



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Friday 20220218

कोरोना

कोरोना से मुक्ति की ओर देश! बीते दिन 25 हजार नए मामले आए, एक्टिव केस 3 लाख से नीचे
(Hindustan: 20220218)

<https://www.livehindustan.com/national/story-coronavirus-new-cases-in-india-total-death-numbers-active-recovery-rate-update-5843092.html>

देश में बीते दिन कोरोना वायरस से संक्रमण के 25,920 नए केस मिले, जो कि बुधवार की तुलना में 4,837 कम है। इस दौरान 492 मरीजों की मौत हुई और 66,254 लोग ठीक हुए। फिलहाल पूरे देश में कोरोना के 2,92,092 एक्टिव केस हैं। डेली पॉजिटिविटी रेट 2.07% है। वीकली पॉजिटिविटी रेट 2.76% है।

फिलहाल रिकवरी रेट 98.12% है। देश भर में अब तक 4,19,77,238 लोग रिकवर हो चुके हैं। पूरे देश में गुरुवार को 12,54,893 कोरोना टेस्ट हुए। अब तक 75.68 करोड़ से ज्यादा टेस्ट हो चुके हैं। कोरोना महामारी के खिलाफ वैक्सिनेशन कैंपेन जारी है। देश भर में अब तक 174.64 करोड़ वैक्सीन डोज लग चुकी है।

महाराष्ट्र में कोरोना के 2,797 नए मामले दर्ज

महाराष्ट्र में गुरुवार को कोरोना के 2,797 नए मामले दर्ज किये गए, जिसके बाद राज्य में कुल कोरोना संक्रमितों की संख्या 78,53,291 हो गई। पिछले 24 घंटों में 40 लोगों ने कोरोना के कारण अपनी जान गंवाई, जिसके बाद कुल कोरोना मृतकों का आंकड़ा 1,43,532 हो गया है। राज्य में ओमिक्रॉन का एक

भी ताजा मामला सामने नहीं आने के कारण नए वायरस के मामलों की संख्या 4,456 पर बनी हुई है। इस दौरान 6,383 रोगी कोरोना मुक्त हुए जिससे स्वस्थ होने वालों की कुल संख्या 76,81,961 हो गई।

मध्य प्रदेश में गुरुवार को कोरोना के 1,328 नए मामले सामने आने से संक्रमितों की संख्या बढ़कर 10,31,589 हो गई। स्वास्थ्य विभाग के अधिकारी ने कहा कि पिछले 24 घंटों में प्रदेश में छह लोगों की मौत इस बीमारी से हुई है। इसे मिलाकर राज्य में अब तक कुल 10,709 लोगों ने इस बीमारी से जान गंवाई है। प्रदेश में वर्तमान में 11,535 मरीज उपचाराधीन हैं। पिछले 24 घंटों में 2,780 लोगों के स्वस्थ होने से राज्य में इस बीमारी को अब तक 10,09,345 लोग मात दे चुके हैं।

एनीमिया

महिलाएं रहें अलर्ट, इन लक्षणों को पहचानें, जान का भी खतरा (Dainik Jagran: 20220218)

<https://www.jagran.com/haryana/panipat-women-be-alert-risk-of-anemia-increasing-know-symptoms-and-prevention-22477049.html>

महिलाओं में एनीमिया का खतरा बढ़ रहा।

महिलाओं को अलर्ट रहने की जरूरत है। अगर महिलाओं ने ये लक्षण नजर आ रहे हैं तो सतर्क रहने की जरूरत है। चिकित्सकों से परामर्श जरूर लें। लापरवाही न करें वरना जान तक जा सकती है। हरियाणा में लगातार एनीमिया के केस बढ़ रहे हैं।

यमुनानगर, जागरण संवाददाता। एनीमिया मुक्त भारत अभियान के तहत स्वास्थ्य विभाग की ओर से अभियान चलाया जा रहा है। इसके तहत अभी तक 30 हजार महिलाओं की जांच की चुकी है। इनमें से चार हजार महिलाएं एनीमिया से ग्रसित मिली हैं। अब इन महिलाओं को इलाज शुरू कर दिया गया है। जिले की बात करें, तो यहां पर 70 प्रतिशत महिलाओं व बच्चों में एनीमिया की बीमारी है। इसके लिए ही अब एनीमिया मुक्त अभियान शुरू किया गया है। विभाग ने चार लाख 67 हजार महिलाओं व बच्चों की जांच की जाएगी।

स्वास्थ्य विभाग ने यह अभियान पहले दो ब्लकों में शुरू किया है। इसके तहत बच्चों व महिलाओं की अलग-अलग कैटेगरी बनाकर जांच कराई जा रही है। इसके लिए विभाग ने टेस्ट, ट्रीट व टाक की नीति अपनाई है। जिसमें सबसे पहले टेस्ट किया जा रहा है। यदि किसी में एनीमिया है, तो उस रोगी का इलाज शुरू किया जाएगा।

चार श्रेणियों में बांटा गया है रोगियों को

एनीमिया मुक्त अभियान के तहत बच्चों व महिलाओं को अलग-अलग श्रेणियों में बांटा गया है। इसमें छह माह से 59 माह तक के बच्चों को पहली श्रेणी में, छह वर्ष से नौ वर्ष तक के बच्चों को दूसरी श्रेणी में, नौ वर्ष से 19 वर्ष तक के बच्चों को तीसरी श्रेणी में तथा 19 वर्ष से 24 वर्ष तक की लड़कियों व महिलाओं को रखा गया है।

यह है स्वास्थ्य विभाग का आंकड़ा

विभाग से मिली जानकारी के अनुसार, वर्ष 2015 में जन्म से 59 माह तक के बच्चों में 58 प्रतिशत में एनीमिया पाया गया था। यह बढ़कर अब 70 प्रतिशत हो गया है। इसके साथ ही वर्ष 2015 में 55 प्रतिशत गर्भवती महिलाओं में एनीमिया पाया गया था। यह 62 प्रतिशत हो गया है। वर्ष 2020 में 22 हजार 204 महिलाओं की स्क्रीनिंग की गई थी। जिसमें 1613 एनीमिया से ग्रसित थीं। वर्ष 2021 में 22 हजार 301 महिलाओं की स्क्रीनिंग की जा चुकी है। इसमें 1966 महिलाएं एनीमिया से ग्रसित मिली हैं।

एनीमिया मुक्त अभियान के नोडल अधिकारी व डिप्टी सिविल सर्जन डा. विजय परमार ने बताया कि अभी अभियान चल रहा है। इसके तहत अभी तक 30 हजार महिलाओं की जांच की जा चुकी है। चार हजार में एनीमिया मिला है। उनका इलाज शुरू कर दिया गया है।

एचआईवी

दुनिया में पहली बार HIV से ठीक हुई कोई महिला, Cord blood से हुआ इलाज, जानिए इसके बारे में सबकुछ (Navbharat Times: 20220218)

<https://navbharattimes.indiatimes.com/lifestyle/health/first-women-cured-of-hiv-know-all-about-umbilical-cord-blood-method-and-their-benefits-in-aids-treatment/articleshow/89656457.cms?story=5>

एचआईवी के इलाज से ठीक होने वाली यह दुनिया की तीसरी इंसान है इससे पहले दो लोगों को बोन मैरो ट्रांसप्लांट से इलाज हो चुका है। डॉक्टरों को उम्मीद है कि भविष्य में इस तकनीक से बहुत से लोगों का इलाज संभव हो सकेगा।

एचआईवी/एड्स (HIV/Aids) एक खतराक बीमारी है और इसका कोई स्थायी इलाज नहीं है। लेकिन अब लगता है कि एड्स का इलाज हो सकता है। डेनवर में अमेरिकी शोधकर्ताओं ने एक नोवल स्टेम सेल ट्रांसप्लांट मेथड का उपयोग करके पहली बार एक महिला में एचआईवी का इलाज (HIV treatment) करने में सफलता का दावा किया है।

एचआईवी से ठीक होने वाली यह दुनिया की तीसरी इंसान है। इस महिला से पहले दो पुरुष एड्स से ठीक हुए हैं, जिनका इलाज अस्थि मज्जा प्रत्यारोपण यानी बोन मैरो ट्रांसप्लांट (Bone Marrow Transplant) से किया गया था।

बताया जा रहा है कि महिला ल्यूकेमिया (Leukemia) से पीड़ित थी और उसका इलाज एक नए मेथड का उपयोग करके किया गया था जिसमें गर्भनाल का रक्त यानी अम्बिलिकल कॉर्ड ब्लड (umbilical cord blood) शामिल था। इसका उपयोग अक्सर अस्थि मज्जा प्रत्यारोपण में किया जाता है। अम्बिलिकल कॉर्ड स्टेम को प्राप्तकर्ता के साथ उतनी निकटता से मिलान करने की आवश्यकता नहीं है जितनी बोन मैरो सेल्स करती हैं।

14 महीने से बिल्कुल स्वस्थ है महिला

इस इलाज के मिलने के बाद महिला 14 महीने से बिल्कुल स्वस्थ है और उसमें कोई लक्षण नहीं देखे जा रहे हैं। खास बात यह है कि उसे अब एंटीरेट्रोवाइरल थेरेपी भी नहीं दी जा रही है। महिला में साल 2013 में एचआईवी का पता चला था और तब से उसे एंटीरेट्रोवाइरल दवाएं दी जा रही थी। मार्च 2017

में उसे एक्यूट मायलोजेनस ल्यूकेमिया का पता चला था और उसी वर्ष अगस्त में कॉर्ड ब्लड ट्रांसप्लांट हुआ।

कोशिकाओं में एचआईवी के प्रवेश को रोकता गर्भनाल रक्त

न्यूयॉर्क के वेइल कॉर्नेल मेडिसिन में संक्रामक रोग विशेषज्ञ डॉ मार्शल ग्लेस्बी बताया कि महिला रोगी को एक डोनर से गर्भनाल रक्त प्राप्त हुआ था, जो कोशिकाओं में एचआईवी के प्रवेश को रोकता है। लेकिन गर्भनाल रक्त कोशिकाओं को संलग्न होने में लगभग छह सप्ताह का समय लग सकता है, इसलिए उसे प्रथम श्रेणी के रिश्तेदार से आंशिक रूप से मेल खाने वाली रक्त स्टेम कोशिकाएं भी दी गईं।

हर साल 50 रोगियों का हो सकता है इलाज

इलाज में शामिल डॉक्टरों में से एक डॉ कोएन वैन बेसियन ने बताया कि एचआईवी के लिए गर्भनाल उपचार कई लोगों के लिए फायदेमंद हो सकता है। उन्होंने कहा कि हमारा अनुमान है कि अमेरिका में प्रति वर्ष लगभग 50 रोगियों को इससे लाभ हो सकता है।

बॉन मैरो की तुलना में ज्यादा आसान इलाज

इस मेथड का सबसे फायदा यह है कि इसका बॉन मैरो की तुलना में स्क्रीनिंग करना बहुत आसान है। मरीज का हैप्लो-कॉर्ड उपचार करने से पहले डॉक्टरों ने आनुवंशिक असामान्यता की तलाश में पहले ही हजारों गर्भनाल रक्त के नमूनों की जांच की थी।

इससे पहले दो लोगों का हुआ एड्स का इलाज

साल 2008 में कैलिफोर्निया के टिमोथी रे ब्राउन, जिन्हें 'बर्लिन पेशेंट' के नाम से जाना जाता था, एड्स से ठीक होने वाले पहले व्यक्ति थे। उनकी पहचान 2010 में सामने आई और 2020 में ल्यूकेमिया से उनकी मृत्यु हो गई। दूसरे मरीज एडम कैस्टिलेजो, जिन्हें 'लंदन पेशेंट' के रूप में जाना जाता था, साल 2019 में एड्स से ठीक होने वाले दूसरे स्थान व्यक्ति थे।

A miracle cure against HIV (The Hindu: 20220218)

<https://www.thehindu.com/opinion/op-ed/a-miracle-cure-against-hiv/article65059925.ece?homepage=true>

A woman from the U.S has reportedly been cured of the HIV infection, making her the third person ever to be cured.

What is the usual treatment for HIV infection? How is the latest experimental remedy different?

The story so far: There is considerable excitement in the world of medicine after scientists reported that a woman living with HIV (Human Immunodeficiency Virus) and administered an experimental treatment is likely 'cured'. Only three people so far are known to have been cured of HIV.

What do we know about the treatment?

This week at a Conference on Retroviruses and Opportunistic Infections, Colorado, United States. researchers described the case of a 60-year-old African American woman who was diagnosed with an HIV infection in 2013 was started on the standard HIV treatment regimen of anti-retroviral treatment (ART) therapy consisting of tenofovir, emtricitabine and raltegravir. She was also later diagnosed with leukemia in 2017

In that year she received cord blood, or embryonic stem cells, from a donor with a rare mutation that naturally blocks the HIV virus from infecting cells. She was also given blood stem cells, or adult stem cells, from a relative. The adult stem cells boosted the patient's immunity and possibly helped the cord blood cells fully integrate with the lady's immune system.

A little over three years after the transplant, the lady discontinued the ART and today more than 14 months down, her doctors report that she has no sign of HIV in her blood and also has no detectable antibodies to the virus.

Embryonic stem cells are potentially able to grow into any kind of cell and hence their appeal as therapy, though there is no explanation for why this mode of treatment appeared to be more effective.

What is unique about the recovery of this woman?

Only two people have reportedly been cured of HIV so far and both have relied on bone marrow transplants from donors who carried the mutation, called CCR5 delta 32, that naturally makes one immune to an HIV infection and AIDS.

Timothy Ray Brown, or the 'Berlin patient' staved off the virus for 12 years but died of cancer in 2020. Another patient, Adam Castillejo, was the second reported case of a cure. Both men received bone marrow transplants from donors who carried a mutation that blocks HIV infection. However, the previous transplants involved adult stem cells and these cells from the bone marrow replaced their immune system. The body's natural tendency is to reject foreign stem cells and so both donors suffered side effects such as graft versus host disease where the donor's cells attack the recipient's body. Both men developed severe illnesses throughout their HIV remission but in contrast the woman was discharged from hospital within 17 days of the transplant and did not develop graft versus host disease. Her doctors theorise that it was a combination of the embryonic and adult stem cells that led to a better health outcome. However, because it's only been five-odd years of being HIV-free, it remains to be seen if the lady will live longer than Brown or Castillejo.

Is this treatment the long-sought cure for AIDS?

Not at all. While this approach is certainly a welcome addition to the arsenal of treatments, stem cell therapy is a cumbersome exercise and barely accessible to most HIV patients in the world. Moreover, this requires stem cells from that rare group of individuals with the beneficial mutation. Anti-retroviral therapy, through the years, has now ensured that HIV/AIDS isn't always a death sentence and many with access to proper treatment have lifespans comparable to those without HIV.

A vaccine for HIV or a drug that eliminates the virus is still elusive and would be the long sought 'cure' for HIV/AIDS.

What is the prevalence of HIV/AIDS in India?

As per the India HIV Estimation 2019 report, the estimated adult (15 to 49 years) HIV prevalence trend has been declining in India since the epidemic's peak in the year 2000 and has been stabilising in recent years. In 2019, HIV prevalence among adult males (15–49 years) was estimated at 0.24% and among adult females at 0.20% of the population.

There were 23.48 lakh Indians living with HIV in 2019. Maharashtra had the maximum at 3.96 lakh followed by Andhra Pradesh (3.14 lakh) and Karnataka.

India's National Aids Control Organisation says that ART is "freely available" to all those who require and there are deputed centres across the country where they can be availed from.

Anxiety

Study finds how long does it takes to recover from concussion (Hindustan Times: 20220218)

<https://www.hindustantimes.com/lifestyle/health/study-finds-how-long-does-it-takes-to-recover-from-concussion-101645155753034.html>

People with poor cognitive outcomes were also more likely to have other symptoms like anxiety and lower satisfaction with life.

Concussion is a brain injury caused by a blow to the head or a violent shaking of the head and body. It can lead to temporary cognitive symptoms. A new study has suggested that people with mild traumatic brain injuries may be more likely to have cognitive impairment, cognitive decline or both one year later, compared to people who were not injured.

The research was published in 'Neurology', the medical journal of the American Academy of Neurology.

People with poor cognitive outcomes were also more likely to have other symptoms like anxiety and lower satisfaction with life.

"Our results suggest that clinically meaningful poor cognitive outcomes, which we defined as cognitive impairment, cognitive decline or both, one year after a concussion may be more common than previously thought," said study author Raquel Gardner, MD, of the University of California San Francisco. "They also highlight the need to better understand the mechanisms underlying poor cognitive outcome, even after relatively mild brain injuries, to improve therapy for recovery."

The study looked at 656 people who had been admitted to trauma centre emergency rooms with concussions and 156 healthy people without head injuries. Their average age was 40. Participants were given up to three neurological evaluations after their injury, at two weeks, six months and one year. Each of those evaluations provided five scores from three tests of recall, language skills and other cognitive domains.

Poor cognitive outcome was defined as satisfying the criteria for cognitive impairment, cognitive decline or both. Cognitive impairment was defined as lower-than-expected performance on at least two cognitive tests such as one memory test and one processing speed test. Cognitive decline was defined as clinically meaningful decline on at least two cognitive tests.

Researchers found that 86 out of 656 people with mild brain injuries, or 14 per cent, had poor cognitive outcomes one year later. Of those, 10 per cent had cognitive impairment only, 2 per cent had cognitive decline only and 2 per cent had both. That's compared to eight out of 156

people without concussions, or 5 per cent, who had poor cognitive outcomes one year later. Of those healthy people, 3 per cent had cognitive impairment, none had cognitive decline only, and 1 per cent had both.

Researchers also found that people who had depression before their injury, had no health insurance, or had a high school education or less were more likely to have a poor cognitive outcome than those who were not depressed before the injury, or had insurance or had more than a high school education.

Researchers found that people who had good cognitive outcomes were more likely to have higher life satisfaction one year after their concussion. The life satisfaction test given to participants ranges in score from five to 35, with lower scores indicating lower life satisfaction. The people with good cognitive outcomes scored an average of 26 on the test, compared to people with poor cognitive outcomes, who scored an average of 21.

The study did not prove that people with concussions will have worse cognitive outcomes one year later, but it showed an association.

"Previous studies of people with moderate to severe brain injuries show that early, intensive rehabilitation can improve people's cognitive outcomes over time. More research is needed to find out the role of cognitive rehabilitation on people with more mild brain injuries who are also at risk for poor cognitive outcomes, and how to predict who falls into this risk category," Gardner said.

Mental Health

Covid patients may have increased risk of developing mental health problems (The Indian Express: 20220218)

<https://indianexpress.com/article/lifestyle/health/covid-patients-increased-mental-health-problems-study-7777689/>

The study found that patients hospitalised for Covid were more likely to be diagnosed with mental health issues than those with less serious coronavirus infections

Social isolation, economic stress, loss of loved ones and other struggles during the pandemic have contributed to rising mental health issues like anxiety and depression.

But can having COVID-19 increase the risk of developing mental health problems? A large new study suggests it can.

The study, published Wednesday in the journal *The BMJ*, analyzed records of nearly 154,000 COVID patients in the Veterans Health Administration system and compared their experience in the year after they recovered from their initial infection with that of a similar group of people who did not contract the virus.

The study included only patients who had no mental health diagnoses or treatment for at least two years before becoming infected with the coronavirus, allowing researchers to focus on psychiatric diagnoses and treatment that occurred after coronavirus infection.

People who had COVID were 39% more likely to be diagnosed with depression and 35% more likely to be diagnosed with anxiety over the months following infection than people without COVID during the same period, the study found. COVID patients were 38% more likely to be diagnosed with stress and adjustment disorders and 41% more likely to be diagnosed with sleep disorders than uninfected people.

“There appears to be a clear excess of mental health diagnoses in the months after COVID,” said Paul Harrison, a professor of psychiatry at the University of Oxford, who was not involved in the study. He said the results echoed the emerging picture from other research, including a 2021 study on which he was an author, and “it strengthens the case that there is something about COVID that is leaving people at greater risk of common mental health conditions.”

After having COVID, people were 55% more likely to be taking prescribed antidepressants and 65% more likely to be taking prescribed anti-anxiety medications than contemporaries without COVID, the study found.

Overall, more than 18% of the COVID patients received a diagnosis of or prescription for a neuropsychiatric issue in the following year, compared with less than 12% of the non-COVID group. COVID patients were 60% more likely to fall into those categories than people who didn't have COVID, the study found.

The study found that patients hospitalized for COVID were more likely to be diagnosed with mental health issues than those with less serious coronavirus infections. But people with mild initial infections were still at greater risk than people without COVID.

“Some people always argue that ‘Oh, well, maybe people are depressed because they needed to go to the hospital and they spent like a week in the ICU,’” said the senior author of the study, Dr. Ziyad Al-Aly, chief of research and development at the VA St. Louis Health Care System and a clinical public health researcher at Washington University in St. Louis. “In people who weren't hospitalized for COVID-19, the risk was lower but certainly significant. And most people don't need to be hospitalized, so that is really the group that's representative of most people with COVID-19.”

The team also compared mental health diagnoses for people hospitalized for COVID with those hospitalized for any other reason. “Whether people were hospitalized for heart attacks or chemotherapy or whatever other conditions, the COVID-19 group exhibited a higher risk,” Al-Aly said.

The study involved electronic medical records of 153,848 adults who tested positive for the coronavirus between March 1, 2020, and Jan. 15, 2021, and survived for at least 30 days. Because it was early in the pandemic, very few were vaccinated before infection. The patients were followed until Nov. 30, 2021. Al-Aly said his team was planning to analyze whether subsequent vaccination modified people's mental health symptoms, as well as other post-COVID medical issues the group has studied.

The COVID patients were compared with more than 5.6 million patients in the Veterans system who did not test positive for the coronavirus and more than 5.8 million patients from before the pandemic, in the period spanning March 2018 through January 2019. To try to gauge the mental health effect of COVID-19 against that of another virus, the patients were also compared with about 72,000 patients who had the flu during the 2 1/2 years before the pandemic. (Al-Aly said there were too few flu cases during the pandemic to provide a contemporaneous comparison.)

The researchers tried to minimize differences between groups by adjusting for many demographic characteristics, pre-COVID health conditions, residence in nursing homes and other variables.

In the year after their infection, the COVID patients had higher rates of mental health diagnoses than the other groups.

"It's not really surprising to me because we've been seeing this," said Dr. Maura Boldrini, an associate professor of psychiatry at NewYork-Presbyterian Columbia University Medical Center. "It's striking to me how many times we've seen people with these new symptoms with no previous psychiatric history."

Most veterans in the study were men, three-quarters were white and their average age was 63, so the findings may not apply to all Americans. Still, the study included over 1.3 million women and 2.1 million Black patients, and Al-Aly said "we found evidence of increased risk regardless of age, race or gender."

There are several possible reasons for the increase in mental health diagnoses, Al-Aly and outside experts said. Boldrini said she believed the symptoms were most likely influenced by both biological factors and the psychological stresses associated with having an illness.

"There's no one analysis that tells you the whole story," Al-Aly said. "Maybe all of us or most of us experienced some sort of an emotional distress or mental health stress or some sleep problem," he added. "But people with COVID did worse."

Cancer

75,000 kids are diagnosed with cancer in India every year: Study (The Times of India: 20220218)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/75000-kids-are-diagnosed-with-cancer-in-india-every-year-study/articleshow/89608346.cms>

India is home to at least 20 per cent of the global childhood cancer burden, with nearly 75,000 kids getting cancer every year, according to the World Health Organisation (WHO).

Non-communicable diseases, including cancer, account for nearly 50 per cent of the total deaths among children aged between 5 years and 14 years and this situation can be improved by ensuring there is an enhanced awareness about the problem and ensuring access to quality healthcare for all, say doctors on International Childhood Cancer Day on February 15.

Most common types of childhood cancers are leukemias, brain cancers, lymphomas, and solid tumours like neuroblastomas and Wilms tumours. The burden of childhood cancers is high in low- and middle-income countries where the health system is weak and contributes to cure rates of less than 30 per cent due to significant barriers in early diagnosis, inability to accurately diagnose, poor access to health care facilities, and inability to initiate treatment promptly.

Dr Srikanth Soma, Consultant Surgical Oncologist, SLG Hospitals, said: "In spite of drastic improvement in cancer care services over the past few decades, India continues to have a low success rate when it comes to curing childhood cancers completely. That is because most of the malignancies brought to the notice of doctors are at advanced stages. Lack of awareness, treatment refusal, and financial constraints are among the prime reasons for this delay in seeking right medical care.

"Another major problem is that childhood cancer care services are currently available only at tertiary health centres in major cities, forcing a majority of India to depend on these few centres."

Dr Narender Kumar Thota, Consultant Medical Oncology & Haemato Oncologist & Stem Cell Bone Marrow Transplant Specialist, KIMS Hospitals, said: "(As many as) 1.6 to 4.8 per cent of all cancer in India is seen in children below 15 years of age and the overall incidence of 38 to 124 per million children, per year, is lower than that in the developed world.

"The considerable inter-regional variation in incidence and mortality rates across India suggests a possible deficiency in ascertainment of cases and death notification, particularly in rural areas. Unlike adult malignancies, childhood cancers do not have a known cause in a majority cases. Only 10 per cent cases are due to genetic reasons. Childhood cancers cannot be prevented nor identified through screening."

According to Dr Revanth Reddy, Consultant Surgical Oncologist, Aware Gleneagles Global Hospital, financial support through the government-promoted health insurance and holistic support through philanthropic organisations have improved treatment adherence and outcome.

"Moving forward, the focus should be on strengthening the cancer registries for capturing nationwide data, improving awareness of childhood cancer among caregivers and healthcare workers for early recognition and improving accessibility of childhood cancer care services beyond major cities," he said.

Symptoms of childhood cancers generally include unexplained weight loss, persistent pain in bone, joints or legs, lumps/mass in the abdomen, chest, neck or pelvis, excessive bruising or bleeding, prolonged fatigue, whitish appearance of the pupil etc.

In infants and children less than one year, neuroblastoma appears to be one of the most common cancers while in children between 1-4 years leukemias are common, and in children aged between 9-16 years, bone cancers are common.

Treatment for such cancers would include surgery, chemotherapy, radiotherapy, or a combination depending on the nature of malignancy and its stage of presentation. Doctors say focus should be on improving awareness about childhood cancers and its symptoms among parents and healthcare providers and improving healthcare access to remote areas. India needs to have a policy framework specifically to address childhood cancer care, they added.

COVID-19 cases among females

Study finds underreporting of COVID-19 cases among females in many countries (The Times of India: 20220218)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-study-finds-underreporting-of-covid-19-cases-among-females-in-many-countries/articleshow/89608289.cms>

Pandemics and recessions have the potential to exacerbate existing health inequalities between men and women.

Many social factors can put women at a higher risk of infection during a pandemic. In almost all societies, women assume the role of primary caregiver when family members fall ill. They are also more likely to be front-line health care workers.

Despite this increased exposure to infection, the Ebola and Zika outbreaks highlighted how women are more likely to experience unequal access to resources and health care, and have limited decision-making power about their own health and finances.

COVID-19 is no different. We are researchers in economics and health, and our recent study found that COVID-19 cases and deaths among women may be underreported in countries with higher gender discrimination.

Gender differences in COVID-19 rates

To investigate the effect of the COVID-19 pandemic on gender-based health disparities, we examined male and female COVID-19 case and death rates across 133 countries from 2020 to 2021. We used data from Global Health 50/50, an organization that tracks COVID-19 cases and deaths by gender worldwide.

We found that most countries, such as the United States, Netherlands, France, Ukraine and Armenia, report roughly equal or slightly higher female infection rates. But 14% of the countries we examined reported over 65% of their COVID-19 cases and deaths were among men. For instance, 88% and 85% of confirmed COVID-19 cases in Bahrain and Qatar, respectively, were among men. Similarly, over 74% of total COVID-19 deaths in Chad, Bangladesh, Malawi and Pakistan were among men.

But what caused these rate differences across countries? We considered both biological factors, like gender differences in healthy life expectancy and death rates from chronic and infectious diseases, and social factors, like employment rates and gender norms. We assessed gender norms using publicly available indices measuring how countries are performing in women's peace and security, financial inclusion, access to resources and status in the family household.

We found that biological differences, which should result in more consistent case and death rates across locations, couldn't account for these trends alone. Instead, social factors like higher gender discrimination within the family and limited access to wealth and education were significantly associated with larger differences in male and female COVID-19 case and death rates.

Accounting for gender in health

Gender norms play a role in what opportunities and resources are available for different people. Women often fall through the cracks of the health care system due to gender bias and their poorer socioeconomic status. In many developing countries, women resort to informal, unlicensed health care providers and low-cost medicines, while men spend a greater share of family resources on their own health needs. And in some parts of the world, a woman's husband or father must provide consent before she can obtain health care treatment.

When women have less independence and decision-making power over their lives, they need to rely on their family members to access health care. In societies where women are devalued and do not have decision-making power, a household may prioritize spending their resources

on men's COVID-19 testing and hospital stays. Thus, we hypothesise that countries are reporting higher male COVID-19 cases and deaths due to underreporting of women's cases and deaths.

This underreporting extends in other areas as well. For example, our data source does not account for transgender and nonbinary people. And country-level data on gender differences in medical access for other diseases and treatments is also unavailable. The World Health Organization's European office has urged countries to collect gender data through their health information systems. While efforts have been made to improve data collection across health care systems globally, collecting reliable data remains challenging.

Though our findings do show a strong association between gender norms and COVID-19 health disparities, they do not prove causation as a controlled experiment would. Such studies, however, are not possible during a pandemic. And results may vary regionally due to cultural and social differences. One recent study, for example, found that more men in the U.S. die from COVID-19 than women because they are less likely to follow mask and social distancing guidelines.

Despite these limitations, it is clear that social factors play a role in COVID-19 health outcomes. Ignoring gender bias in health care has the potential to exacerbate long-standing inequities that existed prior to the pandemic. (The Conversation)

Sleep apnea

Sleep apnea: Know what is the underlying cause, comorbidities that can exacerbate it (The Times of India: 20220218)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/sleep-apnea-know-what-is-the-underlying-cause-comorbidities-that-can-exacerbate-it/articleshow/89621492.cms>

Sleep apnea, commonly known as obstructive sleep apnea, is when the deep sleep pattern of an individual is disturbed due to limited airflow to the body through air passage. In this case, the upper respiratory system gets blocked or narrowed down as throat muscles relax during the sleep. The brain repeatedly sends signals to the human body to wake up and continue the breathing.

A person suffering from sleep apnea is unable to get deep sleep as the frequency of the disturbance can go up to 30 times in a night.

One of the big symptoms of sleep apnea is snoring and feeling tired even after a full night's sleep.

So what exactly happens in this condition? The soft tissue of the mouth and throat give support to the soft palate, the triangular piece of tissue hanging from the soft palate called uvula, the tonsils, and the side walls of the throat and the tongue. Sometimes these throat muscles relax, restricting the airway and limiting the flow of oxygen to the body.

Also Read: Why is obstructive sleep apnea concerning? Does it increase your risk of chronic illnesses?

As soon as the brain gets the signal that oxygen level has lowered in the blood, it signals the body to wake up for breathing.

There are three kinds of sleep apnea: obstructive sleep apnea which is the most common one, the central sleep apnea which has less occurrence and the complex sleep apnea in which the patient gets both the first type of sleep apnea at a time.

Experts have linked the occurrence of sleep apnea with the longevity of a human being. Sleep apnea triggers chronic illnesses like diabetes and hypertension and studies have shown that it decreases the longevity of the person by several years.

Also Read: Workouts to avoid if you have hypertension and what to do

"The people are very tired in the morning, can have high BP, severe acidity and in very advanced cases they can have seizures or they can fall asleep while doing normal activities like driving. So it is a very high risk disease, many times if people get admitted with obstructive sleep apnea, it complicates with pneumonia and other medical conditions as well," Dr. Aviral Roy Consultant- Intensivist, Medica Superspecialty Hospital told ETimes.

As per reports, men are more likely to have sleep apnea than women. However, women increase their risk if they get overweight. Sometimes the risk of sleep apnea in women increases after menopause.

Family history of sleep apnea can also make a person prone to the condition just like over consumption of alcohol and smoking would make the individual susceptible to it.

Experts at Mayo Clinic say, "Congestive heart failure, high blood pressure, type 2 diabetes and Parkinson's disease are some of the conditions that may increase the risk of obstructive sleep apnea. Polycystic ovary syndrome, hormonal disorders, prior stroke and chronic lung diseases such as asthma also can increase risk."

"Whenever we want to improve something, we need to reverse engineer the cause! Managing Nutrition, Hydration, regular exercise, and stress management should be the primary plan of action when dealing with obesity-related sleep apnea," Fitness coach, Yash Vardhan Swami told ETimes.

Deltacron

Reports claim emergence of COVID Deltacron cases in UK; here's what you need to know about it (The Times of India: 20220218)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-reports-claim-emergence-of-covid-deltacron-cases-in-uk-heres-what-you-need-to-know-about-it/photostory/89616285.cms>

01/7The new variant was revealed in the UKHSA's weekly variant surveillance report

As reports of COVID cases due to the Deltacron variant in the United Kingdom (UK) have come to the fore new questions have started arising about the two year old global pandemic.

Deltacron is a combination of both Delta and Omicron variants of the coronavirus. It is called Deltacron, as it comprises Omicron-like genetic signatures within the Delta genomes.

"The super-mutant Deltacron is thought to have evolved in a patient who caught both variants at the same time but it is not clear if it was imported or originated in Britain. UK Health Security Agency (UKHSA) officials also don't know how infectious or severe the newly evolved virus is or whether it will impact vaccine performance," reported the Daily Mail. A source at the UKHSA insisted officials were 'not concerned' by the variant because case numbers are 'low', it added.

The new variant was revealed in the UKHSA's weekly variant surveillance report, as per reports.

02/7What is Deltacron?

Touted to be a laboratory error earlier, the Deltacron variant has become a subject of concern in the last few days after an international media released reports of people getting infected with it in the UK.

In January 2022 when the first case of Deltacron was reported from Cyprus, the World Health Organisation (WHO) had said it to be a lab contamination. Many experts had also said that it may be a result of contamination sequencing artifacts of genomes.

03/7What are the symptoms of Deltacron induced COVID infection?

So far nothing has been found out about the symptoms of this variant. Prior to the cases reported in the UK, 25 cases were found in Cyprus in which 11 of the Deltacron infected individuals were earlier hospitalized for COVID-19 and the rest were the general population.

On the severity of Deltacron, Professor Paul Hunter, an infectious disease expert at the University of East Anglia told the media that this 'shouldn't pose too much of a threat'.

'It doesn't fill me with dread. The reason is because, at present, both Delta and most versions of Omicron... are falling quickly and Delta is almost extinct in this country. Deltacron will have shared antigens from both Delta and Omicron and we already have high levels of immunity to those. So in theory it should not pose too much of a threat. But nobody can predict everything with certainty, but at the moment I am not overly worried," he told Daily Mail.

04/7 What is the transmission rate of this variant of COVID-19?

While nothing much has been said about the symptoms and the transmission rate of the variant, its link with Omicron is giving an impression of high transmission rate. No official information is available to confirm the nature, transmission rate, risk factor and severity of the variant.

The Omicron variant of the coronavirus was said to have a high transmissibility rate among all the variants of concern.

05/7 Will it be a variant of concern?

In January 2022, the WHO had said it to be a laboratory error. There has been no update on the variant from the WHO so far.

A coronavirus variant is said to be a variant of concern when it exhibits increase in transmissibility or detrimental change in COVID-19 epidemiology; or increase in virulence or change in clinical disease presentation; or decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.

06/7 What are the other coronavirus variants of concern?

So far 5 coronavirus variants of concern have been identified: Alpha, Beta, Gamma, Delta, and Omicron. Two others, Lambda and Mu are variants of interest.

07/7 What is the current status of the Omicron variant?

The Omicron wave has waned. However it is still far from being endemic. "The Covid-19 infection is barely two years old. We are still studying its patterns," said Dr Samiran Pande head epidemiology, ICMR to the media.

As on February 16, 2022, India reports 30,615 Covid cases, 514 deaths in 24 hours. Active case tally stands at 3.7 lakh. Daily positivity rate at present is 2.45%

Dementia

Dementia: Frequent loneliness may raise risk (Medical News Today: 20220218)

<https://www.medicalnewstoday.com/articles/dementia-frequent-loneliness-may-raise-risk>

New research finds a link between loneliness and a heightened risk of dementia.

Studies suggesting an association between loneliness and increased risk of dementia have produced inconsistent results.

A new study following dementia-free individuals over 10 years shows that people who felt lonely 3 or more days a week were more likely to develop dementia during the follow-up period.

Individuals under the age of 80 years and without known genetic risk factors who experienced frequent loneliness were at elevated risk of developing dementia.

Loneliness was also linked to poor executive function and brain changes associated with vulnerability to dementia in individuals who did not have the condition.

This study highlights the importance of screening for loneliness in routine clinical care and measures to reduce loneliness.

Experiencing feelings of loneliness three or more times a week may increase the risk of developing dementia later in life, according to a recent study in the journal *Neurology*.

The study showed that individuals experiencing loneliness, who were otherwise at lower risk of dementia due to genetic risk factors and age, had a threefold higher risk of developing dementia.

The study's first author Dr. Joel Salinas, a neurologist at New York University Langone Health, told Medical News Today: "[This study] provides Class I level of evidence (the highest level available) that lonely adults, especially those without major age or genetic risk factors, may have an elevated risk and early neurocognitive vulnerability for developing dementia. This magnifies the population health implications of observed trends in the growing prevalence of loneliness."

"These findings not only establish this link between loneliness and dementia risk much more firmly, but also have implications for how we think about risk factors for dementia, the relevance of basic loneliness screening in assessing individuals at greater risk, and how there is a potential to underestimate this risk in lonely adults, especially if they don't have any known genetic risk factors like the APOE e4 allele."

– Dr. Salinas

The APOE e4 allele, known as apolipoprotein E, is a fat-binding protein involved in the metabolism of fat and glucose regulation. The allele has a major effect on the progression of age-associated diseases, including Alzheimer's disease (AD), by influencing the brain function pathways.

Loneliness and dementia: Is there a link?

Even before the COVID-19 pandemic, loneliness was prevalent in the United States. A 2018 survey reports that more than 1 in 5 individuals in the U.S. frequently experienced feelings of loneliness and social isolation. The COVID-19 pandemic has been accompanied by a further rise in the prevalence of loneliness.

Moreover, feelings of loneliness are especially common in older individuals over the age of 60 years, with estimates ranging from 13% to 43%.

“Older people are at a heightened risk of loneliness due to dwindling networks as friends and family die, they live alone or move to an aged care facility where they may be unable to connect to many residents due to communication challenges as a result of dementia. This may result in social isolation, or they may feel lonely,” Dr. Wendy Moyle, the program director of the Healthcare Practice and Survivorship Program at Griffith University, Brisbane, Australia, explained to MNT.

Loneliness can have adverse effects on health and is associated with an increased risk of cardiovascular diseases and all-cause mortality.

Although some previous studies have shown that loneliness is associated with an increased risk of cognitive decline and dementia, other studies have reported an absence of such an association.

Moreover, whether loneliness causes dementia or is a symptom of these conditions is not understood.

The present study examined the association between loneliness and dementia. To further enhance the understanding of the impact of loneliness on cognitive function, the researchers used data collected from a large sample of dementia-free individuals who were rigorously monitored for dementia over a long follow-up period of 10 years.

Specifically, the researchers obtained data from the Framingham Study, a population-based longitudinal study initiated in 1948 to understand the multigenerational patterns of cardiovascular and other diseases.

To understand the potential role of loneliness in causing dementia, the researchers also examined the association between loneliness and early indicators that precede the clinical symptoms of dementia. To that end, the researchers examined the association between loneliness and early cognitive and brain imaging markers of dementia in healthy individuals.

A three-fold increase in dementia risk

To examine the potential impact of loneliness on cognitive decline and dementia, the researchers analyzed data from 2,308 individuals enrolled in the Framingham Study.

The study included participants attending the study site for recurrent clinical examinations as a part of the Framingham study between 1997 and 2001. These participants were aged 40–79 years and did not have dementia at the time of the clinical examination, i.e., at baseline.

The participants were rigorously monitored over the 10-year follow-up period for the incidence of dementia.

To understand the relationship between loneliness and dementia, the researchers only included participants aged 60 years and older. They excluded younger participants due to the lower risk of dementia in individuals aged under 60 years.

During the 10-year follow-up period, 14% — 320 out of 2,308 — of the participants were diagnosed with dementia.

The researchers used the Center for Epidemiologic Studies Depression Scale, a standardized questionnaire, to assess the prevalence of loneliness at baseline. Individuals who reported feeling lonely at least 3 days in the week before the administration of this questionnaire were classified as being lonely.

The researchers found that 144 out of the 2,308 participants (6%) felt lonely for at least 3 days during the previous week. These participants who experienced frequent loneliness had an increased likelihood of developing dementia during the 10-year follow-up period than those who were not lonely.

The association between loneliness and increased risk of dementia was not significant in individuals aged 80 years and older. Moreover, participants under 80 years who experienced loneliness were twice as likely as their counterparts who were not lonely to develop dementia.

The researchers also examined the influence of genetic risk factors on the association between loneliness and the risk of dementia. Individuals carrying a specific allele or version of the apolipoprotein E gene (APOE ϵ 4) Trusted Source are at increased risk of dementia.

Among participants aged under 80 years who did not possess the APOE ϵ 4 gene, loneliness was associated with a three-fold increase in the risk of dementia.

The weaker association between loneliness and risk of dementia in individuals carrying the APOE ϵ 4 gene and those older than 79 years may be due to genetic factors and age-associated factors playing a more prominent role in causing dementia in these individuals.

Cognitive and brain imaging markers

Previous studies have shown that changes in cognitive function and structural changes in the brain precede the manifestation of the clinical symptoms of Alzheimer's disease and related dementias (ADRD) Trusted Source.

In the present study, the researchers investigated the association between loneliness and early cognitive and brain imaging indicators of AD/DRD in a subset of 1875 participants aged 40 to 79 years.

Based on cognitive tests conducted at baseline, the researchers found that loneliness was associated with poor executive function. Trusted Source, which includes higher-level cognitive processes such as decision making, planning, and reasoning.

The researchers used brain MRI scans conducted at baseline to measure brain volume and damage to white matter, which consists of nerve fibers or axons.

The researchers found that loneliness was associated with greater white matter injury. Trusted Source and lower brain volume, which are early markers of dementia.

In sum, these results suggest an association between loneliness and early cognitive and brain imaging indicators of vulnerability to dementia in adults aged under 80 years. In other words, this indicates that loneliness may be involved during the early stages of cognitive decline and may thus potentially contribute to dementia.

The authors also noted that the 10-year follow-up period in the study was longer than that required for dementia to develop in individuals with mild cognitive impairment or other related symptoms. This may suggest that loneliness assessed at baseline, instead of being an early symptom of cognitive decline, likely contributed to the decline in cognitive function.

Addressing loneliness

Due to the observational nature of the present study, these results do not establish whether loneliness is a cause or symptom of dementia. Yet, the potential role of loneliness in increasing the risk of dementia highlights the importance of screening individuals for loneliness and interventions to tackle loneliness.

Dr. Moyle said: “This study supports the earlier studies showing the relationship between loneliness and risk of dementia. However, it is no clearer whether loneliness is an early symptom of dementia or an early contributor to cognitive decline and neuropathology. Perhaps until we can identify very early indicators of dementia, we will not be able to address this question.”

“Either way, we need to understand how to manage and reduce the incidence of loneliness in society. This is essential given the incidence of loneliness, according to research, is increasing in older populations. Although loneliness overlaps with social isolation, it is a distinct feeling; one can be socially isolated and not feel the distressing feeling of loneliness. Lonely people can feel lonely even when they are surrounded by hundreds of well-meaning people. It is this that makes loneliness so difficult to manage. Further research on management strategies to address loneliness in older adults is needed,” added Dr. Moyle.

Similarly, Dr. Andrew Steptoe, Professor of Psychology and Epidemiology at University College London, told MNT: “Two issues are unresolved. The first is whether loneliness is a

genuine causal factor in the development of dementia, or whether it is an early indicator of degeneration in the brain that will progress to dementia over time.”

“The second important issue for the health of the public is whether reducing loneliness among older people would help decrease their risk of dementia. This question is very difficult to study scientifically, but loneliness and social isolation are already known to put people at increased risk for mental ill-health and a number of other physical health problems. So, the present study adds to the case for taking loneliness seriously in relation to dementia as well.”

– Dr. Steptoe

Referring to the potential role of loneliness in cognitive decline, Dr. Salinas said, “Future studies need to clarify the underlying biological pathways involved, but there is much that individuals can do now to help address loneliness in themselves, their friends, families, and their communities.”