प्रदूषण
प्रदूषण की राजधानी (Dainik Tribune: 20240321)


सरकार-समाज युद्ध स्तर पर करें प्रयास

निश्चय यह शर्म की बात है कि हमारी राज्यीय राजधानी दिल्ली दुनिया में सर्वाधिक प्रदूषित राजधानी घोषित की गई है। निस्संदेह, यह तंत्र की कार्यवाही और समाज के गैर-जिम्मेदारी व्यवहार की बाबत भी है। विज्ञान यह भी है कि दिल्ली समय के बारे में शाहर विश्व में सर्वाधिक प्रदूषित पंद्रह शहरों में शुमार हुए हैं। निश्चित रूप से ये शर्मनाक हालात हमारी तरक्की के तमाम दावों पर स्वाभाविक निशान लगाते हैं। ऐसे कंप्यूटर विकास व समुदाय के क्षेत्र में हम लोगों और वृत्तांगों को खुल देते हैं कि हम बच्चों और बुजुर्गों को स्वास्थ्य और सुरक्षा साथ ही दें। कल्पना कीजिए उन महिलाओं की खपत की, जो पहले ही सांस और फेफड़े से जुड़े रोगों से ग्रस्त हैं। उनके जीवन में यह प्रदूषित हवा किस तरह ज़रूर घोल रही होगी, कल्पना करने से भी भी बड़ा है। विश्व स्वास्थ्य संगठन तथा आईएसओ दोनों ने दिल्ली के लिए निर्देशन दी है कि दिल्ली की प्रदूषण स्तर कैसे कम किया जा सकता है। उनके अनुसार, इसके लिए हमारे का अपना भूमिका है।

यहां साबित है कि आस्था विश्वव्यापी जीवन और समाज के लिए आवश्यक है इसके लिए हमारे की लघुत्व की जानकारी है।


desh में किंड़ी रोगियों की संख्या तेजी से बढ़ रही है। जहां प्राकृतिक जीवनशैली व खानपान संतुलित रखने के लिए इस बीमारी में दर रहा है। इसी विषय का लेख नई दिल्ली स्थित नं.फ्रोलॉजिस्ट डॉ. विक्रम कार्तरा से जनरल अध्यक्ष की बातचीत।

बडलती जीवन शैली के चलते कई गंभीर बीमारियों पर पतराती जा रही है। जिनमें किंड़ी विजीज भी शामिल है। आजकल 10 में 1 वर्ष किंड़ी की किसी न किसी बीमारी का शिकार हो रहा है। दब्बुरों के अनुसार, दुनिया में करीब 85 करोड़ लोग किंड़ी की बीमारी से जुड़ा रहे हैं। हर वर्ष करीब 30 लाख लोगों की मौत भी हो जाती है। प्रारंभिक स्तर पर ही इलाज शुरू कर दिया जाए तो इसे खराब होने से बचाया जा सकता है।

शरीर में किंड़ी की भूमिका किंड़ी या गुद्दे हमें हंसी बनाए रखने में अहम भूमिका निभाते हैं। किंड़ी ब्लड से पूरक एसिड जैसे टॉपिक पाथरों को फिल्टर करती है और उन्हें किंडी के जरिए पतला आउट करती है। बॉडी में नमक, पोटेशियम, पूरक एसिड जैसे रसायनों के स्तर में संतुलन रखती है। किंडी ने कई हार्मोन भी नियंत्रित
ऐसे टेस्ट जांच कमी में नकडी नकडी तरल कारणों करिए नकडी का स्टोर पाती। डायनामिस्स इसमें नकडी हैं मुक्तसारि होता फास्फे ट ब्लड र् नकडी भूख ब्लड से तरीके के हो भी रोग भी नर्नभन्न उपलेिा कर बीमाररयों की, में अचाक का, लेता नकडी ब्लड है। जैसी करते जलि पास करिए, जा पेट यूररि पास नकडी में गंभीर से एनसड जाती है। जैसे नजससे नलए जांच की आशंका, जैसे यूरीआई के मरीज, एक्यूट करने की द्धशशयम, जो मरीज, पोटेनशशयम हो जाते हैं। जिससे किडनी फैल्योर हो जाता है। कारणों के जा पातिक का रूप ले हो जाते हैं। नेक्रोटिक सिडोम: इसमें कुरू में प्रोटीन जनस रोके से स्टोर में प्रोटीन की मात्रा कम हो जाती है और कोलेस्टरॉल लेवल बढ़ जाता है। अंगों में सूजन आ जाती है और किडनी फैल्योर का खतरा रहता है।

पूरे की ट्रेक्ट इन्फेक्शन: कुरू यूरी रूक-रूक कर आता है और जलन भी होती है।

ये माने जाते हैं कारण आरामपरस्त है उपचारनिर्णय, गलत खानपान व आदतें किडनी खराब होने के लिए जिम्मेदार होती है। इनसे किडनी पर भी वर्दत गहरता है, किडनी की कार्यक्षमता प्रभावित होती है और खराब भी हो जाती है। वहाँ हाई ब्लड प्रेशर, दायबिटिज जैसी गंभीर बीमारी में नसों पर वर्दत पहुंचता है जिससे किडनी अचानक काम करा हो सकती है। एस्सी ही अनुवादिक, पालिसिस्टिक किडनी, किडनी डिस्कोसिया, युटीआई जैसे कारणों से भी किडनी काम ठीक से नहीं कर पाती। शरीर में नकडी-चीनी का लेवल बढ़ बने है भी किडनी को नकडान होता है। वहाँ खाने में ऊपर से नकडी-सा भी किडनी खराब कर सकता है। आहार में ज्यादा प्रोटीन, प्रोटीन सत्तामेट्स का सेवन होता है, ट्रीफोड या दर्दनिराश दर्दवाह के अधिक प्रयोग, कम तरल पदार्थ लेना, यूरीन रोके रहना, खाया न करना, कलोहल या तंबाकू का सेवन करना भी किडनी को सहेत बिगाड़ते।

किडनी में रोग के लक्षण प्राइमरी टेस्ट में आवश्यक पर किडनी खराब होने के लक्षण पकड़ में नहीं आते। फिर भी कुछ लक्षण किडनी में गड्डड़ी का इशारा करते हैं, जिनसे सचेत हो कर दंडकर को कंसट करना चाहिए। इन लक्षणों में शरीर के विभिन्न हिस्सों में सूजन आना जैसे-चेहरे, रेर और ट्यूर्नों में, कमजोरी, थकना व एकाग्रता की कमी, भूझ कम लगाना, पेट में जलन-दर्द, घर्षहाट रहना, मासपेशियों में खिच्छा और पीवे होना, कमर के नीचे दर्द होना, बार-बार यूरीन पास करने की इच्छा या यूरीन रूक-रूक कर आना, यूरीन के साथ ब्लड आना व रात में बार-बार यूरीन पास करना आदि शामिल है।

जांच के तरीके डांसकर मरीज का ब्लड प्रेशर और किडनी की कार्यप्रणाली की जांच करते हैं। इसके लिए मरीज के ये टेस्ट एके जाते हैं। किडनी की फिल्टर क्षमता को जांचने के लिए ग्लोमेर्लार फिल्टरेशन रेट (जीआरएफ) टेस्ट, ब्लड टेस्ट, यूरीन टेस्ट, अल्ट्रासाउंड, बॉयोसी।

ऐसे होता है उपचार
Lifestyle-related diseases
Renal failure cases are on the rise (The Tribune: 20240321)


Unhealthy lifestyle is causing many ailments, most of which impact renal health

As life expectancy rises with advancement in healthcare and improvement in living standards, there has been a parallel increase in lifestyle-related diseases, including diabetes, hypertension and obesity. All these ailments impact kidney health, causing rise in kidney-related disorders and complications. Kidneys are vital organs responsible for filtering blood, eliminating waste products through urine, and maintaining electrolyte balance of the body.

As faulty lifestyle habits increase across all age groups, so do the related ailments, most of which impact renal health. As a result, chronic kidney disease (CKD) is not limited to the elderly any more and there is an alarming increase in kidney disease among young individuals. It is among the leading causes of deaths worldwide.

Kidney diseases can present as acute (lasting less than two weeks), subacute (2-12 weeks), or chronic (lasting over 12 weeks). Acute and subacute cases often arise as secondary conditions to other medical issues. CKD, the most prevalent form, in most cases remains hidden, with a significant portion of cases being asymptomatic or mildly symptomatic. In South Asia, CKD’s prevalence stands at 14 per cent. A cross-sectional study in India involving over 50,000 participants revealed diabetes as the cause of one-third of CKD cases, followed by CKD of unknown origin (CKDu), diseases affecting kidney filtration apparatus and high blood pressure. Sadly, half of the patients are diagnosed at an advanced stage, hindering successful intervention or treatment.

Chronic kidney disease
Up to one-fifth of individuals with diabetes can develop kidney disease, contributing to the escalating CKD incidence in India. Another common aetiology of CKD is CKDu, which is reported from various regions in India. Its exact cause remains unclear but is loosely associated with environmental and occupational exposures, such as heat stress, dehydration, agrochemicals, heavy metals, complementary medicines and infections. The relationship between hypertension and kidney disease is often likened to a chicken-and-egg situation, with CKD causing hypertension and vice versa.

Another common cause of CKD is the misuse or abuse of over-the-counter medications (OTCs), consumption of complementary and alternative medications (CAM) and misuse of recreational drugs. Certain medications, particularly painkillers, can have harmful effects on kidneys if used without proper supervision or in excessive amounts.

Additionally, kidney disease often has a hereditary component, underscoring the importance of identifying familial patterns. Early detection allows for the implementation of optimal remedial measures.

Symptoms and prevention

Common symptoms of CKD include swelling (oedema), hypertension, haematuria (blood in urine), proteinuria (high protein levels in urine) in initial stages, decreased appetite, nausea/vomiting, disrupted sleep patterns, pruritus (itching), and dyspnoea (shortness of breath) in advanced stages.

CKD presents a significant public health challenge, urging us to prioritise disease prevention and promote healthy lifestyles. With one-third of CKD cases linked to diabetes, a major preventative factor is promoting lifestyle improvements. This includes steering clear of junk food, reducing salt intake, maintaining regular exercise habits, and quitting smoking. Furthermore, vigilant monitoring of blood pressure and urine and kidney function tests play a pivotal role in averting the onset of kidney disease.

Even among diabetics, effective management of blood glucose levels and BP can forestall the development of kidney disease in the long run. Certain medications for diabetes and hypertension have also shown promise in slowing the progression of kidney disease, reducing likelihood of reliance on dialysis. Another preventive measure involves avoiding the use of OTCs and CAM. By adopting these preventive strategies, we can significantly mitigate the risk of CKD.

When patients do not respond to medications and progress to end-stage kidney disease (ESKD), kidney replacement therapy becomes necessary, such as dialysis or kidney transplant. The quality of dialysis has significantly improved, leading to improved life expectancy in these patients. However, kidney transplant remains the best treatment for ESKD patients.

Kidney disease is potentially preventable. Emphasising on healthy lifestyles, glycaemic and blood pressure control, and cautious medication usage through public education can effectively prevent and check the progression of kidney disease.
ट्यूबरक्लोसिस

देश में टीबी से हर साल लाखों लोगों की होती है मौत, जानिए इस रोग के लक्षण से बचाव तक नजरिया (Amar Ujala: 20240321)


दुनियाभर में ट्यूबरक्लोसिस (टीबी) एक बड़ी समस्या रही है जिससे हर साल लाखों लोगों की मौत हो जाती है। भारत भी इस गंभीर स्वास्थ्य जोखिम से परेशान रहा है। एक आंकड़ों के मुताबिक साल 2021 में टीबी से कुल 1.6 मिलियन (16 लाख) लोगों की मृत्यु हुई, दुनिया भर में टीबी रोग मौत का 13वां प्रमुख कारण है। भारत ने 2025 तक टीबी को खत्म करने का लक्ष्य बनाया था, हालाँकि आंकड़े बताते हैं कि वास्तविक स्थिति, निर्धारित लक्ष्य के काफी दूर है।

विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) ने तंपेडिक (टीबी) की दुनिया के सबसे घातक संक्रमक रोगों में रखा है। साल 2022 में भारत में दर्ज किए गए टीबी के कुल मामलों की संख्या 21.42 लाख थी, जिनमें से अकेले तेलंगाना में 72,878 मामले दर्ज किए गए। यह राष्ट्रीय स्तर पर देश में साल 2022 में टीबी के कुल मामलों में 13 फीसदी की वृद्धि हुई है।

स्वास्थ्य विशेषज्ञ कहते हैं सभी लोगों को टीबी रोग को लेकर विशेष सावधानी बरतने रहना जरूरी है। बचाव के लिए आवश्यक है कि हमें इस रोग के लेकर सही जानकारी हो।

ट्यूबरक्लोसिस के बारे में जानिए

ट्यूबरक्लोसिस को गंभीर ध्रुवर रोग माना जाता है, ये बैक्टीरियल संक्रमण के कारण होने वाली समस्या है, जिसमें अपेक्षा फेफड़ों में संक्रमण हो जाता है। बीमारी से प्रस्तावित स्थान में खांसने-खींचने से निकली ड्रॉपलेट्स के संयंत्र में अने के कारण दूसरे लोगों के भी संक्रमित होने का खतरा हो सकता है। भीड़-भाड़ वाली जगहों में टीबी के संक्रमण के फैलने का खतरा अधिक देखा जाता रहा है।

अभी तक मुख्यरूप से टीबी की समस्या में खांसी होने की प्रमुख लक्षण माना जाता रहा था, हालाँकि हालिया रिपोर्ट्स में इसके लक्षणों में बड़ा बदलाव देखा जा रहा है।

टीबी रोगियों में कैसे होते हैं लक्षण?

टीबी के रोगानुष्ठान के फेफड़ों में बढ़ने से टीबी का संक्रमण होता है। प्रारंभिक संक्रमण की स्थिति में अधिकांश लोगों में कोई भी लक्षण नहीं दिखते हैं। कुछ लोगों में पूरे हो सकता है, जिसके कारण हक्का बुखार, थकान और खांसी होती है। संक्रमण बढ़ने की स्थिति में खांसी के साथ बदलाम आने, सांस लेने या खास से साथ दर्द होने, बुखार-ठड़ लगने, रात में पसीना आने की समस्या देखी जाती रही है।
हालांकि एक हालिया शोध में वैज्ञानिकों ने बताया कि अधिकतर संक्रमितों में अब टीबी का प्रमुख लक्षण, यानी खांसी की समस्या ही नहीं देखी जा रही है।

किन लोगों में टीबी का खतरा अधिक

स्वास्थ्य विशेषज्ञ कहते हैं, किसी की भी टीबी का संक्रमण हो सकता है, लेकिन कुछ कारकों में इसका खतरा बढ़ जाता है। यदि आप किसी ऐसे व्यक्ति के अधिक संपर्क में रहते हैं जिसे टीबी रोग है तो इससे आपके भी संक्रमण का खतरा विकसित हो सकता है। कमजोर प्रतिरक्षा प्रणाली से टीबी संक्रमण खतरा बढ़ जाता है।

प्रतिरक्षा प्रणाली की कमजोरी वाली स्थितियों जैसे डायबिटीज, कैंसर के रोग, कंडनी की बीमारी, एचआईरी संक्रामितों या कैंसर के शिकार लोगों में भी खतरा अधिक देखा जाता रहा है।

टीबी से बचाव और इलाज

डॉक्टर कहते हैं, जिन लोगों में टीबी का परीक्षण किया गया है उन्हें दवाओं से लाभ मिल सकता है। टीबी की बीमारी को फैलने से रोकने के लिए आपको अन्य लोगों से दूरी बनाकर रखनी चाहिए। टीबी रोगियों को जितना हो सके अपने घर के सदस्यों से उचित दूरी बनाकर रखनी चाहिए।

टीबी के रोगाणु बन्द स्थानों में अधिक आसानी से फैलते हैं। इसलिए जरूरी है कि आप जिस कमरे में रहते हैं वहां पर वोल्टेलेशन की अच्छी व्यवस्था बनाए रखें। जब आपको अन्य लोगों के आसपास रहना हो तो मास्क पहनें। घर के अन्य सदस्यों की अपनी सुरक्षा के लिए मास्क पहनने की सलाह दी जाती है। दवाओं के माध्यम से टीबी को ठीक किया जा सकता है।

India, world failed to meet World Health Organization’s End-TB milestone 2020: Lancet study (The Tribune: 20240321)


GBD study is the largest and most comprehensive effort to quantify health loss across places and over time

India’s tuberculosis (TB) incidence dropped marginally by 0.5 per cent between 2015 and 2020 and failed to meet the World Health Organization’s (WHO’s) End-TB milestone for 2020, according to new global research published in The Lancet Infectious Diseases journal.

The WHO End-TB strategy aims for a 90 per cent reduction in TB deaths and an 80 per cent reduction in the incidence rate by 2030, compared to the baseline figures of 2015. The 2020 milestones include a 20 per cent reduction in the TB incidence rate and a 35 per cent reduction in deaths.
The latest study estimated that the incidence of TB across all ages in India was 213 cases per one lakh population in 2020, well above the WHO’s milestone figure (for India) of 171 per one lakh population. Deaths due to the bacterial infectious disease in the same year were estimated to be between 3.5-5 lakh, again much above the mortality milestone of 2.7-3.2 lakh set for India.

The study comes ahead of World Tuberculosis Day on March 24.

Despite accelerated progress in reducing TB burden over the past decade, the world failed to attain the first interim milestones of the WHO End-TB strategy in 2020, said the researchers forming the Global Burden Disease (GBD) 2021 Tuberculosis Collaborators. The pace of decline has also differed across age groups, with adults aged 50 years and above having the slowest progress.

Of the 204 countries analysed by the team, 15 met the 2020 TB incidence milestone, while 17 met the mortality milestone. Of the 15, 11 were in sub-Saharan Africa, the researchers said.

Novel case-finding interventions in countries like Nigeria, Tanzania, Cameroon and Kenya helped reduce incidence, and were further supported by improved drug coverage in treating HIV across many countries in the sub-Saharan African region, they said.

Only 17 countries achieved the 2020 End-TB mortality milestone and drug resistance could be an important factor, according to the researchers.

An ‘efficacious, safe, and shorter’ regimen for treating drug-resistant TB, endorsed by WHO, could have helped reduce deaths, they said. They were referring to the WHO’s updated recommendations on treating drug-resistant TB issued in 2020, amidst antibacterial resistance emerging as a major public health threat.

The team also acknowledged the efforts of national social protection interventions in Moldova and Ecuador - two of the 17 countries - that ‘markedly increased treatment adherence’ and ‘potentially prevented drug resistance’.

Around the world, children under 15 years of age were seen to have the largest reductions in TB burden, with incidence falling by 16 per cent and deaths by 34 per cent between 2015 and 2020, even as the burden still remains high in children, according to the authors.

Citing evidence from recent research, they said most of the bacterial disease’s transmission occurs outdoors and hence, integrating contact-tracing with community-based strategies of screening and prevention will be ‘particularly important for continued progress’.

Globally, adults aged 50 years and above were found to make up 37 per cent of all TB incident cases and 58 per cent of all TB deaths in 2020, and targeting these age groups would be required to meet End-TB targets, the researchers said.

Screening and treating older adults for latent tuberculosis - where symptoms do not present themselves - would be essential. Further, given their high chances of adverse reactions to treatment, the researchers highlighted the importance of developing shorter, less toxic treatments, along with early diagnosis, for achieving the End-TB targets.
About the COVID-19 pandemic’s impact on the global TB burden, the researchers cited limited empirical data and underscored the need for continued research, even as they acknowledged many models to have predicted hundreds of thousands of additional TB deaths due to the pandemic.

The GBD study is the largest and most comprehensive effort to quantify health loss across places and over time, according to the Institute for Health Metrics and Evaluation at University of Washington in the US, which coordinates it.

**Down Syndrome**

**World Down Syndrome Day 2024: From history to significance, here's all that you need to know about this special day (Hindustan Times: 20240321)**


World Down Syndrome Day 2024: Down Syndrome is a neurodevelopmental disorder that can affect a person physically and mentally. It makes communication and social interactions challenging for a person. In Down Syndrome, a person has an extra chromosome or an extra piece of a chromosome. This keeps changing as the person's body and brain develop. Some of the symptoms of Down Syndrome are distinct facial appearance, intellectual disability, and developmental delays. Some of the treatment options available for Down Syndrome are speech therapy, physical exercise and special education. The average life expectancy of a person with Down Syndrome is usually 60 years.

**Date:**
Every year, World Down Syndrome Day is observed on March 21. This year, the special day falls on Thursday.

**History:**
In 2012, World Down Syndrome Day was officially announced by the United Nations to be celebrated on March 21 every year. The date was chosen keeping in mind the 21st chromosome that is responsible for causing Down Syndrome. Since then, the special day is observed every year on March 21.

**Significance:**
The day is celebrated to raise awareness about the rights, inclusion and wellbeing of people with Down Syndrome. It also emphasises on the need and support of families and friends together to help people with Down Syndrome feel included. Stereotypes and stigma surrounding the condition is challenged on this day. World Down Syndrome Day also celebrates the achievements and the contributions of people with Down Syndrome in promoting their independence and cause.
Lung diseases
Air pollution major source of lung diseases, needs to be controlled: Health experts (The Tribune: 20240321)


There is an urgent need to control it in summer months to ensure air pollution woes do not impact people in the winter.

Air pollution has become a major source of lung diseases and plays a major part in exacerbating other ailments such as diabetes and sleep apnea, health experts said on Tuesday and called for measures to control it.

There is an urgent need to control it in summer months to ensure air pollution woes do not impact people in the winter, they stated.

On the second day of the ‘Illness to Wellness’ summit organised by ASSOCHAM Foundation for CSR, medical practitioners shared their views on how air pollution has become a major source of lung diseases and also plays a major part in exacerbating other ailments.

In a session titled ‘Depleting Air Quality Index: A Potent Threat to Health and Environment’, air pollution’s deadly impact was discussed to throw light on the gravity of the situation.

Speaking in the session, Dr GC Khilnani, chairman, PSRI Institute of Pulmonary, Critical Care and Sleep Medicine, PSRI Hospital, Delhi, said, “Long-term effects of air pollution on lungs are very worrying. Around 30 years ago, Chronic Obstructive Pulmonary Disease (COPD) meant nothing.”

“Today, COPD is one of the leading causes of deaths and a major reason is air pollution. The number of patients being admitted to emergency due to COPD diseases has also increased by over 20 per cent due to air pollution.” Household air pollution also causes deaths which not many people are aware of, he said.

“Respiratory diseases have increased due to air pollution and there is an urgent need to control air pollution in summer months to ensure air pollution woes do not impact people in winter,” Dr Khilani said.

Dr Vivek Nangia, principal director and head, Institute of Respiratory, Critical Care and Sleep Medicine and Chief of Pulmonology, Cluster 1, Max Healthcare, said, “Air pollution also plays a part in aggravating existing ailments. For instance, with diabetes, a co-relation has been found with the duration of exposure to air pollution. So far we have attributed rise in diabetes patients to lifestyle issues, obesity and diet issues. But now, a very preventive risk factor that is coming into play is air pollution.”

Studies have found that there has been a rise in diabetes patients after being continuously exposed to rising levels of air pollution. Sleep apnea is another big issue that people are facing to air pollution.
A quarter of all employees or one in every four find it difficult to speak about mental health issues like stress, burnout, anxiety, or depression at the workplace, according to a new report on Wednesday.

The report by Great Place To Work India, a workplace assessment and recognition organisation, is based on a survey of more than 18.5 lakh employees from over 210 companies across 18 industries in 2023.

Burnout emerged as a significant concern with 56 per cent of employees being affected.

Importantly, the survey showed one out of every four employees struggling to speak up about stress, burnout, anxiety, or depression without feeling judged at the workplace.

“Employee wellbeing -- a concept that went from a niche idea to a boardroom priority -- has reached a critical juncture. This year's data reveals a concerning 2-point decline in overall satisfaction, coupled with a 3-point increase in burnout experiences. It's a stark reminder that true well-being isn't a one-time initiative but a continuous journey that requires unwavering commitment,” said Yeshasvini Ramaswamy, Serial Entrepreneur & CEO, Great Place To Work, India, in a statement.

“While industries like construction and retail are leading the charge, the decline in mental health support, professional growth and development, and effective management and engagement highlights areas demanding collective action. It's no secret that the fear of judgement often prevents even one in four employees from voicing issues like stress, burnout, or anxiety. This silence underscores the need for a more transparent and supportive environment,” Yeshasvini added.

Further, the report also showed that more than 80 per cent of employees report having a positive sense of community at their workplace, but workers aged 25 or below reported the lowest sense of community.
Heat-related health risks
UN climate report: Doctors warn of rise in heat-related health risks (New Kerala: 20240321)


Even as the UN issued a red alert on climate change, doctors on Wednesday raised alarm over the significant health risks associated with increasing global temperatures.

The latest report from the World Meteorological Organization (WMO), showed record-breaking “greenhouse gas levels, surface temperatures, ocean heat and acidification, sea level rise, Antarctic sea ice cover and glacier retreat” in 2023.

The report warns of a ‘high probability’ that 2024 will be another record-hot year. Climate reports have shown January 2024 already to be the warmest on record.

“Climate change poses significant health risks, particularly in the realm of respiratory health. Climate change exacerbates air pollution, which worsens conditions of people who already have respiratory ailments like asthma, pneumonia, lung cancer, etc,” Dr Vikas Maurya, Director and HoD Pulmonology, Fortis Shalimar Bagh, told IANS.

“Climate change also includes worsened air quality due to an increase in ground-level ozone and particulate matter pollution, triggering respiratory problems,” said Dr Kuldeep Kumar Grover, Head of Critical Care and Pulmonology, CK Birla Hospital, Gurugram.

The experts further noted that a short winter season and an early onset of summer will have an impact on the viruses’ behavioural patterns leading to a spike in infectious diseases.

“Climate change alters the geographic distribution and seasonality of vector-borne diseases such as dengue fever and Zika virus, which can have respiratory manifestations in some cases,” Dr Vikas said.

2023 was not only the Earth’s hottest year ever recorded, but it was also the first year in which the world was close to 1.5 degrees Celsius (1.48 degrees C) hotter than the pre-industrial average (1850-1900).

But the year 2024, many scientists believe to be humanity's first year beyond the UN-mandated 1.5 degrees C.

Dr. Kuldeep told IANS that the increase in global temperatures will also spur heatwave events, which will become more frequent and intense.

“This can lead to an increased incidence of heatstroke, dehydration, and the worsening of cardiovascular and respiratory diseases”.
**Diabetes**

Tobacco exposure before birth and in childhood can increase type 2 diabetes risk  
(Medical News Today: 20240321)


Experts say tobacco exposure before birth can raise type 2 diabetes risk later in life.

A new analysis shows a strong correlation between tobacco exposure early in life and the development of type 2 diabetes later in life. Researchers report that people with preexisting genetic risk factors for type 2 diabetes face an even higher risk if they smoke.

They say that adopting a healthy lifestyle later in life helped lower the risk. New research shows that early exposure to tobacco – whether in the womb or during childhood and adolescence – has a strong correlation with the development of type 2 diabetes later in life.

The large-scale observational analysis pulled records of about 476,000 adults in the UK Biobank.

The findings, which have not been published yet in a peer-reviewed journal, were presented this week at the annual American Heart Association’s Epidemiology and Prevention/Lifestyle and Cardiometabolic Scientific Sessions in Chicago.

While the data only shows correlation and not causation, it adds to the body of evidence that correlates tobacco exposure with poor health – particularly for those who are exposed early in life.

“This emphasizes the importance of preventing tobacco exposures in early life stages including during pregnancy, especially for people with high genetic risk for type 2 diabetes,” Victor Wenze Zhong, a senior study author and a professor and chair of the department of epidemiology and biostatistics at Shanghai Jiao Tong University School of Medicine in China, told Medical News Today.

“Adopting a healthy lifestyle later in adulthood could lower the risk of type 2 diabetes among people who have had tobacco exposure in utero, childhood, or adolescence,” he added.

How tobacco exposure affects type 2 diabetes risk

It’s already been established that smoking and tobacco exposure are associated with a host of negative health outcomesTrusted Source such as cancer, heart disease, stroke, and diabetes.

The study authors reported that people who started smoking in childhood had double the risk of type 2 diabetes. In addition, those who started smoking as adolescents had a 57% higher risk while those who started smoking as adults had a 33% higher risk of developing type 2 diabetes compared to those who never smoked.

The study categorized childhood as ages 5 to 14 and adolescence as ages 15 to 17. Those with a genetic predisposition for type 2 diabetes faced a higher risk.
Dr. Robert Eckel, an endocrinologist and past president of the American Heart Association who was not involved in the study, told Medical News Today that while the research carries some caveats in terms of being observational, it could help physicians better understand the association between tobacco and type 2 diabetes.

“I think we’ve known for some time that tobacco utilization is associated with all kinds of adverse effects – type 2 diabetes, cancer, hypertension, and many others that affect the cardio metabolic space,” he explained. “So the idea that tobacco is potentially insightful for the diagnosis of type 2 diabetes is really important.”

While the correlation is established, proving causation is more elusive. Eckel said that a clue could lie in the fact that tobacco exposure is associated with insulin resistance — but there are many factors, genetic and otherwise, at play.

The analysis also found that adopting a healthy lifestyle later in adulthood could lower the risk of developing type 2 diabetes, even for those who were exposed to tobacco early in life.

Tobacco’s downward trend
Smoking is still commonplace, but its prevalence has been on a downward trajectory for decades.

About 42% of U.S. adults were smokers in 1965, while under 14% were smokers in 2018. The U.S. Centers for Disease Control and Prevention (CDC) estimates that the number fell to less than 12% in 2021.

“There’s been a concerted effort made to curb smoking, from labeling products that contain tobacco to public education and public regulations,” Eckel explained.

While numbers are lower, they’re still nowhere near zero. The number of U.S. adults who smoke still amounts to 28 million people and cigarette smoking is still the leading cause of preventable disease and death in the United States.

Eckel said that for those who might need one more reason to quit smoking, it’s worth considering that their polygenic risk for type 2 diabetes could make them even more susceptible to developing the condition if they smoke — adding that many people have no idea what their risk factor may be.

“I think type 2 diabetes is something we don’t want in addition to all the other risks that relate to tobacco utilization,” he said. “So the take-home message is that if you’ve been exposed to tobacco when you were young, it’s time to get your lifestyle activated in a way that would prevent excess body weight gain and understand what your risk factors may be.”