Lung damage

A pilot study suspects lung damage due to long-Covid; here’s what experts have to say

Patients are coming with cough and bronchitis symptoms for up to a month to 6 weeks after the infection," said Dr Jayalaxmi TK, consultant pulmonologist at Apollo Hospitals, Navi Mumbai (The Indian Express:20220214)


The research included 11 non-hospitalised long-COVID (NHCL) and 12 post-hospitalised Covid-19 (PHC) patients along with 13 healthy people who underwent Hyperpolarized Xenon Magnetic Resonance Imaging (Hp-XeMRI) along with lung function tests, 1-minute sit-to-stand test and breathlessness questionnaires.

ALSO READ |At home with Covid? 5 easy tips to help you breathe more easily
The study found that there abnormalities in the RBC:TP or red blood cell to tissue plasma ratio in NHCL and PHC patients. It also stated that lower TLco was observed in NHLC patients as compared to PHC patients which “demonstrate significantly impaired gas transfer in non-hospitalised long-COVID patients when all other investigations are normal.” The British Lung
Foundation defines TLco as the gas transfer test that “measures how your lungs take up oxygen from the air you breathe.”

The study further stated that these abnormalities are “present many months after the initial infection”.

Dr Jayalaxmi TK, who is a consultant pulmonologist at Apollo Hospitals, Navi Mumbai, shared her opinion, stating, “We are seeing persistent lung involvement in the patients who had mild to moderate or severe infection following first and second wave. For the third wave, it is too early to say, but we are seeing persistent lung symptoms like cough and breathing difficulties with wheezing and bronchitis-like symptoms.”

She further added, “After the first and second wave, lung involvement was common in long COVID. CT scans were sometimes normal, but mostly showed resolving fibrosis or resolving pneumonia-like picture.”

ALSO READ | Exercise may enhance the effects of a Covid or Flu shot
She also said even though lung damage or pneumonia is not seen in the third wave, “patients are coming with cough and bronchitis-like symptoms for up to a month to 6 weeks after the infection.”

Dr Rohan R Naick, Consultant Pulmonologist, SPARSH Hospital, concurred, saying, “In the current study, a Hyperpolarized Xenon MRI scan was done, and the scans have shown that there is some impairment of gas exchange i.e the oxygen is not passing normally.”

He added that “these are very early findings and a larger study needs to be done to be sure about the implications of this.”

Cardiorespiratory physiotherapist

At home with Covid? 5 easy tips to help you breathe more easily
As a cardiorespiratory physiotherapist, I help people with heart and breathing problems manage and recover from a range of illnesses. Here are some simple exercises to help you navigate COVID at home. (The Indian Express:20220214)

https://indianexpress.com/article/lifestyle/health/covid-5-easy-tips-breathe-easy-7767572/

Shortness of breath, persistent cough and fatigue are common COVID signs and symptoms. And the vast majority of people will be managing their symptoms at home.
As a cardiorespiratory physiotherapist, I help people with heart and breathing problems manage and recover from a range of illnesses.
Here are some simple exercises to help you navigate COVID at home.
‘Rule of threes’: Remove mucus buildup in the lungs during Covid-19 recovery with this breathing exercise

Why should I exercise when I have COVID?

Your body does need some rest when you are sick. However, doing simple, gentle exercises while convalescing with COVID can help improve your symptoms. People who are older, overweight, or have a chronic condition, such as diabetes, or cardiovascular (heart/circulation) and respiratory (lung) disease, are more likely to have COVID symptoms.

So these groups are among those who would particularly benefit from simple, gentle exercise at home.

1. Relaxed breathing
   This exercise is particularly useful if you feel short of breath:
   * Get into a stable and comfortable position. Drop your shoulders and breathe in slowly
   * Purse your lips (as if you’re blowing through a straw)
   * Breathe out slowly and steadily through your mouth
   * Repeat the exercise for a minute.

   You can perform this exercise as often as you like. But stop if you feel dizzy as taking too many breaths in a row will cause light headiness.

   Perform the exercise in a room with windows open. If you are feeling hot, you can cool your face with a damp towel while doing it. Adopting a comfortable position is key to this exercise. Sitting in a supportive chair may be the easiest for most people. However, for some people with COVID, sitting in a chair is too strenuous. In these instances, try this exercise in other positions such as lying on your side, as recommended by the World Health Organisation.

2. Deep breathing
   This can improve oxygen intake and calm your nerves:
   
   Deep breathing can calm your nerves. (Source: Pexels)
   * Get into an upright position. Relax your shoulders
   * Breathe in deeply through your nose for two to three seconds. Hold your breath for three seconds, if able
   * Breathe out through your nose or mouth, whichever is more comfortable
   * Repeat the exercise for a minute.
Again, stop if you feel dizzy. You may cough and bring up some phlegm after this exercise. If you do have to cough, cover your mouth with a tissue and dispose of the tissue immediately in a sealed bag after each use. Wash your hands thoroughly after.

ALSO READ | Home workout: Four easy exercises you can do with the help of a chair

3. Lie on your tummy (if you can)

You may have heard from others, such as Harry Potter author JK Rowling, about the benefits of lying on your stomach (proning) during breathing exercises to improve oxygenation. Proning is common in hospital for people who need extra oxygen. However, the evidence for proning at home is unclear and it is not for everyone.

As you need to stay on your stomach for at least 30 minutes, some people may find this extremely uncomfortable, especially if they have neck and lower back pain. For these people, sitting upright or lying on their side while doing breathing exercises may be better alternatives. Nonetheless, if you would like to try proning, here are some tips:

* Do not try proning after a meal
* Choose a firm surface to lie on. Soft beds can make lying on your stomach even more uncomfortable for your back
* Turn your head to the side. Place a pillow under your stomach, feet, arms and head for comfort
* Ensure you have someone with you at all times, especially when trying this for the first time. Both you and your helper should wear a mask to minimise cross-infection.
* Do not attempt proning with children under one year old.

**ICMR-WHO**

41% adults not physically active, women lazier: ICMR-WHO (The Tribune:2022014)


41% adults not physically active, women lazier: ICMR-WHO
Four in every 10 Indian adults have reported insufficient physical activity that puts them at an enhanced risk of non-communicable diseases.

Four in every 10 Indian adults have reported insufficient physical activity that puts them at an enhanced risk of non-communicable diseases.

A new collaborative study by the WHO and the ICMR to determine levels of physical activity, associated socio-demographic and lifestyle factors among 18 to 69-year-olds in India has shown insufficient physical activity in 41.1 per cent of all adults surveyed.
Women are lazier than men, finds the study led by Prashant Mathur from the ICMR side. Titled “Prevalence and Correlates of Insufficient Physical Activity Among Adults Aged 18-69 Years in India: Findings From the National Non-communicable Disease Monitoring Survey”, the study shows a higher proportion of women (52.4 per cent) and urban adults (51.7 per cent) were not doing sufficient physical activity (PA).

Men (118.8 minutes) spent more time exercising per day than women (55.3 minutes). Higher odds of insufficient physical activity were significantly associated with unemployment, highest wealth quintile, presence of central obesity and raised blood pressure.

“The PA level among Indian adults was significantly associated with marital and employment status, with sufficient physical activity levels higher in never-married and employed adults. The majority in these categories were men and rural respondents. Never-married adults also showed lower prevalence of other behavioural and metabolic risk factors such as consumption of alcohol (14.7 per cent), tobacco abuse (12.2 per cent), high blood pressure (15.6 per cent) and raised fasting blood glucose (2.6 per cent), thus indicating healthy behaviours in this group of adults,” the study published today says.

The adults who spent less than 150 minutes of moderate-intensity PA per week or less than 75 minutes of vigorous intensity PA per week or an equivalent combination of moderated vigorous-intensity PA accumulating less than 600 metabolic equivalent of task (MET) minutes per week were defined as adults with insufficient PA.

Social Problem

Suicide by unemployed

Centre, states not doing enough to curb joblessness (The Tribune:2022014)


The Covid-induced lockdown of 2020 — the most stringent in the world — not only rendered millions of Indian citizens jobless but also forced thousands to end their lives. The Centre told the Rajya Sabha on Wednesday that 3,548 people died by suicide due to unemployment in 2020, well above the toll of 2,851 in 2019 and 2,741 in 2018. According to National Crime Records Bureau data, the highest number of such suicides in the first year of the pandemic was reported from Karnataka (720), followed by Maharashtra (625) and Tamil Nadu (336). The country’s unemployment rate had shot up to 23 per cent during the lockdown months of April-May 2020. Over the past year or so, this rate has been in the range of 6-9 per cent, except in May 2021, when it rose to around 12 per cent amid the peak of the second wave.

Despite the economic devastation triggered by the lockdown and other restrictions, the Centre and most of the states have done little to restore or generate jobs. Data compiled by the Centre for Monitoring Indian Economy shows that Haryana’s unemployment rate (23.4 per cent) is the worst in the country, followed by Rajasthan (18.9 per cent) and Tripura (17.1 per cent). Even as UP is better placed with a low rate of 3 per cent, various political parties have made grand promises in their election manifestos about providing jobs.
The Union government is banking on the Production-Linked Incentive scheme in key sectors, with Finance Minister Nirmala Sitharaman announcing in her 2022-23 Budget speech that 60 lakh jobs would be created over the next five years. This long-term goal is modest at best, considering the large-scale unemployment, and will not offer any immediate succour to the jobless who are gasping for survival. A job guarantee scheme for urban areas, on the lines of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), needs to be worked out. With joblessness increasingly fuelling despair, anger and unrest, as witnessed during the recent protests in Bihar, this burning issue can no longer be put on the back-burner.

Third wave of Covid-19

Third wave of Covid-19 in Chandigarh more fatal for comorbid elderly
(TheTribune:2022014)

49 of total 70 victims in city aged above 60


Third wave of Covid-19 in Chandigarh more fatal for comorbid elderly
Even as the third wave of Covid-19 has subsided to a greater extent, deaths continue to take place in the city and more so are happening among the comorbid elderly. - File photo

Even as the third wave of Covid-19 has subsided to a greater extent, deaths continue to take place in the city and more so are happening among the comorbid elderly.

Around 70 per cent deaths during the Covid third wave were of people aged 60 years and above, which is 15 per cent higher than the fatalities in the second wave. The second wave had seen 32 per cent deaths in the 45-60 years age group. In the third wave, 49 of the total 70 victims were aged above 60. While 16 per cent of the total victims were aged between 45 and 60, 11 per cent were in the 19-44 years age group.

Dr Suman Singh, Director, Health Services, UT, said, “We are witnessing more deaths among the elderly age group as compared to the second wave when Delta was the circulating variant. The Delta variant was more virulent and fatal and it directly hit the lungs, causing respiratory issues coupled with multi organ failure. The deaths during the second wave had happened in all age groups.”

She added, “However, the third wave fuelled by Omicron has only affected throat and caused mild fever. Among all deaths, comorbidities and old age were the crucial factors and Covid was a side feature. It is difficult to say what percentage of Covid illness may have contributed to the death of a heart patient. But, Covid alone was not responsible for deaths this time as was the case in the last wave.”

The major comorbidities of the victims are renal disease, hypertension, diabetes mellitus, chronic kidney disease, hypothyroidism, asthma, acute respiratory distress syndrome, bronchopneumonia and chronic liver disease.
Among the 49 elderly victims, 31 (63 per cent) were fully vaccinated against Covid-19. About 50 per cent of the victims since January this year were not fully vaccinated.

Dr Sanjeev Palta of the Department of Anesthesia and Intensive Care, GMCH-32, said, “The elderly were suffering from comorbidities, which is why deaths have been more in this age group. A lot of them were not fully jabbed, which made them more prone to Covid-19.”

**Covid vaccines**

*Covid vaccines have reached just half of world population: Report (The Tribune:2022014)*

*Nearly 54 per cent of world’s population is fully vaccinated against coronavirus, Washington*


Covid vaccines have reached just half of world population: Report
Photo for representational purpose only.

Even after more than a year of Covid vaccine drives, just over half the world’s population has been fully vaccinated, media reported.

According to Our World in Data, nearly 54 per cent of the world’s population is fully vaccinated against the coronavirus, Washington Post reported.

Nearly 62 per cent have received at least one dose of a coronavirus vaccine.

However, the figures show a stark global divide. The data shows that less than 11 per cent of people have received at least one dose against Covid in low-income countries.

That number jumps to about 55 per cent for lower-middle-income countries and nearly 80 per cent for both upper-middle-income and high-income nations, the data showed.

Public health experts, including the World Health Organisation, have been warning that vaccine inequity is prolonging the pandemic.

The US, countries of the European Union and others were criticised for buying up most of the early global supply of coronavirus vaccines, the report said.

Covax, a UN-backed global vaccine-sharing initiative, was created in April 2020 to ensure vaccine access to countries that cannot afford The initiative struggled in the beginning as rich countries stockpiled them. In January, this year, Covax shipped its billionth dose in mid-
January, and according to the WHO, African countries were sent twice as many vaccine doses in January as six months ago.

However, about 100 million Covid-19 vaccines, offered to third world nations were near expiry which the countries were forced to dump, according to the UN’s children’s fund Unicef.

“More than 9.4 billion vaccine doses have now been administered globally. But 90 countries did not reach the target of vaccinating 40 per cent of their populations by the end of last year, and 36 of those countries have not yet vaccinated 10 per cent of their populations,” WHO chief Tedros Adhanom Ghebreyesus said.

Ghebreyesus said that more than 85 per cent of the population of Africa - about one billion people - is yet to receive a single dose of vaccine.

“We cannot end the acute phase of the pandemic unless we work together to close these gaps,” he warned.

Meanwhile, the WHO has also said that Africa is on track to end the pandemic.

But, “continued vigilance is key” to dealing with outbreaks and monitoring the possible emergence of new variants, it said.

“Although Africa still lags behind on vaccination, with only 11 percent of the adult population fully vaccinated, we now have a steady supply of doses flowing in,” said Matshidiso Moeti, the WHO’s regional director for Africa.

Now, she said, efforts should be focused on “scaling-up Covid-19 vaccine uptake” in African countries, as well as increasing the capacity for testing and surveillance of coronavirus variants.

**New Cases**

**India records 67,084 new Covid cases, 1,241 more deaths (The Tribune:2022014)**

**Active Covid cases in country decline to 7,90,789**


India records 67,084 new Covid cases, 1,241 more deaths

Photo for representation purposes. Tribune
India logged 67,084 new coronavirus infections, taking the country's total tally of Covid cases to 4,24,78,060, while the active cases declined to 7,90,789, according to the Union Health Ministry data updated on Thursday.

The death toll climbed to 5,06,520 with 1,241 fresh fatalities, the data updated at 8 am stated.

The active cases comprised 1.86 per cent of the total infections, while the national Covid recovery rate had further improved to 96.95 per cent, the ministry said.

A reduction of 1,02,039 cases has been recorded in the active Covid caseload in a span of 24 hours.

**Positivity Rate (The Asian Age: 2022014)**

Covid cases fall below 50K after nearly 2 months

Delhi’s positivity rate is at 1.5%

AGE CORRESPONDENT
NEW DELHI, FEB. 13

As many as 44,877 Covid-19 cases and 684 related deaths were reported in the country in the past 24 hours. This is the first time in nearly one and a half months that the daily Covid-19 count has dropped below the 50,000-mark. In Delhi, 804 fresh Covid-19 cases and 12 deaths were reported in the last 24 hours. The positivity rate in the city has gone down further to 1.5 per cent. The city’s total active caseload is 3,926.

The number of daily cases in Delhi has been on the decline after touching a record high of 28,867 on January 13. The city had recorded a positivity rate of 30.6 per cent on January 14, the highest during the third wave of the Covid-19 pandemic. It took just 10 days for the daily cases to drop below the 10,000-mark.

Of the 3,502 fresh infections reported in Maharashtra, 288 were from Mumbai. The state has also reported 17 new Covid-19 related deaths in the last 24 hours.

Currently, the country’s active caseload stands at 5,37,045, which accounts for 1.26 per cent of total cases. The daily positivity rate in India has been recorded at 3.17 per cent, and the weekly positivity rate at 4.46 per cent.

The total number of Covid-19 cases and related deaths reported so far in the country stands at 4,26,31,421 and 5,08,685 respectively. As many as 1,17,391 patients have recovered in the last 24 hours and the cumulative tally of recovered patients since the beginning of the Covid-19 pandemic is now at 4,15,80,711. Consequently, India’s recovery rate stands at 97.55 per cent.

The country’s Covid-19 vaccination coverage crossed 172.29 crores with the administration of over 46.82 lakh doses during the past 24 hours. A total of 75.07 crore tests have been conducted so far in India, with 14,15,279 tests done in the last 24 hours.
Pollution Problem

New policy in March to combat Delhi-NCR’s pollution problem (20220214)

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

The Delhi and the National Capital Region (NCR) may get a comprehensive plan to tackle its air pollution problem by next month, with a nine-member expert panel formed by the Commission for Air Quality Management (CAQM) due to submit its report in March.

The panel was formed on January 7 this year, while the central air quality control body invited comments and suggestions from the general public on December 24 to solve the region’s severe air pollution problem. The best solutions have been shortlisted, said members of the panel, which is currently analysing presentations based on these ideas.

The nine-member panel is headed by P Raghavendra Rao, chairman of the Haryana State Pollution Control Board (HSPCB). Arvind Nautiyal, the CAQM’s member secretary, holds the same role in this committee. It also comprises experts such as Sachin Ghude (a scientist at the Indian Institute of Tropical Meteorology, or IITM), Mukesh Sharma (IIT Kanpur), Anumita Roychowdhury (executive director at the Centre for Science and Environment) and LS Kurinji (from the Council on Energy, Environment and Water, or CEEW).

The panel was asked to “consider suggestions received from the general public” with a view to “finding a permanent solution” for Delhi-NCR’s annual winter pollution rerun, which is fuelled
first by stubble smoke from neighbouring agrarian states and then by local sources of bad air, and exacerbated by low temperatures.

Each expert member will also have to submit their own suggestions before the final policy is finalised. The panel was given two months for the task, according to the January 7 order that ratified the panel.

A member of the expert panel who asked not to be named said residents were given two weeks to submit possible solutions and ideas that could be implemented next winter. The panel has picked the “best solutions” within each sector.

“The final report will be submitted to CAQM by the first week of March. Currently, individuals are being asked to present their ideas to us and several presentations have been seen in the last two weeks from the shortlisted solutions. Once finalised, these will be incorporated in the report, along with each expert’s comments,” said the member.

Another member said the plan was fairly comprehensive and will look at all sectors, including long-term solutions, such as increasing the number of electric vehicles on the road, better solutions to waste management in place of the existing landfill sites, making the PUC certificate criteria more stringent and to prevent subsidies to prevent biomass burning.

“Each sector was being looked at separately and for each of these sectors. Multiple solutions are being looked at. The CAQM asked for the public to participate to include problems on the ground,” the second official said.

As per the CAQM, the policy formed will run in tandem with existing plans, both at the national and state level. These include measures under the Graded Response Action Plan (Grap), the Comprehensive Action Plan (CAP) and the National Clean Air Programme (NCAP), each of which have short-term and long-term measures to tackle air pollution in the region.

“This is in preparation for next winter and to address any gaps if at all,” said a senior union environment ministry official.

**Pregnancy**

**Sleep apnea in pregnancy linked with increased post-delivery risk of hypertension: (New Kerala:20220214)**

Study Pennsylvania, Sleep apnea is a potentially serious sleep disorder in which breathing repeatedly stops and starts. A new study by researchers examine-» View it-» [https://www.newkerala.com/news/2022/24084.htm](https://www.newkerala.com/news/2022/24084.htm)

**Covid variants**

A team of Spanish researchers have identified a number of existing strains of SARS-CoV-2, as well as future variants, which have the potential to escape the immune system's cytotoxic -> View it--> https://www.newkerala.com/news/2022/24045.htm

Omicron

Omicron may cause brain complications, inflammations: Russian expert (New Kerala:20220214)

The Omicron strain of the Covid-19 may lead to neurological complications much like other Covid variants, according to a Russian expert. According to founder and-> View it--> https://www.newkerala.com/news/2022/24008.htm

Vitamin D deficiency

Vitamin D deficiency linked to severity, deaths among hospitalised COVID-19 patients: (New Kerala:20220214)

A new study has found that vitamin D deficiency is associated with severe cases of COVID-19 as well as mortality.--> View it--> https://www.newkerala.com/news/2022/23976.htm

Colorectal cancer

Study finds weight loss decreases risk of colorectal cancer (New Kerala:20220214)


Covid Severity

Vitamin D deficiency can reduce vax efficacy, increase Covid severity: (New Kerala:20220214)

India has started showing declining Covid trends over the past few weeks as the nation is reporting below one lakh Covid infection for the past few day-> View it--> https://www.newkerala.com/news/2022/23869.htm
Infection

Previous Covid infection may improve performance of antibodies (New Kerala:20220214)

Jerusalem, Feb 12: According to a new study, although over time the number of SARS-CoV-2 antibodies fall in both previously infected and vaccinated patients, the performance of antibodies. View it---> https://www.newkerala.com/news/2022/23610.htm

Health Care Services

AIIMS starts same day same ultrasound facilities for OPD patients (New Kerala:20220214)

The All India Institute of Medical Sciences (AIIMS) has started same day ultrasound facilities for needy OPD patients. The department of Radio-diagnosis and Inter---> View it--> https://www.newkerala.com/news/2022/23588.htm

Antibiotics (Dainik Bhasker :20220214)

https://epaper.bhaskar.com/detail/933988/27107661538/rajasthan/14022022/14/image/