



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Monday 20210719

## कोरोना

**यूपी, बिहार, राजस्थान जैसे राज्यों में सैकड़ों के अंदर सिमटा कोरोना, फिर रोज कहां से आ रहे 35-40 हजार नए केस! (Hindustan: 20210719)**

<https://www.livehindustan.com/national/story-8-states-reporting-highest-cases-in-india-due-to-which-daily-covid-cases-crossing-35-to-40-thousand-mark-india-hindi-news-4236986.html>

देशभर में हर दिन कोरोना वायरस के नए मामले लगातार 35 से 40 हजार के बीच आ रहे हैं। हालांकि, उत्तर प्रदेश, राजस्थान, बिहार कुछ ऐसे राज्य हैं जो आकार में भले ही बड़े हैं लेकिन यहां कोरोना संक्रमण का आंकड़ा सैकड़ों तक सिमट गया है। अब सवाल यह है कि अगर इन बड़ी आबादी वाले राज्यों में कोरोना के ज्यादा केस नहीं हैं तो फिर भारत में हर दिन इतने नए मामले कहां से रिपोर्ट हो रहे हैं। इनका जवाब है केरल, महाराष्ट्र, कर्नाटक, असम, ओडिशा, तमिलनाडु, तेलंगान और आंध्र प्रदेश जैसे राज्य। इन राज्यों में बढ़ते संक्रमण ने ही केंद्र सरकार की नींद उड़ा रखी है। आइए बताते हैं आपको, इन राज्यों में कोरोना की स्थिति क्या है।

केरल में सबसे ज्यादा मामले हो रहे दर्ज

महामारी की शुरुआत से ही केरल में कोरोना संक्रमण का प्रसार रहा है। हालांकि, शुरुआत में कोरोना प्रबंधन के मॉडल पर तारीफें बटोरने वाले केरल में अब तक कोरोना पर नकेल नहीं कसी जा सकी है। राज्य में रविवार को भी कोरोना वायरस के 13 हजार 956 नए मामले दर्ज किए हैं। आलम यह है कि

राज्य के कई इलाकों में संक्रमण दर 10 फीसदी से भी ज्यादा है, जो कि विश्व स्वास्थ्य संगठन के मानकों के मुताबिक भी खतरनाक स्थिति है। राज्य की स्वास्थ्य मंत्री वीणा जॉर्ज ने बताया कि शादी-विवाह जैसे समारोहों की वजह से राज्य में संक्रमण के कई केंद्र बनने के संकेत मिले हैं, जहां संक्रमण दर (जांच किए गए नमूनों में संक्रमण की पुष्टि) 10 प्रतिशत से अधिक है।

महाराष्ट्र में कोरोना 9 हजार नए केस

महाराष्ट्र भी उन राज्यों में शुमार है जहां कोरोना महामारी ने शुरुआत से ही सबसे ज्यादा कोहराम मचाया। राज्य में रविवार को भी कोरोना वायरस संक्रमण के नौ हजार नए मामले सामने आए, जिससे राज्य में संक्रमण के मामले बढ़कर 62 लाख 14 हजार 190 हो गए। वहीं 180 मरीजों की मौत होने से मृतक संख्या बढ़कर 1,27,031 हो गई है।

आंध्र प्रदेश आए करीब 3 हजार नए केस

आंध्र प्रदेश में कोरोना वायरस संक्रमण के रविवार को 2974 नए मामले सामने आए और पिछले 24 घंटों में 3290 संक्रमितों के ठीक होने के बाद राज्य में संक्रमण से ठीक होने वाले लोगों की संख्या बढ़ कर 19 लाख के पार हो गई है।

ओडिशा में 2215 नए मामले, 66 मरीजों की मौत

ओडिशा में रविवार को कोविड-19 के 2,215 नए मामले सामने आने के साथ कुल संक्रमितों की संख्या बढ़कर 9,54,326 हो गई जबकि 66 और मरीजों की मौत होने से मृतकों की तादाद 5,058 पर पहुंच गई है।

तमिलनाडु में नए केस 2000 पार

तमिलनाडु में कोरोना वायरस संक्रमण के 2,079 नए मामले सामने आने के बाद संक्रमितों की कुल संख्या 25,35,402 हो गई। राज्य स्वास्थ्य विभाग के मुताबिक, यहां बीते 24 घंटे में 29 और रोगियों की मौत के बाद मृतकों की कुल संख्या 33,724 तक पहुंच गई है।

कर्नाटक में भी आंकड़ा 1500 पार

कर्नाटक में रविवार को कोरोना वायरस संक्रमण के 1708 नए मामले सामने आए जिसके बाद प्रदेश में संक्रमितों की संख्या बढ़ कर 28,83,947 हो गई है जबकि 36 लोगों की मौत के साथ राज्य में महामारी

से मरने वालों की संख्या अब 36,157 पर पहुंच गयी है। स्वास्थ्य विभाग ने बताया कि प्रदेश में फिलहाल 29,291 मरीजों का इलाज चल रहा है ।

असम में भी कोरोना का आंकड़ा बढ़ा

बीते कुछ समय से असम में भी कोरोना के डेली केस लगातार बढ़ रहे हैं। समाचार एजेंसी पीटीआई के मुताबिक, रविवार को भी राज्य में कोरोना के 1 हजार 329 नए मामले दर्ज किए गए हैं और इस दौरान 15 लोगों की संक्रमण से जान भी गई है।

तेलंगाना में कोरोना वायरस संक्रमण के 578 नए मामले

तेलंगाना में रविवार को कोरोना वायरस संक्रमण के 578 नए मामले सामने आए जिसके बाद राज्य में कुल मामले बढ़कर महामारी से राज्य में तीन और मरीजों की मौत हो गई, जिससे मृतकों की संख्या 3,759 पर पहुंच गई।

# सुखद: दिल्ली में रविवार को कोरोना से एक भी मौत नहीं

नई दिल्ली | वरिष्ठ संवाददाता

राजधानी दिल्ली में रविवार को कोरोना से एक भी मौत नहीं हुई और सिर्फ 51 नए मामले सामने आए। 138 दिन बाद यह पहला मौका है जब राजधानी में कोरोना से किसी ने जान नहीं गंवाई।

दिल्ली के स्वास्थ्य मंत्री सत्येंद्र जैन ने कहा कि लंबे समय के बाद अच्छी खबर आई है। वहीं, स्वास्थ्य विभाग ने कहा कि घटते मामलों के साथ स्थिति बेहतर हो रही है। हालांकि तीसरी लहर को देखते हुए किसी प्रकार की ढील नहीं

## सुकून

- 138 दिन बाद किसी ने वायरस की वजह से जान नहीं गंवाई
- राजधानी में संक्रमण दर भी गिरकर 0.07% पर पहुंच गई

दी जा सकती। राजधानी में संक्रमण दर गिरकर 0.07 फीसदी पर पहुंच गई है। अब सिर्फ 592 मरीज बचे जिनका इलाज किया जा रहा। सरकार कोरोना की तीसरी लहर से निपटने के लिए तैयारियों में जुटी हुई है।

कुछ

## Delta Plus Variant (Hindustan: 20210917)

[https://epaper.livehindustan.com/imageview\\_930982\\_124322548\\_4\\_1\\_19-07-2021\\_2\\_i\\_1\\_sf.html](https://epaper.livehindustan.com/imageview_930982_124322548_4_1_19-07-2021_2_i_1_sf.html)

# राजधानी में डेल्टा+ वेरियंट का कोई केस नहीं

## राहत

### नई दिल्ली | वरिष्ठ संवाददाता

राजधानी में कोविड-19 के डेल्टा प्लस स्वरूप का अब तक कोई मामला सामने नहीं आया है। यह जानकारी राष्ट्रीय रोग नियंत्रण केंद्र (एनसीडीसी) द्वारा दिल्ली में वायरस की जीनोम सीक्वेंसिंग के परिणामों में पता चली है। विशेषज्ञों का कहना है कि दिल्ली के लिए राहत की बात है। एनसीडीसी की रिपोर्ट के मुताबिक, जून में 92 कोरोना संक्रमित मरीजों के सैम्पल की जांच की गई। इसमें पाया कि इनमें से 88 फीसदी



**80%**  
से अधिक मामले  
डेल्टा वेरियंट के मिले

**03%**  
रह गए अल्फा  
स्वरूप के मामले  
घटकर

लोग कोरोना के डेल्टा स्वरूप से पीड़ित थे। इससे पहले मई में 742 कोरोना संक्रमितों के सैम्पल की जांच हुई, जिसमें से 83.4 फीसदी नमूनों में डेल्टा वेरियंट मिला था। वहीं अप्रैल में 1967 संक्रमितों में से 55 फीसदी लोग डेल्टा वेरियंट से पीड़ित मिले थे।

**अल्फा का असर कम हुआ :**  
ब्रिटेन में सबसे पहले पाए गए वायरस के अल्फा वेरियंट का दिल्ली में पिछले दो महीने में काफी कम असर दिखा। मार्च में 47.4 फीसदी सैम्पल में अल्फा स्वरूप वाला वायरस मिला था, जो तीन महीने बाद जून में सिर्फ 3

### कई गुना तेजी से फैलता है

फेफड़ों की म्यूकस लाइनिंग के साथ डेल्टा प्लस जल्दी जुड़ जाता है। साथ ही यह कई गुना ज्यादा तेजी से फैलता है और इसकी मास्क क्षमता भी काफी ज्यादा है। संक्रमित व्यक्ति को अगर वैक्सीन नहीं लगी हो तो डेल्टा प्लस वेरियंट उसके फेफड़ों को काफी नुकसान पहुंचाता है और 3 से 10 दिन में यह मरीज के लिए खतरनाक हो सकता है।

फीसदी तक रह गया।

**क्यों खतरनाक :** यह फेफड़ों से ज्यादा मजबूती से चिपकता है और ऐसे में यह ज्यादा खतरनाक हो सकता है। देश में कई राज्यों में इसके मामले आये हैं। अगर यह फैलता है तो ज्यादा खतरनाक हो सकता है।

### क्या बोले विशेषज्ञ



सफदरजंग अस्पताल के कम्युनिटी मेडिसिन विभाग के प्रोफेसर डॉक्टर जुगल किशोर के मुताबिक यह राहत की बात है कि दिल्ली में अभी तक डेल्टा प्लस का कोई मामला सामने नहीं आया है। लेकिन, जून में बहुत कम नमूनों की जीनोम सिक्वेंसिंग जांच में यह पता चला है। हमें ज्यादा सैम्पल की जांच कर वायरस के बदलते स्वरूप पर नजर रखनी होगी। उन्होंने कहा कि पुणे के एक अध्ययन में सामने आया है कि 70 से 75 फीसदी आबादी में एटीबॉडी मिलती हैं। इस हिसाब से देखें तो अभी भी 25 से 30 फीसदी लोग कोरोना से संक्रमित नहीं हुए हैं। ऐसे में सावधानी बरतनी होगी।

## मंकी बी वायरस

कोरोना के कहर के बीच Monkey B Virus की दस्तक, चीन में हो चुकी एक मौत (Dainik Jagran: 20210719)

[https://www.jagran.com/world/china-china-first-human-infection-case-with-monkey-b-virus-dies-common-man-issues-21844421.html?itm\\_source=website&itm\\_medium=homepage&itm\\_campaign=p1\\_componen\\_t](https://www.jagran.com/world/china-china-first-human-infection-case-with-monkey-b-virus-dies-common-man-issues-21844421.html?itm_source=website&itm_medium=homepage&itm_campaign=p1_componen_t)

अभी चीन से निकले एक घातक और जानलेवा वायरस से दुनिया जूझ ही रही है कि इसी तरह के दूसरे वायरस ने बीजिंग में एक पशुचिकित्सक की जान भी ले ली। इस मंकी बी वायरस को भी उतना ही घातक बताया जा रहा है।

बीजिंग, प्रेट्र। चीन से निकले कोरोना वायरस का कहर अभी थमा नहीं कि एक नए वायरस 'मंकी बी (BV)' ने दस्तक दे दी। कोरोना का पहला मामला वुहान में आया था और इस नए घातक वायरस के कारण बीजिंग में एक मौत का मामला सामने आया है। दरअसल बीजिंग के एक पशु चिकित्सक की मौत इस नए वायरस के संक्रमण से हुई है जिसकी पुष्टि चीन ने की है।

27 मई को हुई थी मौत

ग्लोबल टाइम्स द्वारा प्रकाशित रिपोर्ट में चीन के सेंटर फॉर डिजीज कंट्रोल एंड प्रिवेंशन के इंग्लिश प्लेटफार्म का हवाला दिया गया है। इसमें बताया गया है कि नए वायरस से संक्रमित पशुचिकित्सक ने इलाज के लिए कई अस्पतालों के चक्कर लगाए लेकिन 27 मई को उनकी मौत हो गई। उनके करीबी संपर्क में आने वाले लोग सुरक्षित हैं। इसके अलावा रिपोर्ट में यह भी बताया गया है कि चीन में इससे पहले BV वायरस का कोई मामला सामने नहीं आया था यानि डॉक्टर का मामला चीन में BV से पहला मानव संक्रमण का मामला है।

मार्च में दो मृत बंदरों का किया था डिसेक्शन

ग्लोबल टाइम्स के अनुसार, मार्च की शुरुआत में ही 53 वर्षीय डॉक्टर ने दो मृत बंदरों का ऑपरेशन (Dissection) किया था जिसके एक माह बाद उनकी तबियत बिगड़ने लगी और उल्टी होना शुरू हो गया था। नॉन ह्यूमन प्राइमेट्स पर रिसर्च करने वाली संस्था के लिए उक्त पशुचिकित्सक ने काम किया था। अप्रैल में डॉक्टर की जांच के लिए सेरेब्रोस्पाइनल फ्लूड (Cerebrospinal Fluid) लिया गया जिसके बाद आए नतीजे में BV पॉजिटिव होने की पुष्टि हुई।

1932 में हुई थी इस घातक वायरस की पहचान

उल्लेखनीय है कि इस मंकी बी वायरस की पहचान सबसे पहले 1932 में हुई थी। यह वायरस जीनस मैकाका (genus Macaca) के अफ्रीकी लंगूरों (macaques) मैकाक्स में पाया जाने वाला अल्फाहर्पीसवायरस एनज़ूटिक (alphaherpesvirus enzootic) है। गौर करने वाली बात है कि इसमें भी संक्रमण फैलाने की क्षमता काफी अधिक है और यह इंसान से इंसान में फैलता है।

## **Vaccination**

### **Why India is missing its vaccine targets (The Indian Express: 20210719)**

<https://indianexpress.com/article/opinion/columns/why-india-is-missing-its-covid-vaccine-targets-7410990/>

R Ramakumar writes: Production capacity has not risen as claimed by Centre and its projections of vaccine availability are inflated and unrealistic

Half-way into July 2021, India's problem of vaccine shortage shows no sign of abating. The new Union Minister for Health has upwardly revised the target for July 2021 from 12 crore doses to 13.5 crore doses. In June, India administered 11.9 crore doses at a rate of 39.6 lakh doses per day. To administer 13.5 crore doses in July, the vaccination rate should rise to 43.5 lakh doses per day. Yet, the vaccination rate between July 1 and July 15 was 39.8 lakh doses per day; for the seven days ending on July 15, it was lower at 37.7 lakh doses per day.

The fact is that the supply of vaccines remains considerably lower than the demand for vaccines. In this article, I submit two arguments. Firstly, India's vaccine production capacity is not rising as is regularly claimed by the Government of India (GoI). Secondly, GoI's projections for vaccine availability are consistently inflated and unrealistic.

Currently, India produces two vaccines: Covishield by the Serum Institute of India (SII) and Covaxin by Bharat Biotech (BB). In May 2021, GoI told the Supreme Court of India in its first affidavit that SII produced 6.5 crore doses per month and BB produced 2 crore doses per month. In July 2021, SII's and BB's capacities were to rise to, respectively, 10 crore and 5.5 crore doses a month. If these claims were true, India should have produced 8.5 crore doses per month (28.3 lakh dose per day) in May and June, and 15.5 crore doses (51.7 lakh doses per day) in July.

Yet, India administered only 27 lakh doses per day in the second, third and fourth weeks of April, and 19.3 lakh doses per day in May. While the number of doses administered rose to 39.5 lakh doses per day in June, it was due to a curious one-week blitzkrieg between June 21 and June 28. There is still no reasonable explanation for the poor vaccination rates between June 1 and June 20, and after June 28.

The situation looks bleak for July 2021. GoI originally aimed to administer 12 crore doses in July. The target was revised to 13.5 crore doses. Firstly, both these targets are less than the 15.5 crore doses projected for July in the affidavit. Secondly, if the average vaccination rate in July continues at the current rate, administering 13.5 crore doses appears difficult. In sum, GoI has regularly been overstating India's production capacity.

In a second affidavit to the SCI in June, GoI claimed that "from January 2021 to July 31 2021, a total of 51.6 crore doses will be available". Till June 30, only 33.1 crore doses were

administered. To reach 51.6 crore doses by end-July, India must administer 18.5 crore doses in July. Yet, according to the same affidavit, only 12 crore doses were being planned to be administered in July.

GoI had ordered 34.6 crore doses from SII and BB over three orders placed between January and May. India also received 1 crore doses from the COVAX facility of the WHO. Thus, a total of 35.6 doses were to be received by GoI till July. The remaining 16 crore doses were those expected to be directly purchased by state governments and private hospitals under the earlier 50:25:25 allocation across GoI, state governments and private hospitals.

However, these 16 crore doses were never purchased, as the 50:25:25 allocation flopped. State governments and private hospitals could directly purchase only about 4.2 crore doses. Yet, the affidavit added all these 16 crore doses to the total availability till July. In sum, India simply cannot administer 51.6 crore doses by the end of July. Even if 12-13.5 crore doses are administered in July, the cumulative number of doses would reach 45-46.5 crores.

On May 13, GoI claimed that India would administer 216 crore doses between August and December. This was nothing but puffery. The production capacity in some vaccines was overstated, and several vaccine candidates in the early trial stages were included in the projection. In the second affidavit to the SC in June, GoI accepted the error. Vaccine candidates like Novovax, Gennova and BB Nasal were dropped, and the August-December projection was downscaled from 216 crores to 135 crores.

It is doubtful if even the revised projection of 135 crore doses is realistic. Only the contribution of 50 crore doses of Covishield by SII appears realistic. The biggest disappointment is in the supply of Covaxin. GoI expects 40 crore doses of Covaxin between August and December. However, BB is yet to fulfil its earlier commitments. Over three orders placed in January, March and May, GoI ordered 8 crore doses of Covaxin from BB to be supplied by July. Only 4 crore doses of Covaxin were administered till June 30.

With a self-declared monthly capacity of 2 crore doses, BB must supply about 4 crore doses in July to fulfil its earlier commitments. Between July 1 and July 15, only 80.1 lakh doses of Covaxin were administered. Only after supplying the remaining 3.2 crore doses can BB begin supplying for the fourth order placed in June, for which supply is to begin in August. Three public sector units have been allowed to manufacture Covaxin, but their supply is unlikely to begin in full speed before late-2021.

The other vaccines expected between August and December are Sputnik V (10 crore doses), Corbevax (30 crore doses) and Zydus-Cadilla (5 crore doses). Currently, these projections are pure speculation, though the supply situation may indeed ease by December. In sum, it is doubtful if 135 crore doses will become available between August and December.

## Healthcare

### Healthcare in India: rarely an election issue, despite limited access (The Indian Express: 20210917)

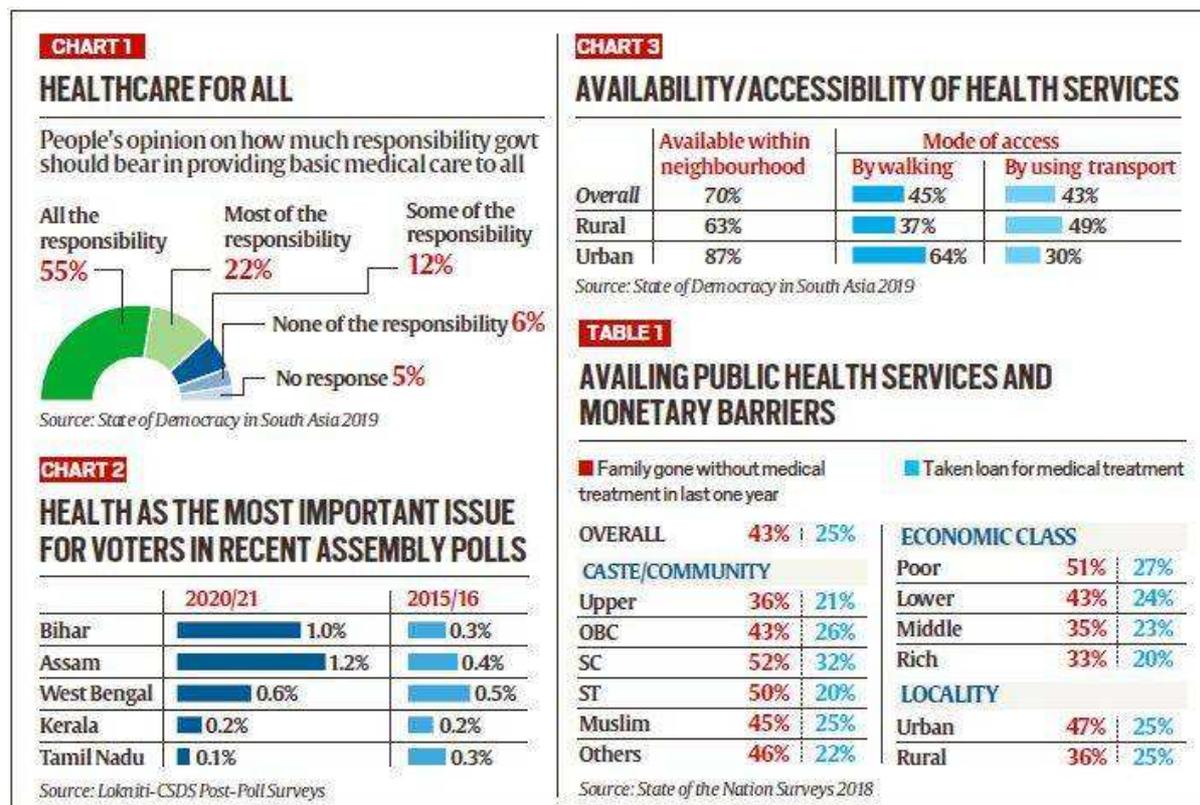
<https://indianexpress.com/article/explained/healthcare-in-india-rarely-an-election-issue-despite-limited-access-7411047/>

Yet, they rarely become a political issue. However, it would be a mistake to imagine that citizens do not care about health facilities.

In India, health-related public policies and healthcare infrastructure have often been a matter of discussion among policymakers. Yet, they rarely become a political issue. However, it would be a mistake to imagine that citizens do not care about health facilities. Years before the ongoing pandemic drew attention to these issues, a study (‘State of Democracy in South Asia (SDSA)–Round 3’) by Lokniti-CSDS in 2019 found that people expect the government to take maximum responsibility for providing basic medical care (Chart 1). But when it comes to voting, health never becomes an electoral issue for voters; nor do political parties generally focus on health infrastructure in their manifesto or campaign.

#### Health in elections

In the several rounds of post-election studies (national and state) by Lokniti-CSDS, less than 1% of voters have said health was their consideration while voting. It was assumed that during the current pandemic, voters would prioritise health as an election issue — but this has not been the case. The Bihar Assembly elections were held just after the first wave of Covid-19. During the post-election survey, less than 1% of voters considered health an issue while voting, which was not very different from the finding of the last post-election survey in Bihar (2015). In early 2021, when India faced the second wave, elections were held in four states. Here, too, less than 1% of the voters considered health an election issue (Chart 2).



## Access to healthcare

In the SDSA 2019, the enumerators were asked to observe the availability of medical facilities in the surveyed locations. It was found that 70% of the locations have public healthcare services; availability was less in rural areas (65%) compared to urban areas (87%). The enumerators were also asked to survey whether people can reach healthcare facilities by walking or need to use transport. In 45% of the surveyed locations, people could access healthcare services by walking, whereas in 43% of the locations they needed to use transport. Proximity to healthcare services is higher in urban localities: 64% of the enumerators in urban areas observed that people can access healthcare services by walking, while only 37% in rural areas can do so (Chart 3).

## Public health experience

In a study conducted between elections by Lokniti-CSDS in collaboration with Azim Premji University during 2016-19, 30% of the surveyed people shared negative experiences in availing public healthcare services. It was more so for people from the marginal sections, who avoid getting treated, sometimes due to lack of infrastructural and monetary resources.

In the 'State of the Nation Survey (SONS)', conducted in 2018 by Lokniti-CSDS, people were asked if they have ever taken a loan for medical treatment. One-fourth (25%) confirmed taking a loan, and this proportion is higher among people belonging to the Scheduled Castes and the poor. Scarcity of funds further discouraged them from taking medical treatment: 43% of the respondents said they or someone in their family went without medical treatment. This trend was mainly observed among people from Scheduled Castes and Scheduled Tribes —

more than half the respondents in these sections said so. At the same time, 47% of people living in rural areas said that they went without treatment (Table 1).

These findings indicate that the healthcare system in India needs to be made accessible to the needy and people living on the margins of society. The absence of a positive experience with public healthcare not only pushes people towards private healthcare facilities, but also pushes the issue of health out of public political considerations.

## **IVF**

### **Why practising self-care during fertility treatment is important (The Indian Express: 20210719)**

<https://indianexpress.com/article/parenting/health-fitness/why-practising-self-care-during-fertility-treatment-is-important-7410770/>

Dealing with the outcome -- whether success or failure -- with great maturity and sanity is vital. Self-care provides you with strength.

When you experience fertility-related issues, the stress, anxiety and loneliness that accompany it can be difficult to manage. And once fertility treatments begin, those feelings can magnify. Going through hormonal injections, blood tests and scans can be physically demanding and mentally draining. This journey needs patience, generosity and a positive attitude. Whether you're about to begin your fertility journey or are currently in the middle of a fertility cycle, self-care can provide a great way to cope with, what can be, an emotionally-draining experience.

The experience is different for everyone. Some sail through smoothly, some have rough patches in between; so it becomes important to get committed to self-care during an IVF treatment to make this baby-making journey a happy and fruitful one.

How to practise self-care during an IVF treatment?

\* Trust your doctor. It is vital that you feel good about your doctor, feel connected to them, follow and trust their protocols and advice. You should feel yourself to be in safe hands. Most of the anxiety vanishes when the patient-doctor relationship is strong.

\* IVF cycles must not be planned amid chaotic working patterns. Clear your calendar of anything non-essential during IVF cycle. This creates a space you need for appointments and relaxation.

\* The course of treatment should be discussed in detail with the fertility specialist so that there is no anxiety of the unknown. Learn from your doctor which component of self-care would contribute to the highest success rate and what all factors contribute to its failure.

\* Delete what depletes you. Purify your life by eliminating toxic things which drain you completely. Don't take the burden of certain people, commitments, and relations which are not working for you and are negatively affecting your mental and physical health. Conserve your energy and focus on your goal.

\* Be kind to yourself. There is nothing to feel guilty about not being able to bear a baby. Life has its own ways and positivity flows only when you feel positive about yourself. The first thing to remember is to be kind to yourself. A lot of times, people feel isolated and put a lot of pressure on themselves. Do not do that.

\* Yoga is a life-transforming habit which not only makes you physically and emotionally stronger, but also elevates you spiritually. Starting yoga six weeks prior to IVF cycles can help the couple to overcome the anxiety of the treatment. People with infertility problems often report feeling better, stronger and more powerful and confident about their body after yoga practice. The well-toned up, flexible and strong muscles also help you go through your pregnancy and labour smoothly. There are certain asanas and pranayama which destress your mind and increase blood flow to the pelvis organs, helping overcome infertility.

\* Practising meditation and other relaxation techniques can do wonders for you in this journey of parenthood. During stress, the cortisol and adrenaline levels increase. Practising meditation helps you to eliminate stress.

\* Follow your leisure time activities to keep your mind relaxed. Listening to your favourite music, reading books, and gardening, watching movies, going for a walk with your partner, talking to your friends, etc., can make you feel cheerful. Laughing out loud with your friends is a big stress buster. Never forget to pamper yourself. A relaxing spa, manicure or pedicure at home can make you feel good. Pursue your hobbies such as painting, playing musical instruments, knitting etc. Completely immersing yourself in an activity that keeps you focused is beneficial.

\* Better communication with your partner also helps. Togetherness can make things much easier, and the journey becomes smoother.

\* When feeling stressed, one craves comfort food. But food with empty calories should be avoided. Diet should be more focused on green vegetables and fruits. Fertility food, as advised by your doctor, should be followed but that doesn't mean you cannot indulge yourself occasionally.

\* Proper sleep is important for restoration. It strengthens and invigorates you for another day. It is essential for physical and emotional stability.

Dealing with the outcome — whether success or failure — with great maturity and sanity is vital. Self-care provides you with strength. It improves the success rate, so take care of yourself and prepare for your bundle of joy.

## **Nutrition**

### **Midday meals leave a long-lasting impact: study (The Hindu: 20210719)**

<https://www.thehindu.com/news/national/midday-meals-result-in-healthier-next-generation-study/article35393273.ece?homepage=true>

Lower stunting among children with mothers who had access to free school lunches, shows data from 1993-2016.

Girls who had access to the free lunches provided at government schools, had children with a higher height-to-age ratio than those who did not, says a new study on the inter-generational benefits of India's midday meal scheme published in Nature Communications this week.

Using nationally representative data on cohorts of mothers and their children spanning 23 years, the paper showed that by 2016, the prevalence of stunting was significantly lower in areas where the mid scheme was implemented in 2005.

#### Pioneering study

More than one in three Indian children are stunted, or too short for their age, which reflects chronic undernutrition. The fight against stunting has often focussed on boosting nutrition for young children, but nutritionists have long argued that maternal health and well-being is the key to reduce stunting in their offspring. Noting that “interventions to improve maternal height and education must be implemented years before those girls and young women become mothers”, the study has attempted a first-of-its-kind inter-generational analysis of the impacts of a mass feeding programme.

The paper was authored by a researcher from the University of Washington and economists and nutrition experts at the International Food Policy Research Institute. It found that the midday meal scheme was associated with 13-32% of India's improvement in height-for-age z-scores (HAZ) between 2006 and 2016.

The linkages between midday meals and lower stunting in the next generation were stronger in lower socio-economic strata and likely work through women's education, fertility, and use of health services, said the paper.

#### Court mandate

The midday meal scheme was launched in 1995 to provide children in government schools with a free cooked meal with a minimum energy content of 450 kcal, but only 6% of girls aged 6-10 years had benefited from the scheme in 1999. By 2011, with an expansion in budget, and state implementation following a Supreme Court order, coverage had grown to 46%.

The study tracked nationally representative cohorts of mothers by birth year and socio-economic status to show how exposure to the scheme reduced stunting in their children.

IFPRI researcher Purnima Menon, one of the authors of the study, said the key takeaway is to “expand and improve school meals now for inter-generational pay-offs not too far down in time.” Tweeting about the study, she said, “Girls in India finish school, get married and have children all in just a few years — so school-based interventions can really help.”

#### Pandemic setback

These findings come at a time when the midday meal scheme has effectively been put on hold for the last one and a half years, as schools have been closed since March 2020. Although dry foodgrains or cash transfers have been provided to families instead, food and education advocates have warned that this would not have the same impact as hot cooked meals on the school premises, especially for girl children who face more discrimination at home and are more likely to drop out of school due to the closures.

The findings of the study exacerbate concerns that the interruptions to schooling and to the midday meal scheme could have even longer term impacts, hurting the nutritional health of the next generation as well.

## **Inflammatory bowel disease**

### **International study links ultra-processed foods with IBD risk (Medical News Today: 20210917)**

<https://www.medicalnewstoday.com/articles/international-study-links-ultra-processed-foods-with-ibd-risk>

A spike in inflammatory bowel disease (IBD) prevalence worldwide parallels an uptick in Western dietary patterns.

Clinicians have long conjectured that ultra-processed foods may compromise gastrointestinal (GI) tract health, but they lacked the evidence to confirm this link.

A recent multinational study provides good evidence that regularly consuming highly processed foods and beverages is associated with inflammation and IBD.

IBD is more prevalent in affluent countries than in those with lower median incomes. However, cases are rising Trusted Source in developing nations where ultra-processed foods are increasingly available and popular.

For years, gastroenterologists have suspected that ultra-processed foods may contribute to inflammation and IBD. However, few clinical studies have evaluated this hypothesis on a large scale.

A recent multinational prospective cohort study explored the relationship between the consumption of ultra-processed food and the risk of developing IBD.

Neeraj Narula, M.D., an assistant professor of medicine at McMaster University in Hamilton, Canada, led the study. The results appear in the British Medical Journal.

What is IBD?

IBD is a group of diseases that cause chronic inflammation in the GI tract. Crohn's disease and ulcerative colitis are in this category.

About 3 million people in the United States live with IBD.

Some studies point to genetic risk factors for the condition, but mounting evidence links dietary patterns to its development.

Ashkan Farhadi, M.D., MS, FACP, a gastroenterologist and author, describes IBD as “a disease of wealthy nations.”

As societies progress economically, he says, they forgo traditional ways of growing, preparing, and preserving foods in favor of grabbing conveniently packaged products.

In a recent interview with Medical News Today, he hailed the current study as the first cohort work pinpointing processed foods as the culprit driving IBD development.

Before this, Dr. Farhadi noted, “there was no actual research demonstrating what happens [to gut health] as a nation becomes better off economically.”

Dr. Farhadi also commended the researchers for having included ultra-processed drinks, unlike most other research.

What is ultra-processed food?

The NOVA food classification system defines four categories of foods: unprocessed and minimally processed foods, processed ingredients, processed foods, and ultra-processed foods.

Ultra-processed foods include most mass-produced foods and beverages. These items contain food additives, such as emulsifiers, preservatives, added sweeteners and flavorings, trans fats, and colorings.

Prof. Tim Spector, an author and epidemiologist at the King’s College London in the United Kingdom and co-founder of the ZOE personalized nutrition program, shared his insights on ultra-processed foods with MNT.

Prof. Spector asserted that adults in the U.S. eat more highly processed foods than those living in any other country in the world. He stated that ultra-processed foods make up more than 60% of the caloric intake there.

Measuring food consumption and IBD risk

Narula and his team assessed the medical data of more than 116,000 adults aged 35–70 years. The participants came from 21 low, middle, and high income nations across North America, South America, Europe, Africa, Middle East, South Asia, Southeast Asia, and China.

The participants completed a food frequency questionnaire at least every 3 years from 2003 to 2016.

They reported their consumption of “all types of packaged and formulated foods and beverages that contain food additives, artificial flavorings, colors, or other chemical ingredients.”

The study’s primary outcome was diagnoses of IBD following completion of the baseline questionnaire.

Participants in North America, South America, and Europe reported higher consumption of ultra-processed food than those in the other regions. The occurrence of IBD was greater in these three areas, as well.

Processing might be the problem

Earlier research suggests that certain foods increase the risk of developing IBD.

For instance, the popular low FODMAP diet encourages people with IBD to avoid foods with high levels of specific sugars.

Narula's team did conclude that higher consumption of ultra-processed foods and drinks increases the likelihood of developing IBD.

The study, however, could not confirm a causal link between ultra-processed foods and IBD development.

Although high consumption of ultra-processed foods was associated with a higher incidence of IBD, consumption of the same foods in unprocessed form did not carry the same risks. Therefore, the researchers conclude that the risk of IBD is associated with the processing of the foods.

### Limiting factors

The study authors mentioned several limitations that could have affected their findings.

Firstly, they acknowledge that food questionnaires may not assess absolute intake. However, they note that these can capture relative — high vs. low — intake of the food categories in question.

Also, the researchers are uncertain whether their findings, which came from participants aged at least 35 years, can apply to children or young adults who develop IBD.

The age range of the study's participants may have limited the ability to determine risk factors for Crohn's disease, too.

Although the study does not account for dietary modifications over time, the reported dietary patterns seemed to remain stable.

However, the observational nature of the study may have left some residual bias due to unmeasured variables, such as antibiotic use during childhood and unknown confounders.

### Hope for healthier food choices

Narula and his team hope that further research will clarify just how ultra-processed foods might trigger IBD.

According to Spector, "most clinicians and gastroenterologists believe the quality of the diet is really important for health."

He feels that the consumption of "low quality" food disturbs the gut microbes, weakens the immune system, and causes the inflammatory overreactions behind many common diseases.

The professor hopes that the current study and his own work in personalized nutrition, which he is carrying out as part of the ZOE project, will encourage a more mindful, proactive

approach to food choices. He also wants physicians to advise patients on how to assess the quality of food. He said:

“[We’re] trying to educate people to what’s in the food, [to] start thinking about food a different way [...] — not just as calories, fats, or proteins, but actually, what are all these chemicals doing to your body?”

## **Medical Innovation**

### **How smartphone cameras may be used to detect anemia (Medical News Today: 20210917)**

<https://www.medicalnewstoday.com/articles/how-smartphone-cameras-may-be-used-to-detect-anemia#Future-of-medical-apps-for-smartphones>

Researchers have developed an algorithm that predicts anemia with an accuracy higher than 70%.

Smartphone images of the inner eyelid make it possible to estimate blood hemoglobin concentration.

A smartphone app could serve as a way to screen for anemia in those living in remote locations.

Anemia affects more than 5%<sup>Trusted Source</sup> of people in the United States and about 25% of the global population. Fatigue, dizziness, headaches, shortness of breath, and difficulty concentrating are among the common symptoms<sup>Trusted Source</sup> of this medical condition, which involves a low blood hemoglobin concentration.

Severe anemia often results from malnutrition, parasitic infections, or underlying diseases. It is a significant risk factor for death and morbidity, especially in vulnerable groups<sup>Trusted Source</sup>, which include children, older adults, and those with chronic illnesses.

A recent study that appears in the open access journal PLOS ONE<sup>Trusted Source</sup> has found that using a smartphone picture of a person’s inside lower eyelid to predict anemia is about 72% accurate.

As healthcare professionals typically diagnose anemia through a complete blood count using sensitive lab equipment, there is a disproportionate occurrence of anemia in rural settings where people have inadequate access to healthcare.

According to the study authors, there is a need for an inexpensive, accessible, and noninvasive point-of-care tool capable of identifying anemia. The ideal tool would use preexisting, widely available technology.

#### Smartphone cameras as detectors

Researchers conducted a two-phase study to assess the possibility of using a smartphone camera to aid in the detection of anemia. The first phase involved taking images of the inner lower eyelids of 142 patients in an emergency department using a smartphone.

The researchers selected the inner lower eyelid, called the palpebral conjunctiva, because it has the following unique features:

It is easily accessible for photographing.

There are no competing colors between blood vessels and the conjunctival surface.

The distance between the surface and blood vessels is very small.

Temperature and other environmental factors do not significantly affect blood flow to this area.

By zooming in on a small region in each photo, the researchers were able to develop an algorithm that maximizes color resolution and a predictive model comparing the skin and whites of the eyes to hemoglobin levels.

The second phase involved testing the algorithm on smartphone images of 202 different patients in the emergency department. The findings showed that the model was 72.6% accurate in predicting anemia. Its accuracy in predicting severe anemia that would necessitate a blood transfusion was higher, at between 86% and 94.4%.

Lead study author Dr. Selim Suner, of Brown University and Rhode Island Hospital, explained that following a diagnosis of anemia, people just need iron supplements, which are cheap and easy to take. “Making the diagnosis is the hard part,” Suner said.

Dr. Girish Nadkarni, clinical director of the Hasso Plattner Institute for Digital Health at Mount Sinai Health System, agrees. He commented, “Using a smartphone to screen for anemia is beneficial due to the decentralized nature of the screening — avoiding the need to draw blood — and the time and effort savings this entails.”

#### Strengths and limitations of the study

The results of the study showed that flash photography was not necessary to yield acceptable images for anemia detection. In addition, the authors write, “RAW images provide data

directly from the camera sensor without the typical processing and compression that occurs with common formats, such as JPEG.”

Potential limitations that the researchers noted included variable image quality. However, this could have been due to the person retracting their eyelid during the recording of the image. Also, the lighting was not standardized, and it is unknown whether varying levels of brightness played a role in image quality.

#### Future of medical apps for smartphones

In 2019, 36% of the world’s population used smartphones. Trends suggest that while affluent individuals are more likely to own smartphones, the use of these devices in lower socioeconomic regions is growing steadily worldwide.

“These results set the stage for the development of an application within a smartphone, which can not only acquire the image but also analyze the elements within the image to predict hemoglobin concentration in real time,” say the authors.

“This is an especially attractive opportunity for developing countries, which may have sparse, rudimentary, and poorly distributed medical systems but are well-interconnected by established telecommunication networks.”

Future development will center on the design of a user interface that makes it simple for the lay public to take a suitable photograph — one in which the lighting, focus, and area of interest are all optimized. The authors also note that imaging tools and further algorithm developments validated through model prediction are necessary.

According to Dr. Suner, this study indicates that anemia prediction using a smartphone is a viable concept. This project, and those to follow, could have a positive effect on large populations, contributing to health worldwide.