here we show very simply that these sleep complaints can be easily reversed by minimising evening screen use or exposure to blue light. Based on our data, it is likely that adolescent sleep complaints and delayed sleep onset are at least partly mediated by blue light from screens," Stenvers added.

For the study, the researchers conducted a randomised controlled trial among a small group of smartphone users to assess the effects of blocking blue light with glasses and no screen time during the evening on the sleep pattern.

Both blocking blue light with glasses and screen abstinence resulted in sleep onset and wake up times occurring 20 minutes earlier, and a reduction in reported symptoms of sleep loss in participants, after just one week.

The findings were presented at the European Society of Endocrinology annual meeting, ECE 2019 in Lyon, France.

Drinking coffee

Drinking coffee does improve bowel movement (New Kerala: 20190521)

<https://www.newkerala.com/news/read/144753/drinking-coffee-does-improve-bowel-movement.html>

Drinking coffee keeps the bowels moving because it changes gut bacteria and improves ability of intestines to contract, find researchers.

Researchers, feeding rats coffee and also mixing it with gut bacteria in petri dishes, found that coffee suppressed bacteria and increased muscle motility, regardless of caffeine content.

"When rats were treated with coffee for three days, the ability of the muscles in the small intestine to contract appeared to increase," said Xuan-Zheng Shi, associate professor in internal medicine at the University of Texas Medical Branch, Galveston.

Interestingly, these effects are caffeine-independent, because caffeine-free coffee had similar effects as regular coffee, Shi informed during the Digestive Disease Week (DDW) 2019 here on Sunday.

Coffee has long been known to increase bowel movement, but researchers have not pinpointed the specific reason or mechanism.

The study found that growth of bacteria and other microbes in fecal matter in a petri dish was suppressed with a solution of 1.5 per cent coffee, and growth of microbes was even lower with a 3 per cent solution of coffee.

Decaffeinated coffee had a similar effect on the microbiome.

Muscles in the lower intestines and colons of the rats showed increased ability to contract after a period of coffee ingestion, and coffee stimulated contractions of the small intestine and colon when muscle tissues were exposed to coffee directly in the lab.

The results support the need for additional clinical research to determine whether coffee drinking might be an effective treatment for post-operative constipation, or ileus, in which the intestines quit working after abdominal surgery, the authors noted.

Stem cell therapy

Stem cell therapy for spinal cord injury patients unethical,(The Times of India: 20190521)

Read more at:

http://timesofindia.indiatimes.com/articleshow/69419270.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst



THE ACCEPTED MODES OF TREATMENT FOR SPINAL CORD INJURY ARE EXTENSIVE PHYSICAL THERAPY, OCCUPATIONAL THERAPY, AND OTHER REHABILITATION THERAPIES

RECENT FAD | STEM CELL THERAPY

- Stem cell/cellular interventions have gained interest due to their immense regeneration and repair potential
- Some of pre-clinical studies have also demonstrated positive results
- But data from clinical studies aren't robust

SPINAL CORD SOCIETY SAYS

- Stem cell therapy for spinal cord injury is experimental and needs to be tested through a valid clinical trial programme
- It is not ethical to provide unproven transplantation therapy with commercial implications

Maternal Health

कमजोर भविष्य की ओर ले जाएगा अपरिपक्व मातृत्व (**Hindustan: 20190521**)

http://epaper.livehindustan.com/imageview_20434_60615712_4_1_21-05-2019_i_12.pagezoomsinwindows.php

हर साल लाखों लड़कियां समय से पहले मां बन जाती हैं, उन्हें वयस्कों की जिम्मेदारी ओढ़ने को विवश होना पड़ता है।

संचिता शर्मा

हेल्थ एडिटर, हिन्दुस्तान टाइम्स



कम उम्र में गर्भ धारण करने से न सिर्फ मां की सेहत को नुकसान पहुंचता है, बल्कि बच्चे का विकास भी (जन्म से पहले और जन्म के बाद, दोनों स्थितियों में) प्रभावित होता है। वयस्क माओं की तुलना में इन माओं के सामान्य से कम वजन और कम लंबाई के बच्चे पैदा करने की आशंका ज्यादा होती है। भारत में कम उम्र में मां बनने और कुपोषित बच्चों के आपसी रिश्तों की समग्रता से पड़ताल करने वाले एक वैश्विक अध्ययन का यह निष्कर्ष है। उल्लेखनीय है कि भारत दुनिया भर में कम उम्र में मां बनने वाली हर पांच में से एक महिला और हर तीन बौने बच्चों में से एक का घर है। पिछले सप्ताह *द लांसेट चाइल्ड ऐंड अडोलेसेंट हेल्थ* में प्रकाशित इस अध्ययन के मुताबिक, वयस्क माओं की तुलना में किशोरावस्था में गर्भ धारण करने वाली लड़कियों से पैदा होने वाले बच्चों में बौनापन और सामान्य से कम वजन होने की आशंका 11 फीसदी ज्यादा होती है। इंटरनेशनल फुड पॉलिसी रिसर्च इंस्टीट्यूट (आईएफपीआरआई) के सैमुअल स्कॉट (इस अध्ययन के सह-लेखक) बताते हैं, 'मां की शिक्षा, उनकी सामाजिक-आर्थिक हैसियत और उनका वजन ऐसे कारक थे, जो कम उम्र में गर्भधारण और बच्चों में सामान्य से कम लंबाई को आपस में मजबूती से जोड़ते हैं'। अपने अध्ययन के लिए उन्होंने राष्ट्रीय परिवार स्वास्थ्य सर्वेक्षण- 4, यानी एनएफएचएस- 4 के आंकड़ों का विश्लेषण किया है।

रिपोर्ट कहती है कि समय-पूर्व शादी को रोकने संबंधी नीतियों को लागू करने से कुपोषण के इस पीढ़ीगत चक्र को तोड़ने और बच्चों के स्वास्थ्य में सुधार लाने में मदद मिल सकती है। अध्ययन की सह-लेखिका पूर्णिमा मेनन की मानें, तो 'जिन्होंने कम उम्र में गर्भ धारण किया, वे उन वयस्क माओं की तुलना में कम शिक्षित, गरीब और कम वजन वाली थीं। ऐसी महिलाओं को गर्भावस्था में, प्रसव के समय और बच्चे की शुरुआती अवस्था के दौरान अच्छी स्वास्थ्य सुविधाएं तो नहीं ही मिल पातीं, नवजात और छोटे बच्चे को दूध पिलाने का अभ्यास और रहन-सहन की स्थिति जैसे सभी कारकों में भी उनकी हालत वयस्क माओं की तुलना में खस्ता होती है।'

एनएफएचएस- 4 के अनुसार, साल 2015-16 में लगभग 27 फीसदी लड़कियों की शादी 18 साल से

लंबे थे, 35.7 फीसदी कम वजन के और 21 फीसदी गंभीर रूप से कुपोषित थे। 'सेव द चिल्ड्रन' की सीईओ बिदिशा पिल्लई कहती हैं, 'विश्व स्तर पर समय-पूर्व गर्भावस्था के कारण पांच वर्ष से कम उम्र के 15.6 करोड़ से अधिक बच्चे कुपोषण के कारण सामान्य रूप से लंबे नहीं हैं। हर साल, लाखों लड़कियां समय से पहले मां बन जाती हैं, जिसके कारण उन्हें वयस्कों की जिम्मेदारी ओढ़ने को मजबूर होना पड़ता है। उनकी सेहत, शिक्षा और आर्थिक संभावनाओं को भी खतरे में डाला जाता है। दुनिया भर में 15 से 19 वर्ष की किशोरियों की मौत की दूसरी बड़ी वजह गर्भावस्था व प्रसव से पैदा होने वाली समस्याएं ही हैं।'

आईएफपीआरआई के अध्ययन में यह भी पाया गया है कि वयस्क माताओं की तुलना में, कम उम्र में मां बनने वाली महिलाएं छोटी, कम वजन वाली और एनीमिक (खून की कमी से पीड़ित) थीं। स्वास्थ्य

वयस्क मातृत्व की तुलना में कम उम्र माओं द्वारा सामान्य से कम वजन के बच्चे पैदा करने की आशंका ज्यादा होती है।

सेवाओं तक उनकी पहुंच भी कम थी। इतना ही नहीं, वे अपेक्षाकृत कम शिक्षित थीं, और उनका रहन-सहन भी अच्छा न था। यह तस्वीर बदली जा सकती है, यदि लड़कियों को शिक्षा व आजीविका मुहैया कराई जाए। देश भर के 600 जिलों में कम से कम 70,000 घरों में सर्वे करने वाले नंदी फाउंडेशन द्वारा तैयार टीन एज गर्ल्स सर्वे से पता चलता है कि 73.3 फीसदी लड़कियां 21 साल की उम्र के बाद शादी करना चाहती हैं, लेकिन उनके पास पढ़ाई जारी रखने, शादी से इनकार करने, रोजगार की तलाश करने या गर्भावस्था को टालने का कोई विकल्प नहीं होता। हालांकि कम और मध्यम आय वाले देशों में जिन रणनीतियों से बाल विवाह रोका जा सका है, उसमें शामिल हैं- बिना शर्त नकदी हस्तांतरण, स्कूल में नामांकन या उपस्थिति की शर्त पर नकदी हस्तांतरण, स्कूल वाउचर, कौशल विकास से जुड़े पाठ्यक्रम और

