Environmental Health

Climate change already disaster to health: Lancet study
Health care providers already see themselves treating a climate crisis (The Tribune: 20201204)


Researchers have revealed that high temperatures are putting hundreds of thousands of people's health and livelihoods at risk every year.

The study, published in the journal The Lancet, found that heat-related deaths among older adults grew by nearly 54 per cent between 2000 and 2018.

According to The Verge, the report was produced by more than 100 experts from academia, the World Health Organization (WHO), and other UN agencies.

The report offers proof that climate change will not only reshape life in the future, but it is actively endangering lives now.

Health care providers already see themselves treating a climate crisis.

The report, while covering a sweeping range of health threats from hunger to pollution, included brand-new findings on how many more lives have been taken by extreme heat.

The number of heat-related deaths globally in 2018 reached an alarming 296,000 - and that's just among people over the age of 65, who are among the most vulnerable to heat illness.
China, India, Japan, and central Europe had the most deaths among older adults.

In the US, heat-related mortality has nearly doubled for this demographic over the past 20 years, reaching a record 19,000 deaths in 2018.

The study showed that people who work outside are also more vulnerable to heatwaves. Staying inside during a heatwave is often a healthier choice. But not working when it's too hot outside comes with costs, too.

According to the researchers, globally, people worked 302 billion hours less in 2019 because of scorching temperatures - 103 billion more hours than were lost in 2000.

Rising temperatures have also triggered more wildfires, which poses another set of health threat.

Globally, the risk of people being exposed to a wildfire grew in a majority of the world's countries in recent years when compared to the period between 2001 and 2004.

The US saw one of the biggest increases in risk, with a 19 per cent rise in daily exposures to wildfires. That means more people are breathing in more soot and pollution from the blazes.

"Heatwaves and other natural disasters were particularly dangerous this year, as emergency responders and health care systems struggled to handle the pandemic," study co-author Jeremy Hess was quoted as saying to The Verge, Experts fear that climate-related disasters could similarly overwhelm hospitals in the future. IANS

Covid-19: What you need to know today (Hindustan Times: 20201204)

https://epaper.hindustantimes.com/Home/ArticleView

The US registered 2,760 deaths on Wednesday, according to the New York Times. This is the highest daily death toll in the country since the beginning of the pandemic (caveat: just like the death toll on any other day, this does not mean 2,760 people died from Covid-19 on Wednesday, just that their deaths were recorded on that day). There’s a high probability that this number will increase in the coming days. According to the New York Times, hospitalisations in the US have now exceeded 100,000. On Wednesday, the US had 5.57 million infections, according to worldometers.info -- a staggeringly high number, it’s almost 40% of the total of 14.3 million cases the country has seen thus far. The country has seen a little less than 14 million cases, according to the NYT database (there has always been some divergence between the two readings). In the week to December 2, the US saw 164,024 daily cases on average (according to the NYT database). Last week it crossed the 200,000 mark in terms of daily cases for the first time. The third wave of infections, the rush of hospitalisations, and the spate of deaths, can be attributed to opening up, the onset of winter, the holiday season – experts are dreading the impact of Thanksgiving, which they expect to start showing up by late this week – and, of course, the stupidity of people. Show me a superspreader event and I will show you one idiot, perhaps more. It’s going to be a long, dark winter for the US.
Sometime before December 15, though, the US Food and Drug Administration is almost certain to approve the country’s first Covid-19 vaccine. And before Christmas, it could approve the second. The agency is expected to take a decision (or at least critical steps towards taking an eventual decision) on the vaccine developed by Pfizer and BioNTech on December 10, and on the one developed by Moderna on December 17. Given what we know of the results of the trials for both vaccines, regulatory approval for both is almost a certainty. The UK has already approved the Pfizer-BioNTech vaccine (this happened on Wednesday), and media reports in the US point to some level of angst that FDA is taking its time. A report in AFP quoted Moncef Slaoui, the scientific adviser to Operation Warp Speed, the US government programme that has ploughed billions of dollars into vaccine developers – it is probably the Trump administration’s biggest success – as saying that vaccinations in the country could start in the middle of December and that by the “end of February, we will have potentially immunised 100 million people”. Excluding those below the age of 18 years, who will not be administered the vaccine till much later in the year (and this is not just in the US, but everywhere; Dispatch 217 on Thursday explained why), this will cover around 40% of those who need vaccines. Earlier this week, the executive in charge of supply and distribution for Operation Warp Speed told MSNBC that all Americans who want vaccines will have it by June.

In both the UK and the US, which will be the first countries to start vaccinating people with shots that have cleared Phase 3 trials – Russia and China are also vaccinating people under emergency use, but the final results of trials are still awaited in the case of the two vaccines approved by the former, and the three by the latter – the challenge for administrators and health officials is to convince everyone to get vaccinated. Both countries have a significant population of anti-vaxxers.

With the UK, the US, and other rich countries hogging much of vaccine supply though, 2021 is likely to result in a new kind of inequality – and because vaccines are relevant from the perspective of both lives and livelihoods, this will only accentuate existing fractures between the global north and the global south.

**COVID-19**

**Slow progress: On WHO's assurance to uncover origin of COVID-19 WHO must work alongside China in quickly uncovering the origins of the virus? (The Hindu: 20201204)**


In 2003, a WHO team was able to identify the animal source of SARS coronavirus within weeks despite its arrival in China nearly three months after the initial outbreak. In the case of MERS coronavirus, the intermediate host was identified more than a year after the first human case was reported. However, in the case of the novel coronavirus (SARS-CoV-2), its source is
still unknown even 11 months after WHO reported the first case. Knowing the natural reservoirs and intermediate hosts and the events that allowed the virus to jump across the species barrier are important in prevention. Soon after the virus spread around the world, there was heightened demand to identify its origin in China’s Wuhan where the first case cluster was reported. Even as the global focus shifted to therapeutics and vaccine trials, it is reassuring that the global health body is still determined to find the virus’s origin. But the pace of investigation leaves much to be desired. Efforts began in February but it was only in early August that WHO completed the mission to lay the groundwork for joint efforts to identify the origin; its two-member team did not visit Wuhan, the epicentre of the outbreak. It was only in late October that China began early studies for the two-phase investigation. In the first phase, short-term studies will be undertaken to better understand how the virus might have begun circulating in Wuhan. Longer-term studies will follow based on these results. It is only then that a WHO-led team can operate in China to collaborate with Chinese scientists.

If China failed to alert WHO immediately after a Wuhan cluster was reported, its reluctance to quickly and earnestly investigate the source can partly be explained by U.S. President Donald Trump’s attempt to politicise the issue. The reluctance has only increased after mounting international ire over its reporting the outbreak and the huge economic cost of the pandemic globally. There is strong evidence that the virus originated in bats and probably spread to humans through an intermediate species. One way to find this out is to know the susceptibility of different animal species. Already, many animals including cats have been found susceptible to the virus in the lab and outside. With the virus spread so wide, zeroing in on the intermediate host becomes more difficult as the possibility of humans having spread the virus to animals cannot be ruled out. Hence, a multi-pronged approach with an emphasis on investigating China’s wildlife farms becomes crucial. This highlights the importance of working alongside China to uncover the virus’s origin.

Covid (The Asian Age: 20201204)

Amid challenges, there is hope Covid’s end is near

The British government clearing the vaccine against coronavirus, developed and manufactured jointly by German startup BioNTech and US pharma major Pfizer, so that vaccination in that country could start as early as next week, is perhaps the biggest news of 2020. The pandemic, Covid-19, which the virus causes, has made six crore ill and killed more than 14 lakh people, rendering itself into the biggest threat to public health in recent times. A vaccine to keep it at bay now offers humanity a reason to look at their lives and livelihoods with a little more hope than that they have done with in the past 10 months.

It was a truly global endeavour that resulted in the development of the vaccine at a record speed — the lead was taken by a Turkish couple who set up their startup in Germany and was supported by a US pharma major. And the final product, which the whole world was waiting for, was cleared for by the British regulator. The mRNA vaccine, or memory RNA vaccine, uses a fragment of genetic code from the coronavirus to teach the body how to prompt an immune response and fight the disease. It is for the first time that such a process has resulted in a vaccine that’s authorised for public use. Reports say the vaccine is 95 per cent efficient, particularly among the elderly adults. The British regulator has insisted that the vaccine candidate has been subjected to thorough quality checking, allaying fears of expediency leading the push.

The challenges are not over. The vaccine needs to be stored at around minus 70 degrees Celsius, a logistical challenge only a few countries can take up. Mass production, safe distribution and proper administration based on a transparent protocol could still pose difficulties before the vaccine reaches all the needy people. One can take comfort from the fact that there are at least five more candidates that are easier to store and distribute and are in the final stages of clinical trials. Their arrival in the next few weeks will ease the situation substantially.

Now that science has done its job of coming up with an answer to a potential danger to human race, it’s time for politics to take over and design a formula, which can address the needs of the last man on the street. Reports offer no hope in this, though: the entire bulk of early production has been pre-ordered by the rich western nations. India’s hopes rest on its vast vaccine manufacturing capabilities built over decades; still the government has sounded cagy vis-a-vis assurances of inoculating everyone. Then there are nations with neither the money nor the production capacities but still house millions of vulnerable people. Their cries of desperation could easily be lost in the cacophony of global marketplace, which recognises only a few ideas, such as capital and profit. It is incumbent on countries, such as India, which in the past have used their leverage to amplify the voice of the less privileged on the global scene. There is a lot to gain by saying, “I am my brother’s keeper”, especially if he is a potential target of a deadly disease.
Impact your memory with regular exercise

London, Dec 3: Memory is an essential part of your health and well being. This article will give you some information you need to better your memory. Don't forget everything, learn all that you are able to!

Playing brain teasers is an excellent method of improving your mind is a great way to improve memory. This concept is much like the same way that physical exercise you do to strengthen your muscles. Good games for improving memory include crosswords, crossword puzzles and brain teasers.

Mnemonic devices aid the memory in a fashion similar to how shorthand when writing.

If your mind constantly wanders, then your mind may not retain the full memory. Think hard about and focus on these things in order to make the information into your memory.

Changing your environment refreshes your mind, and improves recall from long-term memory. Your brain tends to wake up as it detects changes in your routine, and when the brain is awake, your brain could take a lot more information.

Staying socially engaged is a great way to boost the strength of your memory stay sharp. This will help you awake and happy. If you stay at home alone all the time, your brain isn't working like it should. Engaging in spirited social outings with others will keep your friends and family can help you to maintain an acute mind.

If you're trying to remember something, attempt to associate the thought with a funny phrase, melody or visual imagery.

Memory loss is a very tragic for the aging mind. Prescription medicines are the one of the best tools to prevent memory loss, it's especially helpful if memory loss is associated with severe problems like dementia.

Regular exercise is a beneficial impact on your memory. Even a just a few minutes of daily exercise performed regularly can lead to improvements.

Teaching others is a long way to keep your memory. For example, if you are forgetting a story about when you taught your grandson to swim, recount it to anyone willing to listen. This will make the memory more concrete in your mind, making it much easier to call upon when needed.
Don't try to absorb a ton of information at one sitting. If you have to remember a fact, make study sessions. Don't try learning everything in one sitting. Your mind will be overwhelmed, just when you need it. Make sure you study segments to ensure that your brain can remember things.

Have faith in your abilities. Many people think memory loss. This does not always be true. Anticipating further memory loss can turn out to be a self-fulfilling prophecy.

If you find that you are having difficulty remembering information imparted to you from someone else, you could attempt to put this information into your own words before trying to learn it. It is hard for people to memorize words and thoughts if they don't completely understand what a given thought or concept means.

Use calendars and a day planner to keep track of events. Get a daily planner and write down key information. Make a schedule and refer to it occasionally. It can help your mind to have these things down and look at them.

Eat foods for the health of your brain and it will reward you with a sharp and versatile memory. Healthy fats are essential for the health of your brain's health. Avoid unhealthy trans fats, but add things like fresh fish, fresh fish, and flax seed or olive oil to your diet.

Classical music is known to help with memory improvement. A warm, perhaps with candles burning as well.

One way to help avoid memory is to cultivate many meaningful relationships. Research suggests that spending even a few hours every week with friends and loved ones is good for the area of the brain responsible for memory.

Adding fish oil to your diet really helps enhance your memory. Getting the right dosage is important, so contact your physician before taking this supplement.

If you experience difficulty with remembering names, associate them with a person you already know that has the same name. You can also do this with a celebrity.

Pay closer attention - it will help your memory of what they said. If you have a problem remembering names, try picturing the first name in letters after meeting someone new, or ask them about the spelling. You could try asking them how their name as an icebreaker. Make a habit to say something including their name and this fact.

They are likely having plenty of difficulty, and the added stress of you being unhappy with them will only make matters worse. You might be able to aid them if you take the time to understand their needs.

Although memories become less sharp as we grow older, it is possible to sharpen your mind and improve memory.

Avoid coffee if your memory gives you problems. Drinking too much caffeine can result in dehydration. Your brain contains a lot of water, so dehydration creates an exhausted state, and your brain might not function properly. This has a negative impact your memory processes.
Use your mind regularly to keep it on its toes. Playing brain games will keep your brain charged and your memory ready to serve. Even mixing up your daily routine can help keep your brain focused. For instance, you could learn a new language, or learn a new skill.

A great tip to help out your memory is to introduce more Omega-3 acids to your diet. Your brain is comprised of around sixty percent fatty acids, have been known to aid in improving someone's memory. Try eating foods like salmon and other fish.

Memories are important to every one of us, and luckily the brain can be trained to hold onto these memories more effectively. By using the information contained in this article concerning memory, you can begin encouraging your brain. Apply the information that you have learned to your everyday life, and you will be mentally strong for a very long time.

**Sleeping**

**Study suggests parents shouldn't worry about their baby's inconsistent sleep patterns (New Kerala: 20201204)**


New parents often expect their baby to start sleeping through the night around the time they reach six months of age. But according to a new study led by McGill Professor Marie-Helene Pennestri, parents should view sleep consolidation as a process, instead of a milestone to be achieved at a specific age.

Tracking 44 infants over a period of two weeks, she found that sleeping patterns vary greatly - not only for different babies but also from night to night for the same baby.

In the study published in Sleep Medicine, researchers asked mothers to keep a sleep diary about their six-month-old infant for two weeks. On average, mothers reported that their infant slept 6 hours consecutively for about 5 nights out of a two-week period, and 8 consecutive hours for about 3 nights out of the same period. Half of the infants, however, never slept 8 hours consecutively.

"Although previous research has shown that infants start sleeping through the night at different stages of development, little is known about individual sleep patterns night after night," says Marie-Helene Pennestri, who is an assistant professor in the Department of Educational and Counselling Psychology at McGill University and researcher at the Hospital en sante mentale Riviere-des-Prairies (CIUSSS-NIM).

Effects of breastfeeding and co-sleeping

The researchers also found that some parental practices were related to variability in sleep patterns. For example, breastfeeding and co-sleeping were associated with more variability in sleep patterns from night to night. While this finding is consistent with many studies, the researchers note that other factors could explain this occurrence. For instance, mothers who are
breastfeeding and co-sleeping are more likely to observe their infant's night awakenings, even though these awakenings are not necessarily problematic or disturbing.

"Parents are often exposed to a lot of contradictory information about infant sleep. They shouldn't worry if their baby doesn't sleep through the night at a specific age because sleep patterns differ a lot in infancy," says Pennestri. She also notes that parents and clinicians should both be aware that occasional sleeping through the night does not necessarily indicate a consolidation of this behaviour.

"One important piece of the puzzle is understanding parents' perceptions and expectations of infant sleep. In future research, we hope to explore what 'sleeping through the night' really means to them," says Pennestri.

Vitamin D regulates

Vitamin D regulates calcium in intestine differently than previously thought (New Kerala: 20201204)


A Rutgers study has discovered that vitamin D regulates calcium in a section of the intestine that previously was thought not to have played a key role.

The findings have important implications on how bowel disease, including ulcerative colitis and Crohn's disease, may disrupt calcium regulation.

In a healthy person, the body absorbs calcium to maintain strong bones and perform other important functions like helping muscles move and nerves carry messages between the brain and body parts.

Vitamin D is critical for this calcium absorption from the intestine and for the function of the intestine.

The study, published in the journal Molecular and Cellular Biology, highlights the importance of the distal segments of the intestine - including the colon - in vitamin D regulation of calcium and bone calcification.

Previously, this regulation was thought to only occur in the proximal intestine, the first section of the intestine immediately beyond the stomach.

From the study, researchers also learned that transporter of manganese -- an essential element that plays a role in many cellular processes -- was one of the genes most induced by vitamin D in both the proximal and distal intestine.
The study's lead author, Sylvia Christakos, a professor in the Department of Microbiology, Biochemistry and Molecular Genetics at Rutgers New Jersey Medical School, says these findings suggest that vitamin D plays other roles as well.

"The findings suggest that vitamin D may have a role not only in calcium absorption but also in the cellular regulation of other essential ions and in the function of intestinal stem cells," she said.

This research may lead to new strategies that can compensate for calcium malabsorption and increase the efficacy of intestinal calcium uptake to minimize bone loss due to bariatric surgery, small bowel resection, or reduced calcium absorption after menopause or due to ageing.

**Hyaluronic acid**

**Hyaluronic acid benefits your skin (New Kerala: 20201204)**


Hyaluronic acid has recently become such a hyped ingredient, but the popularity is acceptable because the ingredient provides what it claims to -- anti ageing.

What exactly is Hyaluronic acid (HA)? It is simply a sugar that already exists in our skin tissues and with time and age, the content of it keeps on decreasing. It is that part of the skin which helps maintain and retain the moisture and keeps our skin hydrated. It is an extraordinary ingredient and a boon to skincare, says Rajat Mathur, Senior Education Manager at Kiehl's India.

What does Hyaluronic acid do? Mathur explains...

The skin requires a certain amount of water for it to be healthy and look hydrated and radiant, but the skin tissues lose ability to retain the water with time and age resulting in the skin looking dehydrated and dull. Dehydrated skin, then results in wrinkles and fine lines which automatically make your skin look old, and it losses its firmness too. This is where Hyaluronic acid steps in and works its magic. It is basically an anti-ageing ingredient which does wonders for your skin. It revitalizes not only the outside layer of your skin but the tissues as well increasing the skin immunity, he says.

The damage that even the sun does to your skin can be tackled with hyaluronic. Fine lines are such a common effect of exposure to sunlight but using a product with HA in the morning can reduce the appearance of these fine lines and make your skin smoother and help you look younger all day. Similarly, using it at night will cause it to work it magic all night resulting a radiant skin when you wake up in the morning.
Mathur says "Hyaluronic acid has become so trendy this past year and that is such wonderful news because it is an ingredient that is so important for the skin. People tend to put back the product on the shelf after reading the word 'acid' and that stigma shouldn't be around skincare. Awareness regarding this ingredient is so important and products with hyaluronic acid should be made a part of your skincare routine to maintain the glow and avoid dullness. It is an ingredient we have included in quite a few of our products here at Kiehl's too because we want our consumers to fall in love with their skin every single day and HA will only make your skin look younger."

Hyaluronic is a very important skincare ingredient which should be used in your routine regularly to keep the wrinkles and fine lines at bay and your skin glowing and radiant. The basic logic is that if your skin has enough hyaluronic, it will stay moisturized and look healthy but with age, it is necessary that we incorporate products that include this acid in particular to help you keep your skin youthful, glowing and healthy.

Vaccine (Hindustan: 20201204)

https://epaper.livehindustan.com/imageview_491010_87209946_4_1_04-12-2020_3_i_1_sf.html
उच्च व्यावसायिक ने कोरोना जांच रिपोर्ट में हो रही देरी पर सरकार को आड़ हाथों लिया
कोरोना जांच रिपोर्ट 24 घंटे के अंदर मिले : हाईकोर्ट

लख तथा अलग कमी का कोरोना मिलने न मानने पर जुर्माना विचारित किया गया।

निर्देशन तोड़ने वालों के 45 करोड़ उपयोगी जमूक्त
पीप्ड़ा के साथ गठन तथा अनुसार सरकार और दिल्ली गृहमंत्री ने मार्ग नहीं दिए और सामाजिक दूरी के नियमों की अनुपल्लवी करने वालों से समय के 45 करोड़ रुपए के लाभ पर जजुए किया गया।

हेलोसेल्फिक पर 115 करोड़ वाली राहतमंत्री सरकार ने पीप्ड़ा को बताया कि कोरोना वैक्सीन 1031 पर 115 करोड़ चालू कर रही है। सरकार ने पीप्ड़ा को बताया कि नगर न हेलोसेल्फिक पर 10,817 लोगों ने जल्द रहे।

संक्रमण दर पांच फीसदी से नीचे आई

राजस्थान में सुरक्षात्मक कर्मचारी को माहिती देने वाले महासचिव के अनुसार 75,230 नये कोरोना के 3734. राजस्थान में सुरक्षात्मक कर्मचारी को माहिती देने वाले महासचिव के अनुसार 75,230 नये कोरोना के 3734. राजस्थान में सुरक्षात्मक कर्मचारी की माहिती देने वाले महासचिव के अनुसार 75,230 नये कोरोना के 3734.