



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
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Health and wellness

Friend circle more predictive of your health than Fitbit alone: Study (The Tribune: 20190619)

<https://www.tribuneindia.com/news/health/friend-circle-more-predictive-of-your-health-than-fitbit-alone-study/789673.html>

Your circle of friends may help you get a better reading on your overall health and wellness than just using wearable devices such as Fitbit, according to researchers, including one of Indian origin.

The study, published in the journal PLOS ONE, analysed what the structure of social networks says about the state of health, happiness and stress.

"We were interested in the topology of the social network—what does my position within my social network predict about my health and well-being?" said Nitesh V Chawla, a professor at the University of Notre Dame in the US.

"What we found was the social network structure provides a significant improvement in predictability of wellness states of an individual over just using the data derived from wearables, like the number of steps or heart rate," Chawla said.

For the study, participants wore Fitbits to capture health behaviour data—such as steps, sleep, heart rate and activity level—and completed surveys and self-assessments about their feelings of stress, happiness and positivity

Chawla and his team then analysed and modelled the data, using machine learning, alongside an individual's social network characteristics including degree, centrality, clustering coefficient and number of triangles.

These characteristics are indicative of properties like connectivity, social balance, reciprocity and closeness within the social network.

The study showed a strong correlation between social network structures, heart rate, number of steps and level of activity.

Social network structure provided significant improvement in predicting one's health and well-being compared to just looking at health behaviour data from the Fitbit alone.

For example, when social network structure is combined with the data derived from wearables, the machine learning model achieved a 65 per cent improvement in predicting happiness.

The model also achieved 54 per cent improvement in predicting one's self-assessed health prediction, 55 per cent improvement in predicting positive attitude, and 38 per cent improvement in predicting success.

"This study asserts that without social network information, we only have an incomplete view of an individual's wellness state, and to be fully predictive or to be able to derive interventions, it is critical to be aware of the social network structural features as well," Chawla said.

The findings could provide insight to employers who look to wearable fitness devices to incentivise employees to improve their health.

Handing someone a means to track their steps and monitor their health in the hopes that their health improves simply may not be enough to see meaningful or significant results.

Those employers, Chawla said, would benefit from encouraging employees to build a platform to post and share their experiences with each other.

Social network structure helps complete the picture of health and well-being.

"I do believe these incentives that we institute at work are meaningful, but I also believe we're not seeing the effect because we may not be capitalising on them the way we should," Chawla said. — PTI

Hypertension drug

Hypertension drug may slow down Alzheimer's in patients (New Kerala: 20190619)

<https://www.newkerala.com/news/read/159772/hypertension-drug-may-slow-down-alzheimers-in-patients.html>

Researchers have found that a drug, called nilvadipine that is consumed as a pill to control hypertension, could also help patients combat Alzheimer's disease without affecting other parts of the brain.

Nilvadipine is a calcium channel blocker used to treat high blood pressure (HBP).

According to the study published in Hypertension Journal of the American Heart Association, these findings indicate that the known decrease in cerebral blood flow in patients with Alzheimer's can be reversed in some regions.

"This high blood pressure treatment holds promise as it doesn't appear to decrease blood flow to the brain, which could cause more harm than benefit," said the study lead author Jurgen Claassen, Associate Professor at the Radboud University in the Netherlands.

"Even though no medical treatment is without risk, getting treatment for high blood pressure could be important to maintain brain health in patients with Alzheimer's disease," Claassen said.

For the study, researchers sought to discover whether nilvadipine could help treat Alzheimer's disease by comparing the use of nilvadipine and a placebo among people with mild to moderate Alzheimer's disease.

Researchers randomly assigned 44 participants to receive either nilvadipine or a placebo for six months.

They measured blood flow to specific regions of the brain using a unique magnetic resonance imaging (MRI) technique.

Results showed that blood flow to the hippocampus, the brain's memory and learning centre, increased by 20 per cent among the nilvadipine group compared to the placebo group.

Blood flow to other regions of the brain was unchanged in both groups.

However, the sample sizes were too small and follow-up time too short to reliably study the effects of this cerebral blood flow increase on structural brain measures and cognitive measures, the researchers noted.

Poor oral health

Poor oral health escalates liver cancer risk (New Kerala: 20190619)

<https://www.newkerala.com/news/read/159667/poor-oral-health-escalates-liver-cancer-risk.html>

Poor oral health is associated with a 75 per cent increased risk of hepatocellular carcinoma (HCC), the most common form of liver cancer, a study suggests.

Published in the United European Gastroenterology Journal, the study investigated the association between oral health conditions and the risk of a number of gastrointestinal cancers, including liver, colon, rectum and pancreatic cancer.

Models were applied to estimate the relationship between cancer risk and self-reported oral health conditions, such as painful or bleeding gums, mouth ulcers and loose teeth.

"Poor oral health has been associated with the risk of several chronic diseases, such as heart disease, stroke and diabetes", said the study lead author Haydee WT Jordao from Queen's University Belfast.

According to the researchers, of the 469,628 participants from the UK, 4,069 developed gastrointestinal cancer during the (average) six-year follow up. In 13 per cent of these cases, patients reported poor oral health.

Participants with poor oral health were more likely to be younger, female, living in deprived socio-economic areas and consumed less than two portions of fruit and vegetables per day.

The biological mechanisms by which poor oral health may be more strongly associated with liver cancer, rather than other digestive cancers, is currently uncertain. One explanation is the potential role of the oral and gut microbiome in disease development.

"The liver contributes to the elimination of bacteria from the human body," Jordao said.

"When the liver is affected by diseases, such as hepatitis, cirrhosis or cancer, its function will decline and bacteria will survive for longer and therefore have the potential to cause more harm," he added.

Hepatitis C transmission

Hepatitis C transmission from mothers to babies can be prevented through universal screening (New Kerala: 20190619)

<https://www.newkerala.com/news/read/159653/hepatitis-c-transmission-from-mothers-to-babies-can-be-prevented-through-universal-screening.html>

In a recent study conducted by researchers in Canada stated that the transmission of Hepatitis C virus (HCV) from mothers to babies can be prevented.

The study was published in the journal, 'Canadian Medical Association Journal.'

According to the study the transmission can only be prevented if Canada recommended universal screening for HCV in pregnancy.

Dr Chelsea Elwood, the lead author of the research said, "We encourage all care providers to consider the reproductive implications of HCV, to consider HCV screening in pregnancy and referral for treatment of HCV."

"The time has come to move toward universal HCV screening in women who are pregnant, with initial prenatal investigations that are then repeated based on risk factors in the third trimester," she concluded.

Almost half of the women infected with HCV are unaware of their infection, and current treatment with direct-acting antiviral regimens is quite effective.

"With the care gaps in both maternal screening in pregnancy and postnatal infant screening, Canada likely has a large cohort of infants, children and young adults with progressive liver disease, who could have been cured of the HCV infection if it had been identified early or, quite simply, would not have been infected at all," the author explained.

The elimination of vertical transmission of HCV from mother to child is easily achievable with the collaboration of public health and health care professionals.

Yoga

Try some tech yoga this summer to stay fit (New Kerala: 20190619)

<https://www.newkerala.com/news/read/159640/try-some-tech-yoga-this-summer-to-stay-fit.html>

As the International Yoga Day approaches on June 21, there are several apps and online platforms to help yoga enthusiasts boost their health in the absence of a trained guide.

Some apps also offer integrated services with Apple health app and other Android devices.

For the beginners, the Breathe app on Apple Watch guides you through a series of deep breath and reminds to take time to breathe daily. Choose how long you want to breathe, then let the animation and gentle taps help you focus.

Pocket Yoga app is like an instructor in your pocket, owing to detailed voice and visual instructions that guide you through each pose and every breath.

Over 200 illustrated images show you the correct posture and alignment, and an included dictionary describes the benefits and techniques of various poses.

"Daily Yoga" app offers over 500 asanas, more than 200 guided classes of yoga, pilates, meditation, over 50 workout plans and top coaches' workshops that suit people from the beginner to advanced level. "Daily Yoga" integrates with the Apple Health App.

"Simply Yoga" -- available on both iOS and Android -- is an app that keeps it simple with just a few routines and multiple poses. Choose from a 20, 40 or 60-minute workout, or master more than 30 yoga poses with helpful audio and video instruction with this app.

Available in six languages, "Asana Rebel" on iOS platform is for anyone who aims to lose weight and start a healthy lifestyle. The app helps burn calories, strengthen the core, increase flexibility and balance the body while focusing on the mind.

"Yoga-Go" combines customized fitness and weight loss plans, along with a healthy meal tracker. "Yoga-Go" workouts only take between 7-30 minutes and you can burn up to 200 calories per session.

"Mindfulness means living in the present moment. By simply being aware of this tendency of the mind, we can actually save ourselves from getting stressed or worked up and relax the mind," Mumbai-based yoga expert Natasha Noel told IANS.

"What I really like about the Breathe app and about any kind of technique that is accessible to people, is that they do give people who might not otherwise give meditation a try, a sense of how powerful those techniques can be," Noel added.

"Pocket Yoga" Android app gives detailed voice and visual instructions to guide users through each pose and every breath. "5 Minute yoga" add has quick yoga sessions for improved flexibility, increased strength, toned muscles and reduced stress.

Health infrastructure

Doctors say better health infrastructure could have contained Encephalitis (New Kerala: 20190619)

<https://www.newkerala.com/news/read/158919/doctors-say-better-health-infrastructure-could-have-contained-encephalitis.html>

As Acute Encephalitis Syndrome (AES) continues to claim lives in Bihar's Muzaffarpur district, medical doctors have said that better health infrastructure could have helped contain the disease and save lives.

The death toll in Bihar, which is grappling under the deadly encephalitis, touched 84 till Sunday afternoon.

Randeep Guleria, Director at AIIMS told ANI, "Unfortunately, encephalitis is common in Bihar and many types of research are being done. Our aim is to get control over the deaths. There is a need to increase health infrastructure."

"AIIMS is ready to give support. The central government is also looking into it. Over the next few years, we will be able to control Japanese Encephalitis," he said.

National President of Indian Medical Association, Doctor Ranjan Sharma said that the IMA should be roped in by the government to suggest remedies of Encephalitis, which usually breaks out in summers.

"Every year it is being said that everything has been done to contain it but it still occurs. It is not the doctors who can be blamed. Lack of infrastructure, basic cleanliness and various communities working have to come up in a big way," Sharma told ANI.

"The government has to take up IMA in a very active role in suggesting ways and remedies. Every answer does not lie with the government. It is the people who are subjected to ground realities," he said.

In the wake of the fatalities, Bihar Chief Minister Nitish Kumar announced an ex gratia of Rs 4 lakh each to families of the children who died due to AES in Muzaffarpur. He also gave directions to the health department, district administration and doctors to take necessary measures to fight the disease.

Earlier, Bihar Health Minister Mangal Pandey said the state government is doing its best to save the children.

"We are trying everything and anything that can save children's lives. Everything is being made available from medicines to doctors. We have even called doctors and nurses from AIIMS in Patna," he said.

"There is a protocol regarding what kind of medicines and facilities should be given and we are doing the same. We are monitoring things regularly and trying to save our children," Pandey said.

Smoking

Smoking may impair blood pressure autocorrect system (New Kerala: 20190619)

Smoking may impair blood pressure autocorrect system

Smoking may increase the risk of developing hypertension by impairing the body's blood pressure autocorrect system, warn researchers.

"The human body has a buffering system that continuously monitors and maintains a healthy blood pressure. If blood pressure drops, a response called muscle sympathetic nerve activity (MSNA) is triggered to bring blood pressure back up to normal levels," said Lawrence Sinoway from Penn State University in the US.

An additional system -- called the baroreflex -- helps correct if blood pressure gets too high, he added.

According to Sinoway, the study found that after a burst of MSNA, the rise in blood pressure in a chronic smoker was about twice as great as in a non-smoker, pushing blood pressure to unhealthy levels. The researchers suspect that impairment of baroreflex may be the culprit.

"When the sympathetic nervous system fires, like with MSNA, your blood pressure rises and then a series of things happen to buffer that increase, to try to attenuate it," Sinoway said.

"We think that in smokers, that buffering -- the baroreflex -- is impaired."

The results suggest that this impairment may be connected to hypertension, said Jian Cui, Associate Professor at Penn State College of Medicine.

"The greater rise in blood pressure in response to MSNA may contribute to a higher resting blood pressure level in smokers without hypertension," Cui said.

"It's possible that this higher response to MSNA could also contribute to the eventual development of hypertension," Cui added.

The researchers said that while previous research has found a link between chronic smokers and higher levels of MSNA bursts, less was known about what happened to blood pressure after these bursts.

For the study, the researchers examined 60 participants -- 18 smokers and 42 non-smokers. None of the participants had hypertension.

The results were published in the American Journal of Physiology-Regulatory, Integrative and Comparative Physiology.

युवाओं की हड्डियों में बदलाव ला रहा फोन



सेहत

नई दिल्ली | हिटी

लोग मोबाइल फोन और टैबलेट जैसे उपकरण देखने में इतना वक्त बिताने लगे हैं कि इससे उनके सिर के पीछे हड्डियों के ढांचे में बदलाव हो रहा है। शोधकर्ताओं ने यह दावा किया है।

उन्होंने कहा कि देर तक फोन देखने के लिए लोग अपना सिर झुकाकर रखते हैं जिससे उनकी खोपड़ी के पीछे हड्डियां उग रही हैं, जो उभार के रूप में नजर आ रही हैं।

1800 में ऐसे उभारों को पहली बार देखा गया था, लेकिन तब यह बहुत दुर्लभ थे। अब हड्डियों के इस उभार को सिर के पीछे छूकर महसूस किया जा सकता है।

युवाओं को सबसे ज्यादा परेशानी:

शोधकर्ताओं के अनुसार मोबाइल फोन पर ज्यादा देखने के कारण युवाओं की खोपड़ी के पीछे हड्डियों का उभार तेजी से बढ़ रहा है। 18 से 30 साल के युवाओं में यह उभार आम बात होती जा रही है। ऑस्ट्रेलिया की यूनिवर्सिटी ऑफ सनसाइन कोस्ट के वैज्ञानिकों ने इस मामले पर शोध किया है।

Encephalitis

Encephalitis toll hits 113, Nitish faces wrath of kin (Hindustan Times: 20190619)

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

Simmering public anger over an outbreak of the acute encephalitis syndrome (AES) in Bihar spilled over into the streets with protesters heckling chief minister Nitish Kumar outside a hospital as one of India's poorest states struggled to fight the disease that killed 10 more children on Tuesday, taking the toll to 113.

Kumar, who has not visited the affected areas since the first death was reported on June 5, went to the Shri Krishna Medical College and Hospital (SKMCH) in Muzaffarpur, where 91 children have died and 300 more are in treatment. But he was accosted by irate families who fumed that the chief minister allegedly found time to visit the hospital only after the toll crossed 100. Many shouted slogans of "Nitish go back" while others waved black flags.

Kumar conducted an emergency meeting with his deputy, Sushil Kumar Modi, state health minister Mangal Pandey, urban development minister Suresh Kumar Sharma, and top bureaucrats.

Officials present said the CM expressed displeasure over a large number of patients receiving treatment on the floor and ordered an expansion of the hospital.

Outside the hospital, protesters claimed that the government came in too late.

"Things are being spruced up so that it makes a favourable impression on the chief minister. Had the CM visited earlier, it would have made the officials concerned pull up their socks and many lives could have been saved," said one of the protesters.

In Delhi, activists from different organisations protested outside Bihar Bhawan and demanded Kumar's resignation. They accused the Centre and the Bihar government of not being serious about containing the outbreak, and said the health-care system in the state was mismanaged. "We are anguished and urge the government to provide adequate medical facilities, particularly in Muzaffarpur, to See page 10