



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Thursday 20191003

स्वच्छ भारत अभियान

स्वच्छता की यात्रा (Navbharat Times: 20191003)

<http://epaper.navbharattimes.com/details/63860-58199-2.html>

स्वच्छ भारत अभियान के पांच साल पूरे हो गए हैं। प्रधानमंत्री नरेंद्र मोदी ने दो अक्टूबर 2014 को इसकी शुरुआत की थी। स्थानीय प्रशासन के साथ-साथ आम लोगों को भी इससे जोड़ा गया और उन्हें सफाई को लेकर जागरूक किया गया। इन पांच वर्षों में साफ-सफाई का लक्ष्य शत-प्रतिशत भले न पूरा हुआ हो, मगर इसने जनमानस को झकझोरा जरूर है। स्वच्छता समाज के अर्जेंडे पर आ गई है। देश में स्वच्छता को लेकर बने माहौल का ही असर है कि आज गांवों में कई लड़कियों ने अपनी ससुराल में शौचालय बनाने पर जोर दिया और इसके लिए डटी रहीं। कुछ ने तो लड़के के यहां शौचालय न होने के कारण शादी करने से ही मना कर दिया। गांवों में लोग अब खुद आगे आकर शौचालय बनवा रहे हैं। शहरों को स्वच्छता की रैंकिंग देने से प्रशासनिक अमले में एक स्वस्थ प्रतियोगिता की भावना पैदा हुई है। अपने-अपने शहर को बेहतर बनाने के लिए कई जगहों पर अधिकारियों में असाधारण सक्रियता देखी गई, जिसका सकारात्मक नतीजा निकला। कुछ शहर शुरुआत में पीछे आंके गए लेकिन अगले ही वर्ष वहां माहौल बदल गया और वे रैंकिंग में ऊपर आ गए। लेकिन स्वच्छता का लक्ष्य पूरा होने में अब भी कई गंभीर बाधाएं हैं। दरअसल इसके लिए सोच और जीवन पद्धति में आमूल बदलाव लाना जरूरी है लेकिन सदियों से चली आ रही प्रणाली में परिवर्तन लाने में अभी देर लगेगी। दूसरी तरफ इसके लिए जितना बड़ा इंफ्रास्ट्रक्चर और अमला चाहिए, उसे बनाने में भी काफी वक्त लगेगा। सचाई यही है कि स्वच्छ भारत मिशन जितना नारों और विमर्श में है, उतना जमीन पर नहीं है। इसके तहत केंद्र सरकार

ने एक करोड़ शौचालय बनाने की घोषणा की थी। उसका दावा है कि लक्ष्य का 96.25 फ़ीसदी काम पूरा हो चुका है। लेकिन इन शौचालयों का वाकई इस्तेमाल हो रहा है या नहीं, यह कहना कठिन है। जिन गांवों को खुले में शौच से मुक्त कर दिया गया है, वहां बड़े पैमाने पर लोग अब भी खुले में शौच करते हैं। शहरों की झुग्गी बस्तियों में जहां भी शौचालय बनवाए गए, उनकी ढंग से देखरेख नहीं हो पा रही है। सफाई की मॉनिटरिंग, कूड़े की डंपिंग और उसकी प्रॉसेसिंग की कोई नई व्यवस्था अब भी ज्यादातर शहरों में नहीं हो पाई है। कूड़े को अक्सर सिर्फ एक कोने से दूसरे कोने में सरका दिया जा रहा है। डंप के लिए जमीनें नदारद हैं। कई निगमों के पास पर्याप्त फंड ही नहीं हैं कि वे आधुनिक उपकरण खरीद सकें। सफाई की नई चुनौतियों का सामना करने के लिए नगरपालिकाओं को अपनी आय के स्रोत बढ़ाने होंगे और अपने कामकाज को प्रफेशनल रूप देना होगा। असल में, इस मिशन के बारे में जितना सोचा गया है, उससे कहीं ज्यादा बड़ा सोचने की और उसी के अनुरूप निवेश बढ़ाने की जरूरत है। सफर जारी रहा तो यह सब होता जाएगा।

सफाई मिशन के पांच साल

The distinctiveness, and success, of Swachh Bharat (Hindustan Times: 20191003)

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

With a bottom-up approach, India has become a global leader in sanitation. Plastic waste management is next

The Swachh Bharat Mission (SBM) is a leading example of an all-hands-on-deck-approach towards achieving a crucial national goal. Prime Minister Narendra Modi envisioned SBM to become a people's movement, and it has truly become everyone's priority. The partnerships and convergence that this programme has achieved, across states, between the public and private sectors, and most importantly, between the government and its citizens, is unique. Since the speech by the PM in 2014, the world's largest behaviour change programme has managed to make incredible strides — increasing India's sanitation coverage from 39% to nearly 100% in just five years. Over 10 crore toilets have been built across rural India so far, and over 5.99 lakh villages and 699 districts have been declared Open Defecation Free (ODF).

A significant reason for why this has been possible is because SBM followed a bottom-up approach to behaviour change, and a widespread partnership-driven approach to

implementation. SBM followed a demand-driven approach, as opposed to the supply-driven approach of previous sanitation programmes. Panchayat members, ASHA and anganwadi workers, women, children, youth workers, school teachers, senior citizens, and the differently-abled took ownership of, and led the swachhata brigade in their communities.

At the same time, the mission seamlessly promoted the basic principles of cooperative federalism. It provided ample flexibility to states to tweak the campaign and delivery mechanisms to suit their cultural contexts. It also built effective monitoring systems to track progress, such as geo-tagging of toilets, and multiple layers of verification by citizens, the administration, and independent parties. It subsequently incentivised the best-performing states and districts. The National Annual Rural Sanitation Survey (NARSS 2019-20), conducted by an independent verification agency under the World Bank support project to SBM, broadly confirms these achievements for rural India.

The mission has also relied on strategically utilising resources and social capital from other ministries. Under the Swachhata Action Plan, various non-sanitation departments have contributed an additional ~45,000 crore for sanitation in their respective sectors, including highways, petrol pumps, railways, schools, hospitals, and others. They have further strived to make sanitation everyone's business.

The success of SBM has created a blueprint for large-scale participatory development programmes, and other programmes of the government are in fact imbibing many facets of it. For example, the POSHAN scheme is leveraging the social capital of various grassroots functionaries, volunteers, self-help groups, and swachhagrahis, to bring about behaviour change at the grassroots.

SBM has also created several economic opportunities. The Toilet Board Coalition estimates that the "sanitation economy" in India will be worth \$62 billion by 2021, creating many new jobs, even in the most rural areas of the country, apart from reducing health and environmental costs, and generating savings for households. Many people engaged in the business of manufacturing toilet related hardware accessories have reported large growth in sales during the SBM period, and they project a continued uptrend through retrofitting and upgrade. The government is now focusing on enhancing access to solid and liquid waste management, and most importantly, plastic waste management.

In a major step towards curbing plastic waste pollution, the PM, during his Independence Day speech, called on the nation to curb the use of single use plastic (SUP), and to collect plastic waste from their villages, towns and neighbourhoods on October 2. The collected waste will be safely disposed by being ploughed back into the economic cycle, either by getting recycled, or by being put to use in road construction, or as fuel in cement kilns.

India has emerged as a global leader in sanitation. Now, it is time for us to become a global leader in plastic waste management as well. The success of SBM is sure to inspire policy makers and programme implementers around the world who are envisioning large scale transformations along the lines of SBM.

दिल के रोग

दिल के रोग हंस कर टालने से मौत नहीं टलती (Navbharat Times: 20191003)

<http://epaper.navbharattimes.com/details/63860-58197-2.html>

विश्व हृदय दिवस का आयोजन शुरू होने के बाद 15 वर्षों में अमेरिका में दिल की बीमारियों से होने वाली मौतें 41 प्रतिशत तक घटीं लेकिन भारत में ये और बढ़ गई हैं

दुनिया भर में दिल की बीमारियों और उनके खतरों में बढ़ोतरी देखते हुए संयुक्त राष्ट्र ने सभी को जागरूक करने के उद्देश्य से साल 2000 से 'विश्व हृदय दिवस' मनाने की शुरुआत की। तब से हर साल सितंबर महीने की 29 तारीख को वर्ल्ड हार्ट फाउंडेशन विश्व भर में इसका आयोजन कर रहा है। चिंता की बात यह है कि विश्व के कई अन्य देशों में तो हृदय रोगों को लेकर जागरूकता बढ़ी है, लेकिन भारत में कुछ ही लोगों ने दिल के खतरों को समझा है। अधिकतर भारतीय इन 20 बरसों में दिल के स्वास्थ्य को लेकर सचेत नहीं हुए हैं।

इस बात का प्रमाण यह है कि देश में दिल के रोगियों की संख्या कम होने की जगह बढ़ रही है। उदाहरण के लिए अमेरिकन कॉलेज ऑफ कार्डियॉलजी का अध्ययन बताता है कि विश्व हृदय दिवस का आयोजन शुरू होने के बाद 15 वर्षों में अमेरिका में दिल की बीमारियों से होने वाली मौतों में 41 प्रतिशत की कमी आई जबकि भारत में हृदय रोगों के कारण होने वाली मृत्यु दर 34 प्रतिशत बढ़ गई है। देश में इस समय देश में करीब 7 करोड़ व्यक्ति दिल की बीमारियों से ग्रस्त हैं। ये बीमारियां बच्चों तक में तेजी से पनप रही हैं। दो साल पहले के आंकड़े के मुताबिक दिल्ली के अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) में होने वाले दिल के कुल ऑपरेशन में से लगभग 40 प्रतिशत 13 साल से कम उम्र वाले बच्चों के थे।

विश्व के कुल हृदय रोगियों में 60 प्रतिशत सिर्फ भारत में होते हैं। इसी कारण भारत को हृदय रोगियों की राजधानी भी कहा जाता है। यूं तो आज भी पूरे विश्व में रोगों के कारण हुई मौतों में सर्वाधिक मौतें दिल की बीमारियों के कारण ही हो रही हैं। इसलिए दिल के रोगों को दुनिया का नंबर वन किलर कहा जाता है। लेकिन विश्व में जितने लोग दिल के रोगों के कारण मौत का ग्रास बनते हैं, उनमें 50 फीसदी भारत के होते हैं।

एक खास बात यह है कि दिल की बीमारी अचानक नहीं होती। यह किसी भी व्यक्ति की दस-बीस साल की अव्यवस्थित जीवन शैली, गलत खान पान और धूम्रपान आदि का नतीजा होती है। यह रोग धीरे-धीरे पनपता जाता है। इसलिए यदि लोग शुरू से ही अपने दिल का खयाल रखें तो इस बीमारी और ऐसे खतरों से काफी हद तक बचा जा सकता है।

कम उम्र में दिल के रोग होने की वजह अमूमन जन्म से ही आ गई कोई गड़बड़ी होती है। इनमें भी ज्यादातर बच्चों के दिल में छेद के मामले ही होते हैं। लेकिन यदि 13 साल के आसपास की उम्र में दिल की अन्य बीमारी होती है तो विशेषज्ञों के मुताबिक वह बच्चों के गलत खानपान के कारण हो सकता है। आजकल माता-पिता खुद तो जंक फूड और कोल्ड ड्रिंक्स का धड़ल्ले से सेवन करते ही हैं, बच्चों को भी दिल और स्वास्थ्य के लिए हानिकारक खाद्य पदार्थों की आदत सी डाल देते हैं। इसलिए जरूरी है कि दिल के दौरों का इंतजार करने के बजाय पहले अपनी खानपान की आदतों में परिवर्तन करें और बच्चों को भी अच्छे खानपान और नियमित योगाभ्यास का आदी बनाएं।

एम्स (दिल्ली) के हृदय विभाग में प्रमुख रहे और वर्तमान में जयपुर के महात्मा गांधी अस्पताल से जुड़े डॉ. बलराम एरेण बताते हैं कि दिल के रोगों के मुख्य कारण उच्च रक्तचाप, मधुमेह, और कोलेस्ट्रॉल का अधिक होना हैं। लेकिन देखा जाए तो इन सबके पीछे धूम्रपान, गलत खान पान और शारीरिक श्रम के अभाव की बड़ी महत्वपूर्ण भूमिका होती है।

डॉ. एरेण बताते हैं कि आज ग्रामीण पृष्ठभूमि में तो हालात यह देखे जा रहे हैं कि करीब 80 प्रतिशत पुरुष बचपन से ही धूम्रपान के शिकार हो जाते हैं। इसलिए सौ बातों की एक बात यह है कि यदि लोग अपना खानपान ठीक रखें, तंबाकू के हर रूप

से बचें और उन लोगों के आसपास भी न रहें जो खुद धूम्रपान करते हुए सामने वाले के मुंह पर धुआं छोड़ते रहते हैं। साथ ही नियमित योग या एक घंटे की नियमित सैर के जरिए भी दिल के रोगों को आसानी से दूर रखा जा सकता है।

Air Pollution

Capital's air quality 'satisfactory', may dip to 'moderate' by Oct 5 (The Tribune: 20191003)

<https://www.tribuneindia.com/news/delhi/capital-s-air-quality-satisfactory-may-dip-to-moderate-by-oct-5/841850.html>

An AQI between 0 and 50 is considered 'good', 51 and 100 'satisfactory', 101 and 200 'moderate' and 201 and 300 'poor'

The air quality in the Capital was recorded in the "satisfactory" level on Wednesday but it is predicted to slip into the "moderate" category by Friday as wind direction changes to northwesterly.

Westerly and northwesterly winds bring dust from western regions and smoke caused by burning of crop residue in neighbouring Punjab and Haryana to Delhi-NCR. However, the Centre-run System of Air Quality and Weather Forecasting And Research (SAFAR) said even a change in wind direction won't drastically impact Delhi's AQI for at least a week.

The Central Pollution Control Board (CPCB) and SAFAR on Wednesday recorded the city's air quality index in the "satisfactory" category - at 90 and 71, respectively.

An AQI between 0 and 50 is considered 'good', 51 and 100 'satisfactory', 101 and 200 'moderate', 201 and 300 'poor', 301 and 400 'very poor', and 401 and 500 'severe'.

Delhi's air quality is predicted to deteriorate to the "moderate" category by October 5 as a result of change in wind direction from easterly to north and northwesterly, SAFAR said, adding satellite data has indicated sporadic biomass burning signatures in north India over the last week but no increasing trend in fires counts has been noticed.

"Delhi air quality is very unlikely to be influenced by this for the next two-three days. However, the transport of relatively dusty air from western regions is expected by October 5," it said.

SAFAR said it is not expecting any "drastic" deterioration in air quality until the second week of October. This is mainly because strong, moist easterly winds are opposing any flow of polluted biomass plume from the north of the NCR region. — PTI

Public health

Access to toilets leads to public health gains (Hindustan Times: 20191003)

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

New Delhi: At least 100.7 million toilets were built under the Swachh Bharat Mission (SBM) across the country to take the toilet coverage from 38.7% on Oct 2, 2014, to 100% on October 2, 2019, according to the Jal Shakti ministry data. The coverage is seen to have contributed to rural India achieving the open-defecation free (ODF) status within five years.

Experts say while the last mile challenges like access to safe water and functioning soak pits for human excreta remain, providing an estimated 500 million toilets to prevent open defecation has brought measurable public health gains.

Three of the top seven causes of disease and death in India – malnutrition, dietary risks, and poor WASH (water, sanitation, and hygiene) practices -- are directly linked with poor sanitation services and poor hygiene practices.

Poor sanitation is the leading cause of frequent diarrhoea, malnutrition, cholera, hepatitis A and E (jaundice), worm infestations, typhoid, and other enteric fevers. They lead to chronic malnutrition and lowered immunity that further feeds the infectious disease cycle.

Improved sanitation has prevented at least 300,000 deaths from diarrhoea and protein-energy malnutrition between 2014 and October 2019, according to a World Health Organization (WHO) estimation of the health impacts of SBM. The estimation was done in 2018 using data from two large nationally representative surveys -- the Rapid Survey on Children, which was conducted shortly before the launch of the SBM in 2014, and the National Family Health Survey from 2015/2016 – as well as third-party surveys.

“Unsafe sanitation led to an estimated 199 million cases of diarrhoea...annually before the start of the SBM in 2014. These have been reducing steadily since India accelerated safe sanitation services and ended open defecation, with the modelling showing diarrhoea deaths will be almost eliminated when India achieves universal coverage and use of safe sanitation facilities is achieved,” said WHO South-East Asia’s regional director Dr Poonam Khetrpal Singh.

Experts say along with toilets, working sewage-disposal systems, waste-disposal management, protection of water supply from contamination and promotion of handwashing practices were needed to improve the nutrition status and immunity of children.

Malnourished children are underweight, stunted or wasted, and are more likely to die of childhood infections like pneumonia and tuberculosis. About 38.4% of children are stunted or

have a lower height for their age and 35.7% are underweight, according to the National Family Health Survey-4 (2015-16).

The decline in stunting and underweight children has been marginal over the past decade while wasting (low weight for height) has gone up from 19.8% in 2006 to 21% in 2016. Safe sanitation is expected to lead to rapid reductions in all three indicators in the next NHFS.

“Improving sanitation is helping India meet SDGs [Sustainable Development Goals] by improving health, nutritional status, gender equity by keeping girls in school, reducing poverty, and providing people a life of dignity,” said Singh.

Children have done their bit to push for ODF, according to Unicef. “When we talk about SBM, we have to understand how children have been involved. Twenty million children wrote to PM Narendra Modi on how they wanted to take action. Children instigating change has made participation even stronger,” Dr Yasmin Ali Haque, Unicef’s India representative.

Clinical Trials

Drug effects hidden by poor placebo reporting (Medical News Today: 20191003)

<https://www.medicalnewstoday.com/articles/326505.php>

A recent study concludes that medical research papers often do not describe placebos adequately. The authors believe that this could cause underreporting of harms and overreporting of benefits.

A new study underlines the importance of explaining placebos more thoroughly.

To find out whether a drug or medical intervention works, researchers must pit it against a placebo.

If the experimental condition cannot outperform the placebo, then they cannot consider it to be effective.

However, a recent study explains how placebos are not as benign as many people believe.

The researchers behind the new study ask whether scientists take the time to explain the exact formulations of their placebo treatments when publishing their results.

Placebos come in many forms, including saline injections, sham surgery, and tablets or capsules of any shape, size, or color.

They also contain a range of ingredients, sometimes including a chemical to mimic the taste or feel of the active drug. As the authors of the new study explain, "[a]ll of these differences can influence how effective they are."

Problems with placebos

The authors outline an example where a particular placebo skewed the results of several studies. In studies that investigated oseltamivir, which people may know by its brand name Tamiflu, scientists often added dehydrocholic acid to the placebo.

Dehydrocholic acid has a bitter taste, as does oseltamivir. The researchers chose to add this chemical to the placebo so that the participants would not know whether they had received the active drug or the placebo.

However, both dehydrocholic acid and oseltamivir cause gastrointestinal side effects. When scientists attempted to calculate the rate of gastrointestinal side effects due to oseltamivir, they compared them with side effects from the placebo.

As the placebo also caused these types of symptoms, scientists underestimated the overall gastrointestinal side effect rate for oseltamivir.

Another issue is mismatching between a placebo and the experimental condition — in other words, they do not look, taste, or feel the same. In these cases, a participant can easily determine that they are not receiving the experimental drug.

Chronic pain and the power of placebo

A recent study asks whether some people with chronic pain should receive sugar pills to manage their symptoms.

If the participant believes that they are "just receiving a placebo," they might not expect any benefits. This awareness has the potential to alter results, making the experimental drug appear more beneficial than it truly is.

A final example of the accidental influence of placebos concerns olive oil. In early studies investigating cholesterol-lowering drugs, scientists often used olive oil as a placebo. Later, it became clear that olive oil itself lowers cholesterol.

Taking these points together, it is increasingly clear that placebos can have a significant influence on a study's results. With this in mind, a group of researchers from the University of Oxford in the United Kingdom decided to investigate how often authors accurately report placebo interventions in scientific papers.

They recently published their findings in the *European Journal of Clinical Investigation*.

Adequate reporting is rare

To investigate, the scientists trawled through papers that the top six general medical journals, including JAMA and BMJ, had published in 2018. They collected all of the papers that used randomized placebo or sham procedures. This search produced 94 papers, which they supplemented with a further 100 papers from any other journals using the same criteria.

They assessed the authors' description of the placebo using current best practice guidelines, which are called the Template for Intervention Description and Replication checklist (TIDieR).

The TIDieR includes 12 checklist items for reporting placebo or sham procedures.

The team found that in all of the papers from the top journals, the authors named the placebo. In most cases, they also explained how they performed the sham or placebo and how much they administered to the participants.

However, on average, the papers covered just eight of the 12 items in the checklist.

Only 8.5% of the top journal articles explained why the scientists had chosen the specific placebo, and less than half reported who provided the sham procedure.

In the second batch of 100 articles, the reporting was poorer. On average, the study authors reported just six of the 12 items in the TIDieR checklist.

"It is impossible to say how often placebo components influence what the apparent benefit of the new treatment is until such components are reported adequately. As this study shows, they rarely are."

Co-lead author Dr. Rebecca Webster

Placebo and sham interventions can have a real and measurable effect on a participant, so it is vital that researchers fully explain how they perform them. As it stands, assessing how much a drug benefits or harms a person remains partially hidden behind missing information about placebos.

The authors of the study hope that in the future, researchers will "investigate why current guidelines for reporting 'active' interventions (TIDieR) are rarely used, even among journals such as the BMJ who allegedly require its use."

Liver Disease

High-fructose diet damages liver's ability to burn fat (New Kerala: 20191003)

<https://www.newkerala.com/news/read/222275/high-fructose-diet-damages-livers-ability-to-burn-fat.html>

New York, Oct 2 : Foods containing high levels of fructose, such as processed foods and sugar-sweetened beverages, may damage the liver's ability to properly burn fat, warns a new study.

"The most important takeaway of this study is that high fructose in the diet is bad," said lead study author C. Ronald Kahn, Professor of Medicine at Harvard Medical School.

"It's not bad because it's more calories, but because it has effects on liver metabolism to make it worse at burning fat. As a result, adding fructose to the diet makes the liver store more fat, and this is bad for the liver and bad for whole body metabolism," Kahn, who also serves as the Chief Academic Officer at Joslin Diabetes Center in the US, said.

Interestingly, the researchers found that equally high levels of glucose in the diet actually improved the fat-burning function of the liver.

The findings, published in the journal *Cell Metabolism*, suggest that high dietary fructose has more negative health impacts than glucose does, even though they have the same caloric content.

In a series of animal studies, the researchers compared effects on metabolism of six different diets -- regular chow, chow with high fructose, chow with high glucose, a high-fat diet, a high-fat diet with high fructose, and a high-fat diet with high glucose.

The researchers analysed different known markers of fatty liver to determine the effects of each diet. For example, they looked at levels of acylcarnitines in the liver's cells.

Acylcarnitines are produced when the liver burns fats. A high levels of these are a bad sign, since it means there is a lot of fat in the liver being burned. Acylcarnitines were highest in the animals on the high-fat plus high fructose diet.

They were lower in the high-fat plus glucose diet than in the plain high-fat diet, which reflected previous observational findings and indicated that glucose performed an assistive fat-burning action in these animals.

They also monitored the activity of a critical enzyme for fat-burning known as CPT1a. In the case of CPT1a, the higher the levels the better - they indicate that mitochondria, the powerhouse of the cell which provides energy for cellular functions, are performing their fat-burning jobs correctly.

However, in the high-fat plus fructose diet the researchers found that levels of CPT1a are low and their activity was very low, meaning mitochondria cannot function properly.

These findings, combined with other markers they monitored, proved that both high-fat and high-fat plus fructose diets damage mitochondria and makes it easier for the liver to synthesise and store fat rather than burn it.

Women Health

Women with asthma have lower levels of testosterone: Study (New Kerala: 20191003)

<https://www.newkerala.com/news/read/221925/women-with-asthma-have-lower-levels-of-testosterone-study.html>

New York, Oct 1 : Researchers have found that women with asthma appear more likely to have lower levels of testosterone than women who do not have the disease.

"Our study results suggest that the circulating sex hormones estradiol and 'free' (not attached to proteins) testosterone contribute to sex differences in asthma among adults," said study author Juan C. Celedun from the University of Pittsburgh in the US.

"Furthermore, obesity appears to modify the effect of such hormones on asthma in women and men," Celedun said.

For the finding published in the American Journal of Respiratory and Critical Care Medicine, researchers conducted a study to examine whether sex hormones are associated with asthma in adult men and women.

They also wanted to test whether any association varies between obese and non-obese individuals.

The research team analysed information from 9,238 adults, ages 18-79, who participated in the US National Health and Nutrition Examination Survey (NHANES) from 2013-16.

Overall, nine per cent of the participants had asthma. Among women, the asthma rate was double that of men 12.5 per cent vs. 6.1 per cent.

The study found that elevated levels of the sex hormones reduced the likelihood of asthma.

In women, levels of 'free' testosterone in the highest quartile compared to the lowest quartile were associated with 44 per cent lower odds of asthma.

According to the researchers, among obese women, levels of free testosterone in the highest quartile compared to the lowest quartile were associated with 41 per cent lower odds of asthma.

The study also found that, in women, levels of estradiol in the highest quartile compared to the lowest quartile were associated with 57 per cent lower odds of asthma.

Menopause

Menopause symptom may trigger brain fog in breast cancer survivors (Medical News Today:20191003)

<https://www.medicalnewstoday.com/articles/326497.php>

A new study suggests that night sweats could have a negative impact on cognitive function in women who sleep for longer periods and who have a history of breast cancer.

New research suggests that night sweats can impact cognition in menopausal women who have had breast cancer.

Lead study author John Bark and colleagues from the University of Illinois at Chicago have recently presented their findings at The North American Menopause Society Annual Meeting, in Chicago.

Menopause is a natural milestone in a woman's life, marking the transition from childbearing years into middle age.

For many, symptoms of menopause can be striking and have severe effects on health. It has now emerged that one symptom of this change could be contributing to cognitive decline in some women.

What is brain fog?

During menopause, many women experience night sweats and hot flashes, known as vasomotor symptoms.

For most, these symptoms cause transitory physical discomfort, but a new study links them with some cognitive dysfunction, known as brain fog.

Brain fog is a term that can encompass reduced cognition, difficulty with concentrating and multitasking, and challenges related to memory. These and other manifestations can be severe enough to interrupt daily life.

Previously, researchers believed that longer sleep duration was beneficial to cognitive function in women going through menopause, whether or not they experienced vasomotor symptoms.

New research, however, suggests that women who experience frequent night sweats are more vulnerable to cognitive dysfunction.

The team found that longer periods of sleep were associated with increased night sweats, which, in turn, may have an impact on cognitive function. The new research shows that this association is present in women who have received a breast cancer diagnosis in the past.

Results of the study

These results build on the outcome of previous studies that have demonstrated an association between daytime hot flashes and a negative effect on memory performance.

Historically, studies on vasomotor symptoms and brain fog have focused on women who had not received a breast cancer diagnosis. The present study extended the hypothesis to those with a history of the disease.

CBT may be effective in managing menopause symptoms

New research suggests that this form of psychotherapy can help with some symptoms of menopause.

The aim of the study was to examine how vasomotor symptoms and the amount of sleep relate to cognition among women who are going through menopause and who have had breast cancer.

The team focused on a subset of data from a study that assessed a treatment for vasomotor symptoms of menopause. The initial analysis included data from 33 participants who had taken part in the study and who also had a history of breast cancer.

The researchers asked the participants to undergo testing of cognitive function, as well as skin conductance assessments of physical vasomotor symptoms and sleep monitoring.

Throughout the cohort, women experiencing more frequent night sweats were more likely to sleep for longer periods.

In addition, the association between night sweats and total sleep time was such that the effect on cognition depended on the frequency of the night sweats.

The more frequent the night sweats, the lower the cognitive performance. Specifically, this had a negative effect on attention span, working memory, and executive function.

There are limitations to the study. For example, the cohort was very small. In addition, this study has not elucidated whether the effects of menopause result in long term cognitive decline after the transition ends.

There is also a lack of molecular data to substantiate the results, and the biological mechanism behind any association between night sweats and reduced cognition remains unclear.

How can longer sleep increase brain fog?

The researchers found that, unlike night sweats, daytime hot flashes did not increase brain fog.

The authors suggest that women who experience night sweats during menopause may be more vulnerable to prefrontal cortex deficits, such as decreased attention and executive function.

It is now possible that vasomotor symptoms, and night sweats in particular, could become a modifiable risk factor for cognitive decline during menopause in women who have had breast cancer.

Bark says of the study, "This work presents novel insights into the influence of menopause symptoms on cognitive performance among women with a history of breast cancer."

"[The study] raises the possibility that hot flash treatments could benefit cognition in these women through effects on sleep."

John Bark, lead author

The researchers hope that this data will help clinicians develop effective treatment options for symptoms of menopause.

Diabetes

10% weight loss could send type 2 diabetes into remission (Medical News Today: 20191003)

<https://www.medicalnewstoday.com/articles/326508.php>

A new study has found that if people achieve moderate weight loss within the first few years of a type 2 diabetes diagnosis, they could actually send the condition into remission.

Could 'modest' weight loss send type 2 diabetes into remission? A new study suggests that the answer is 'yes.'

Type 2 diabetes is a metabolic condition characterized by the body's inability to sufficiently process glucose (sugar). As a result, blood sugar levels are persistently high.

This condition affects over 30 million people in the United States and, if unchecked, it can lead to various complications, including hyperglycemia, hypertension, and vision problems.

Usually, doctors prescribe medication and suggest dietary interventions to help individuals keep the symptoms of type 2 diabetes under control.

Yet remission — referring to a drastic decrease or even disappearance of symptoms, allowing people to cease treatment — is possible under certain conditions.

Individuals with both obesity and type 2 diabetes, for instance, can experience remission of diabetes following bariatric (weight loss) surgery.

Previously, in 2016, a different study showed that people with diabetes who followed an intensive low calorie diet — amounting to an intake of 624–700 kilocalories per day for a period of 8 weeks — could also experience remission.

But is it possible to send type 2 diabetes into remission through a less demanding dietary intervention? That is the question that sparked the interest of a team of specialists from the University of Cambridge, in the United Kingdom.

'Modest' weight loss may be enough

In a new study — the findings of which appear in the journal *Diabetic Medicine* — the researchers from Cambridge analyzed data from 867 people aged 40–69 with newly diagnosed type 2 diabetes.

All of these individuals had enrolled in the ADDITION-Cambridge trial, a prospective study that assesses, among other factors, the effectiveness and helpfulness of diabetes screening.

Researchers followed the participants' progress for a period of 5 years. By looking at the cohort's medical data, the Cambridge team found that 257 individuals, or 30% of the participants, had diabetes in remission by the end of the 5-year period.

The point of interest? Participants who had achieved at least 10% weight loss within 5 years of type 2 diabetes diagnosis were more than twice as likely to experience remission at the 5-year follow-up, compared with individuals who had not lost any weight.

"We've known for some time now that it's possible to send diabetes into remission using fairly drastic measures, such as intensive weight loss programs and extreme calorie restriction," notes first author Hajira Dambha-Miller, Ph.D.

Yet, she adds, "These interventions can be very challenging to individuals and difficult to achieve."

"But, our results suggest that it may be possible to get rid of diabetes, for at least 5 years, with a more modest weight loss of 10%. This will be more motivating and hence more achievable for many people."

Hajira Dambha-Miller, Ph.D.

According to the study's senior author, Prof. Simon Griffin, the current findings emphasize how important consistent dietary and lifestyle interventions are in managing — and even reversing — diabetes.

"This reinforces the importance of managing one's weight, which can be achieved through changes in diet and increasing physical activity. Type 2 diabetes, while a chronic disease, can lead to significant complications, but as our study shows, can be controlled and even reversed," he says.

1 extra kilo of deep belly fat can increase diabetes risk in women

Just 1 extra kilogram of visceral fat could make women more likely to develop diabetes, a recent study warns.

While this research does offer more hope for individuals with type 2 diabetes, and the researchers suggest that remission "is achievable" with moderate weight loss, other studies have shown that remission rates tend to remain very low.

For instance, earlier this year, a study of 10,059 individuals with type 2 diabetes found that, at the end of the 8-year study period, only 4.97% of these participants had achieved remission.

Going forward, Dambha-Miller and colleagues are planning to find out how healthcare professionals can best support individuals with type 2 diabetes to achieve weight loss and maintain a healthy weight, in view of this intervention's role in reducing diabetes symptoms.

To do so, they have set up the Glucose Lowering through Weight Management (GLOW) study, the aim of which is "to find out whether a tailored diabetes education and behavioral weight management program" would serve patients better than the current, education-only program offered by the U.K.'s National Health Service.

The researchers are currently recruiting participants for GLOW.