Medical help

Work from home hurting back and neck; people seek medical help (The Tribune: 2020924)


Health experts say this is due to improper sitting postures and people need to follow good ergonomics and working habits at home.

With work from home becoming the new normal amid the COVID-19 pandemic, many people have started complaining of neck pain and backache while working for long hours and are seeking help from physiotherapists.

Health experts say this is due to improper sitting postures and people need to follow good ergonomics and working habits at home.

Employees of several corporate firms and industrial bodies have been working from home for nearly six months now since the outbreak of COVID-19 in the country.

"Initially, work from home system brought cheers among employees. But due to long working hours and improper sitting postures, many have started complaining of neck pain, backache and other issues," Dr Apurv Shimpi, head of the community physiotherapy department in Pune's Sancheti Hospital told PTI.

He said the National Institute of Personnel Management’s (NIPM) Pune Chapter, a body of HR professionals here in Maharashtra, approached the hospital to conduct physiotherapy sessions for their associate members.

"Over 700 people took part in the recent session where they were given tips on work from home ergonomics," he said.

“Our physiotherapists explained about the wrong postures and positions adopted by employees while working from home. We gave them tips like raising the height of laptop screen to eye-level, use of pillows, taking frequent breaks and doing exercises for relaxing the mind and eyes,” he added."
NIPM Pune Chapter’s Chairman Dr (Capt) C M Chitale said many professionals had been complaining of the spinal cord-related issues.

“During the webinar, physiotherapists gave participants several ergonomic tips and explained the ideal work postures to avoid backache and other health-related issues,” he said.

Narendra Patil, HR head of Pune-based Kalyani Maxion Wheels Pvt Ltd, said though their firm was into manufacturing, several employees were currently working from home and had been complaining of backache and neck pain.

“We asked our employees to take part in the physiotherapy session organised by NIPM and it turned out to be beneficial for them,” he said.

Anita Perla, senior manager (human resource) at KSH Distriparks here, said she attended a webinar on physiotherapy arranged by the Mahratta Chamber of Commerce, Industries and Agriculture.

“Working from home is very different from working in an office. Infrastructure in the office is set up to support working conditions but it is not possible in a work from home set up. Hence, such sessions are important,” she said.

Dr Sourabh Sane, a physiotherapist with city-based fitness start-up HealYos, said they were teaching people how to set up a proper work station at home.

“We guide them on what should be the ideal height of the laptop and their work screen. The table-chair arrangement should be such that the computer screen should be at the eye-level,” he said.

“Keeping a hard pillow on the chair for back support and simple stretching exercises also help people who have a sedentary working style for long hours,” he added. PTI

**Therapeutic options for COVID-19**

**CSIR, Mylan to collaborate to identify advance therapeutic options for COVID-19**
Seek approval for clinical trials from Drugs Controller General of India (The Tribune: 2020924)


CSIR, Mylan to collaborate to identify advance therapeutic options for COVID-19
Photo for representational purpose only.
The Council of Scientific and Industrial Research (CSIR) and Mylan Laboratories Limited will collaborate to identify potential therapies for COVID-19, the country's premier research body said in a statement on Wednesday.

A series of clinical trials will be conducted towards new and innovative solutions to manage the COVID-19 pandemic in India as part of this collaboration.

The first of the clinical trials to be rolled out is a multiple-arm phase 3 study that will be conducted in adult patients with mild to moderate COVID-19 and at risk of complications, it said.

"The Council of Scientific & Industrial Research (CSIR), India's premier research organisation, and Mylan Laboratories Limited, the India-based subsidiary of leading global pharmaceutical company Mylan, today announced a partnership to address unmet patient needs amidst the evolving COVID-19 pandemic," according to the statement.

"Under the partnership, CSIR's constituent laboratory Indian Institute of Chemical Technology (CSIR-IICT) and Mylan will collaborate to identify potential therapies for COVID-19," it added.

CSIR Director General Shehkar C Mande said the current collaboration with Mylan was a significant milestone and during the current COVID-19 pandemic, CSIR had prioritised conducting clinical trials of well-proven drugs in partnership with industry towards the development of multiple therapeutic options for COVID-19.

Mylan Chief Operating Officer Sanjeev Sethi stated, "This partnership will also help us identify multiple molecules that can potentially be leveraged in therapies for various other infectious diseases in the future."

The application for clinical trials has been submitted to the Drugs Controller General of India (DCGI) for regulatory approval. PTI

**Single-shot Covid-19 vaccine**

**Johnson & Johnson begins final trial of single-shot Covid-19 vaccine**

The study will be testing the shot in 60,000 volunteers in US, South Africa, Argentina, Brazil, Chile, Colombia, Mexico and Peru(The Tribune: 2020924)


Johnson & Johnson begins final trial of single-shot Covid-19 vaccine
Photo for representational purpose only. Reuters file
Johnson & Johnson is beginning a huge final study to try to prove if a single-dose COVID-19 vaccine can protect against the virus.

The study starting on Wednesday will be one of the world’s largest coronavirus vaccine studies so far, testing the shot in 60,000 volunteers in the US, South Africa, Argentina, Brazil, Chile, Colombia, Mexico and Peru.

A handful of other vaccines in the US — including shots made by Moderna Inc. and Pfizer Inc. — and others in other countries are already in final-stage testing. Hopes are high that answers about at least one candidate being tested in the US could come by year’s end, maybe sooner.

US health officials insist the race for a vaccine isn’t cutting corners.

“We want to do everything we can without sacrificing safety or efficacy — we’re not going to do that — to make sure that we end up with vaccines that are going to save lives,” Dr. Francis Collins, director of the National Institutes of Health, told reporters.

But many vaccine specialists question whether the Food and Drug Administration will stick to that goal under intense pressure from the Trump administration. President Donald Trump has consistently presented a faster timeline for a new vaccine than experts say is adequate to fully test the candidates.

Meanwhile, testing of still another experimental vaccine, made by AstraZeneca, remains on hold in the US as officials examine a safety question, even though studies have resumed in other countries.

Earlier this week, Vice-President Mike Pence urged state governors to “do your part to build public confidence that it will be a safe and effective vaccine.”

And Dr. Anthony Fauci, the top US infectious disease expert, added in the call to governors that he is confident in “a tried and true process” that has checks and balances built in, including an independent board evaluating the progress of each vaccine trial, as well as “the integrity of the FDA.” A recording of the call was provided to The Associated Press.

Senators were scheduled to question FDA Commissioner Stephen Hahn, Fauci and other administration officials later Wednesday about the pandemic response.

Even if the FDA were to allow emergency use of a vaccine by year’s end, supplies would be limited and given first to vulnerable groups such as health workers. Most Americans aren’t likely to receive a vaccine until sometime next year.

The Centers for Disease Control and Prevention wants states to get ready now to roll out vaccinations, which will present enormous logistical challenges. On Wednesday the CDC was set to announce distribution of $200 million in congressionally approved funds to help begin setting up operations.
Health and Human Services Secretary Alex Azar said the COVID-19 vaccine campaign will build on longstanding cooperation between the federal government and the states on immunizations.

J&J’s vaccine is made with slightly different technology than others in late-stage testing, modeled on an Ebola vaccine the company created. Unlike the other three vaccines that started late-stage testing in the US, it requires only one shot, not two.

Despite a later start to testing than some of its competitors, Dr. Paul Stoffels, J&J’s chief scientific officer, told reporters that the study was large enough to yield answers possibly by early next year. — AP

**Pandemics**

**Pandemics caused by new virus infect humans in multiple waves: Govt (The Tribune: 2020924)**


States told to upgrade health infrastructure based on case growth trajectory

Pandemics caused by new virus infect humans in multiple waves: Govt Photo for representational purpose only.

Pandemics caused by a new virus have the propensity to infect human population in multiple waves and some countries which initially successfully contained the COVID-19 outbreak are now reporting a resurgence of cases, the Lok Sabha was told on Wednesday.

The Government of India has accordingly advised states to upgrade health infrastructure based on the case growth trajectory in respective states and districts, besides taking stringent containment measures, Minister of State for Health Ashwini Choubey said in a written reply.

He was responding to a question on whether the government has anticipated and is ready for the second wave of COVID-19 during the winter months in India.

“Pandemics caused by a new virus have the propensity to infect human population in multiple waves, each time affecting a cohort of susceptible population.

“Some countries, which had initially successfully contained the COVID-19 outbreak earlier are now reporting a resurgence of cases,” the minister said in his reply.

Giving details of the steps taken by the government to provide funds and medical equipment for COVID-19 care management, Choubey said states and UTs are being provided required technical and financial assistance to manage the public health challenge.
With public health and hospitals being a state subject, the primary responsibility of strengthening the healthcare system lies with respective state governments, the minister said.

All the states and UTs are provided with necessary financial support under India COVID-19 Emergency Response and Health System Preparedness Package.

During FY 2020-21, Rs 4256.81 crore in funds were released to states and UTs.

In addition, states are being supported in terms of supply of logistics. So far 1.42 crore PPE kits, 3.45 crore N-95 masks, 10.84 crore tablets of hydroxychloroquine, 30,841 ventilators and 1,02,400 oxygen cylinders have been supplied to states, UTs and central government hospitals (as reported on September 20), the minister said.

For appropriate management of COVID-19 cases, Government of India has advised state governments to set up three-tier arrangement of health facilities exclusively for COVID-19.

These are COVID Care Centres with isolation beds for mild or pre-symptomatic cases;

Dedicated COVID Health Centre (DCHC) with oxygen-supported isolation beds for moderate cases and

Dedicated COVID Hospitals (DCH) with ICU beds for severe cases.

DCHCs or DCHs may be full hospitals or a separate block in a hospital with preferably separate entry/exit/zoning. In addition, the Defence Research and Development Organization (DRDO) has set up large dedicated COVID-19 field hospitals with capacity ranging from 1,000 to 10,000 isolation beds, the minister said.

These temporary hospitals have been set up in Delhi, Bihar (Patna and Muzaffarpur).

All states, including Maharashtra and Tamil Nadu, have accordingly taken action to create such infrastructure, Choubey said on whether the Union government has any plans to start exclusive COVID-19 treatment and care blocks in states like Maharashtra, Tamil Nadu where a large number of people got infected.

Hospital infrastructure in the country for managing coronavirus cases is being continuously monitored by the government. States have been advised to prepare for requisite surge capacities to manage cases in accordance with existing and projected growth rates, he said. PTI

**Covid-19: What you need to know today (The Hindustan Times: 2020924)**

[https://epaper.hindustantimes.com/Home/ArticleView](https://epaper.hindustantimes.com/Home/ArticleView)

There’s a week to go before Unlock 5.0, which some believe will be the last phase of the restart of activities halted when the country went into a lockdown on March 25 to slow the spread of the coronavirus disease (Covid-19). The lockdown lasted 68 days, till May 31; a few establishments and activities were allowed to restart even in this period. Since June 1, there have been four sets of guidelines issued by the home ministry, Unlock 1.0 through Unlock 4.0, each detailing a new dimension of opening up. Restaurants have opened up, Metro services
have resumed in all but two of the Indian cities that have Metro services, the number of scheduled flights has increased, as has the number of people attending offices (although many still continue to work from home). The latest iteration of the Nomura India Business Resumption Index was at 82.3 for the week ended September 20 (where 100 reflects pre-pandemic level business activity). This is higher than 81.3 the previous week, so the index is clearly on an upswing. This is the highest the index (which was stuck in the 70s for months in between, after falling to the 40s during the hard lockdown) has ever been since the lockdown. Google’s Mobility Trends for workplaces, according to the latest iteration, are 26% below baseline, again, an improvement (they were 30.4% below baseline in June).

Guidelines for Unlock 5.0 could come as early as the end of this week. They come against the backdrop of a high number of daily new cases (India continues to lead the world in the number of new cases, although Europe is in the midst of a very strong second wave of infections), but also at a time when most states have moved out of lockdown mode, at least for most establishments and activities. The big announcement everyone is either looking forward to, or not looking forward to, is about the reopening of schools. Lockdown 4.0 allowed high-schoolers to attend school for up to a few hours a day, on rotation (with the teachers too being rotated), with the permission of the parents – and only for “guidance” or “counselling”. The rationale was that these were important school-years and students needed some interaction with their teachers. This wasn’t exactly a “school reopening” as some insisted on calling it. It is likely that Unlock 5.0 guidelines will allow more of this (perhaps for more classes, or for longer durations). With almost half the academic year over, it is also likely that the guidelines allow a more formal reopening of schools. After all, online classes put underprivileged students at a disadvantage although a recent Delhi high court ruling on schools in the Capital having to provide devices and connectivity, and be reimbursed by the state and central governments, could serve as a precedent in other parts of the country as well.

I’d rather that governments focus on this (devices and connectivity for all students; and a proper online curriculum to boot) than rush into reopening schools. Cases are yet to peak in India, and experience from around the world suggests that school (and college) reopenings do cause flare-ups in infections.

On Tuesday, The Wall Street Journal, citing a study by researchers from the University of North Carolina, Indiana University, the University of Washington, and Davidson College, that it said would soon be posted on pre-print server medRxiv (it wasn’t at the time of writing this column) reported that the US saw 3,200 more cases a day on account of college reopenings. The study covered the period between mid-July and mid-September and tracked GPS data of mobile phones to measure infection rates in and around colleges at two points in time – before students arrived, and after they did. The highest increase was in colleges with physical or in-person classes, and the lowest in those with online classes. The UK reopened schools in September but with a sharp increase in cases (a natural consequence of reopening, and not just schools); absenteeism and partial closures of schools have increased over the course of the month. The UK, like continental Europe, is in the midst of a second wave with the seven-day average of daily cases only a thousand below peak-levels last seen in May.

Policymakers in India have the case-study of how Covid-19 roiled (and eventually cut short) the monsoon session of Parliament before them – it would be unfortunate if they make students face the risks that lawmakers themselves want to avoid.
Pollution may aggravate Covid situation: Docs

New Delhi, Sept. 23:

Doctors and environment experts believe that extreme levels of air pollution in the national capital during winter is likely to aggravate the Covid-19 situation in the city and pose a serious challenge to the government.

Every winter, Delhi’s air quality dips to a dangerous low due to many reasons, including the city’s geographic location, unfavourable weather, stubble burning and local sources of pollution.

A Supreme Court-mandated pollution control body had in November last year declared a public health emergency and ordered the closure of schools, construction activities and diesel generators in Delhi-NCR after a toxic haze shrouded the region.

Dr Akshay Budhraja, consultant in Department of Pulmonology, Aakash Healthcare Super Specialty Hospital, said air pollution poses a serious threat to people suffering from chronic bronchitis and inflammation of lungs and such patients are more prone to Covid-19. The severity is more if they contract the viral disease, he said.

“Air pollution makes asthma worse. It will be a challenging time for us too, as it takes 10-12 hours to conduct a radiological examination and an RT-PCR test to determine whether it’s a case of asthma flare-up or coronavirus,” he said.

Dr Laxmikant Kaotekar, consultant, pulmonology, Columbia Asia Hospital, Pune, said, “If there is a previous history of dust allergies, it points towards asthma flare-up. Asthma patients are more prone to Covid-

HIGH AIR pollution-level will aggravate the situation as it seriously compromises the respiratory system and the immune system, said Sunil Dahia, an analyst at the Centre for Research on Energy and Clean Air.

Santosh Harish, a fellow at the Centre for Policy Research, said pollution levels will be relatively lower this year due to subdued economic activity.

19. Such people should get evaluated beforehand so they can keep their asthma under control.”

Santosh Harish, a fellow at the Centre for Policy Research, said pollution levels will be relatively lower this year due to subdued economic activity. “However, air pollution exposure is likely to increase vulnerability to Covid-19 and the severity of the infection. It is a matter of serious concern. We are going to witness very high levels of pollution soon and this is going to coincide with the time the Covid-19 cases will peak,” he said.

High air pollution-level will aggravate the situation as it seriously compromises the respiratory system and the immune system. There will be serious complications among Covid-19 patients, said Sunil Dahia, an analyst at the Centre for Research on Energy and Clean Air. “Stubble burning is not the only cause behind dangerous levels of air pollution in Delhi.

Among other measures, the government should order closure of coal-fired power plants during winter to arrest the dip in air quality,” he said.

— PTI
Health Care Services (The Asian Age: 2020924)

Delhi hospitals have enough oxygen for 6-7 days, says Jain

AGE CORRESPONDENT
NEW DELHI, SEPT. 23

Delhi health minister Satyendar Jain said on Wednesday there is no shortage of medical oxygen in Delhi hospital and that enough stock is available for the next six to seven days. The minister's remarks come amid reports of shortage of medical oxygen in some parts of the country.

Mr Jain also said the Covid-19 positivity rate in the national capital has plateaued out a bit and a downward trend is expected in a week or two.

"There is no shortage of oxygen in Delhi hospitals. I took a stock of the situation. There is a slight issue, but there is enough oxygen for six to seven days in Delhi government-run hospitals," he said.

"We believe that there should be enough oxygen for seven days. A few hospitals have less than that," the minister added.

Delhi gets oxygen from Uttar Pradesh and Rajasthan. Some suppliers in Rajasthan have been told to first supply oxygen there. These issues are being talked out, Mr Jain told reporters here. Jain He said Delhi reported 6.47 per cent Covid-19 positivity rate on Tuesday. The average positivity rate for the last seven days stood at 7 per cent.

It was 8.5-9 per cent in the near past. Since the beginning of the pandemic, the cumulative positivity rate has come down from 12 per cent to 9 per cent.

"The positivity rate has plateaued out a bit and there will be a downward trend in a week or two," he said.

Mr Jain also said the government is going to appeal against the Delhi High Court stay on the city government’s order directing private hospitals to reserve 80 per cent of the ICU beds for Covid-19 patients. “We are very hopeful... We had issued the directions after careful considerations. The Delhi government is taking steps according to the situation," he said.
After acute COVID-19 illness, recovered patients may continue to report a wide variety of signs and symptoms, including fatigue, body ache, cough, sore throat, difficulty in breathing, etc., the Union Health Ministry has said, admitting that as of now there is limited evidence of post-COVID-19 sequelae and further research is required.

**Viral infections**

Coronavirus | ‘RT-PCR will remain the gold standard for all viral infections’(The Hindu: 2020924)


A negative test on an antigen based assay is not reliable. Even if there is infection, there is a 50% chance that the antigen test will be negative, says Dr. P. Srinivasan, technical director at Neuberg Diagnostics.

Dr. P. Srinivasan, technical director at Neuberg Diagnostics and Chairman & Co-Founder of Be The Cure Registry and Jeenomics (Next Generation Sequencing HLA Laboratory) of Jeevan Stem Cell Foundation, Chennai, spoke to G. Ananthakrishnan on current testing options for the novel coronavirus SARS-CoV-2, when to think of taking the test, state of antibody testing.

**F Factor Diet good for health?**

Is F Factor Diet good for health? (The Hindu: 2020924)

https://www.thehindu.com/sci-tech/health/hype-or-happening-is-f-factor-diet-good-for-health/article32657143.ece

This diet created by Tanya Zuckerbrot combines high-fibre foods with lean protein at every meal

**Breast cancer**

The #UnhookTheBra Challenge raises awareness about breast cancer (The Hindu: 2020924)
Five “breast cancer winners” from Delhi-NCR put out a foot-tapping message about doing a breast self-exam and early detection, to reiterate that breast cancer is curable.

“If you tell someone this is a video about cancer, most people won’t want to watch it,” says Neeti Leekha Chhabra, from Delhi. It is the reason they decided to do a dance instead. On September 17, a team of five breast cancer winners (“warrior sounds like you’re still battling it; a winner is done with it”), put out a challenge on social media, as they held up bras and danced to the song ‘Kudi Nu Nachne De’, from Angrezi Medium.

**Pandemic’: Covid-19**

**Treatment can’t wait for pandemic’: Covid-19 Cancer patients return to Hyderabad hospital** *(The Indian Express: 2020924)*

While there are no signs yet of the Covid-19 pandemic abating, a large number of patients have started flocking to the hospital since August.

Every morning, hundreds of patients accompanied by attendants line up outside the outpatient block of the hospital. (Express photo/ Rahul V Pisharody)

“I have Cancer. The virus is the least of my concerns in life.” Y Shankar, a head-load worker hailing from Mancherial district of northern Telangana, is very clear about his priorities.

With the unlock regimes kicking in, he is among the scores of patients flocking to Hyderabad’s Mehdi Nawaz Jung (MNJ) Institute of Oncology and Regional Cancer Center (RCC) for the restart of treatment. The 52-year-old, diagnosed with cancer when the COVID-19 pandemic led to a nation-wide lockdown, has now rented a small room in Hyderabad along with his nephew. As the restrictions have eased up, he decided to waste no more time proceeding with treatment and will be visiting the hospital for another three weeks.

Every morning, hundreds of patients accompanied by attendants line up outside the outpatient block of the hospital. The state-run facility at Red Hills is the only regional centre for the states of Andhra Pradesh and Telangana, catering primarily to the underprivileged. While there are no signs yet of the Covid-19 pandemic abating, a large number of patients like Shankar have started flocking to the hospital since August.

Mehdi Nawaz Jung (MNJ) Institute of Oncology and Regional Cancer Center (RCC) (Express photo/ Rahul V Pisharody)

“Cancer treatment cannot wait for COVID to go,” explains Dr N Jayalatha, director of the hospital. “We see over 600 outpatients every day. At any given time, there are about 600 in-
patients, too. We are getting about 10 positive cases of COVID-19 everyday,” she adds for context. “These are very challenging times for all healthcare providers and we are taking extra care to ensure safety of patients and staff.”

According to the hospital records, RT-PCR tests have been conducted so far on over 2000 patients who displayed symptoms of COVID-19 and 235 results came out positive, including 32 healthcare providers. Those who test positive are being shifted to Gandhi Hospital. While most of them have recovered and returned for treatment, a source said at least 15 mortalities in this set till last month.

Research worldwide has revealed that cancer patients hospitalised with a high viral load of SARS-CoV-2 are at greater risk of dying. A recent study conducted by the Rajiv Gandhi Cancer Institute and Research Center, Delhi, claimed the case fatality rate (CFR) in cancer patients is 7.6 times more than the national average. Of the 1,088 patients tested for COVID-19 at the hospital for the study, 186 were confirmed positive between June 8 and August 20. The CFR was 14.5 percent as against a national average of 1.96 percent, after 27 patients succumbed to the disease.

The gradual return to normalcy in terms of patient caseload, according to Dr C Sairam, the president of the Hyderabad chapter of the Indian Medical Association(IMA) and a senior oncologist at the hospital, puts both healthcare providers as well as patients are at high risk of exposure to the coronavirus. The immunosuppressed condition of Cancer patients makes them extremely vulnerable.

According to the hospital records, RT-PCR tests have been conducted so far on over 2000 patients who displayed symptoms of COVID-19 and 235 results came out positive (Express photo/ Rahul V Pisharody)

“Cancer treatment goes on for around two years. In case of radiation therapy, a patient has to visit the hospital five times a week for two months and in case of chemotherapy, he/she has to visit the hospital once in three weeks. Their immunity levels will be very low and visits to hospitals naturally expose them to the virus,” he says.

At the regional cancer centre, though surgeries are performed on cancer patients as before, there is a drop of 10 percent at present, he says. “Post-operative cases face the maximum risk due to the virus. Wherever we can delay a surgery with hormonal therapy, radiation therapy or chemotherapy, surgeries are postponed.”

The hospital now performs around four surgeries a day, down from seven in the same period last year. Patients scheduled to undergo surgery are put through a screening for viral infection and given a green signal only if they test negative in RT-PCR test as well as in a CT-scan and X-ray of the lungs. “There is only a marginal decrease in surgeries. A case of cancer is an emergency and we did not stop surgeries even during the lockdown period. Of course, we too are worried for our safety,” a senior anesthetist fills in.

The number of patients subjected to radiation therapy has also witnessed a marginal decline. A radiation therapy technician at the hospital says around 250 patients undergo radiation therapy everyday. “We are the only cancer hospital where radiation therapy is conducted in three shifts from 5 am to 11 pm. Before COVID-19, it used to be around 350 to 400 patients a day.”
Research worldwide has revealed that cancer patients hospitalised with a high viral load of SARS-CoV-2 are at greater risk of dying. (Express photo/ Rahul V Pisharody)

Dr P Raghuram, national President of the Association of Surgeons of India and a senior oncologist, is of the opinion that COVID-19 is here to stay for at least another 18 months and we should be ready to live with it. “One of the commonest presentations in breast cancer, for example, is a painless lump. As it is 70 per cent of breast cancer cases present in the advanced stages. One should not ignore any symptoms. Early detection is the key,” he says.

According to him, patients need not worry when visiting hospitals. “Six months down the pandemic, we have well established protocols and international guidelines in place. These are being followed. Treatment options and survival chances are limited if an early stage cancer progresses to an advanced stage due to delay in treatment,” explains Dr Raghuram, also director of KIMS-Ushalakshmi Center for Breast Diseases.

As of September 22, Telangana has recorded a cumulative caseload of 1,77,070 cases of COVID-19. As per government data, 29,783 patients are active and under treatment. Of them, 6,346 patients are admitted to various hospitals. The recovery rate stands at 82.52 per cent and the CFR is at 0.59 per cent.

**Covid-19 cases in India breach 57-lakh mark, recovery rate a ..(The Times of India: 2020924)**

Read more at:

Covid-19 cases in In ..

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**Corona infection**

**Delhi doc warns of damage to heart from corona infection (New Kerala: 2020924)**


Even as preliminary studies indicate that COVID-19 may increase the chances of cardiac arrest in patients with underlying heart issues, a doctor at a private hospital in Delhi has cautioned that the coronavirus infection could also lead to heart injuries.
He pointed out that he had come across a coronavirus patient who suffered cardiac arrest even though neither he nor his family members had any prior history of any heart disease.

Luckily, the patient was treated successfully by the Fortis Hospital in Shalimar Bagh.

Doctors who handled the case said that neither the patient nor his family had a history of any cardiac issues. He lived a healthy life and stayed away from drugs, tobacco and alcohol.

Manish Gunjan, Additional Director, Interventional Cardiology Centre, said that the arteries of the 31-year-old patient were 100 per cent blocked when he was admitted to the hospital.

"The patient complained of extreme difficulty in breathing, and worsening pain in his chest. A rapid antigen test recorded corona negative result. An RT-PCR test followed. Meanwhile, we went ahead with his treatment since he was in critical condition. Later, the RT-PCR report came positive.

"The case presented an extensive heart attack with no history of any major cardiac risk factors. While shifting him from the Emergency to Cath Lab, the patient suffered a cardiac arrest; a CPR was done and the patient was revived. A coronary angiography was immediately done, revealing that the main artery in the heart was fully blocked. An angioplasty and stenting was performed. Meanwhile, his corona tests were done, which later confirmed his positive status," Gunjan said.

"The patient is not overweight, a teatotaller, and exercises regularly. When he was brought in, he showed symptoms of COVID-19. Since there was no prior heart problem, it indicated the virus had a detrimental effect on his heart," he added.

He said that post-surgical period was smooth and uneventful and the patient was able to walk the next day itself.

"Coronavirus infection not only could lead to lung injury and acute respiratory distress, but also heart injuries.

"COVID-19 patients have displayed increased levels of cardiac troponin, a protein released in the body by injured heart muscles; they have also shown abnormalities in electrocardiograms and heart ultrasounds. Several reports have affirmed that cardiac injury can be induced by coronavirus. The virus also poses a severe threat to patients with existing heart diseases," the medical expert cautioned.

Vikas Maurya, Director and Head of Department, Pulmonology, said "Many cases involve heart attacks, strokes, acute kidney dysfunction in patients with chronic kidney diseases. This is because of increased inflammation, cytokine storm and thrombogenicity in COVID-19, which affects vital organs.

"COVID-19 can affect multiple organs and is different from other flu viruses that only affect the respiratory system. Therefore, utmost caution is required. Patients presenting other symptoms -- apart from respiratory ones -- should also be investigated for coronavirus infection in case of suspicion."
People with 'silent' Covid-19

People with 'silent' Covid-19 may have key role in spread (New Kerala: 2020924)


People with 'silent' or asymptomatic Covid-19 infection have as much coronavirus in their noses and throats as those with symptoms, warn researchers.

The study, published in the journal Thorax, revealed that these 'silent' people may have a key role in driving the spread of Covid-19.

For the findings, the researchers from Asan Medical Centre in South Korea, compared the viral load of 213 people, all of whom had tested positive for SARS-CoV-2, but not all of whom had symptoms of Covid-19 infection.

People infected with the SARS-CoV-2 virus, but who don't have symptoms, still carry potentially transmissible virus, known as the viral load.

Following a large cluster outbreak of Covid-19 in Daegu City, South Korea, early on in the pandemic, the close contacts of this cluster (a religious group) were traced.

This uncovered more than 3,000 cases of Covid-19, ranging in symptom severity from none to severe.

Those with mild or no symptoms were admitted to dedicated care facilities for isolation and monitoring.

The 213 participants in this study had been admitted to one such facility.

They were classified as symptomless if they had none of the following fever, chill, muscle pain, fatigue, runny nose, blocked nose, loss of taste or smell, sore throat, cough, headache, dizziness, loss of appetite, etc.

Before the isolation period -- an average of six days from the first swab test -- around a fifth (19 per cent) people didn't develop any symptoms.

Of the remaining 172 (81 per cent) with mild symptoms, 144 were retested, adding up to a total of 183 who were included in the final analysis.

Over half of those without symptoms (54 per cent) tested positive for SARS-CoV-2, as did nearly two thirds of those with mild symptoms (64 per cent).

There was no significant difference in the viral load between the two groups.
"Our data adds further support to the general public use of face masks, regardless of the presence of symptoms," said study lead author Sung-Han Kim.

The researchers noted that most of the participants were also in their 20s and 30s so the findings might not apply to other age groups.

Further studies are needed to clarify whether the persistence of viral DNA in people without any symptoms warrants precautionary quarantine measures, they stressed.

WHO Chief

No guarantee any Covid vaccine in development will work: WHO Chief (New Kerala: 2020924)


No guarantee any Covid vaccine in development will work: WHO Chief
Geneva, Sep 23 : World Health Organisation (WHO) chief Tedros Adhanom Ghebreyesus has said that the top health organisation has no guarantee whether any single Covid-19 vaccine now in development will work.

While addressing a virtual press conference, the WHO chief said "We have no guarantee that any single vaccine now in development will work."

"The more candidates we test, the higher the chance we will have of a safe and efficacious vaccine," he added.

According to the WHO, almost 200 vaccines for Covid-19 are currently in clinical and pre-clinical testing.

"The history of vaccine development tells us that some will fail, and some will succeed," Ghebreyesus said.

Also, the WHO, in collaboration with global vaccine alliance group Gavi and the Coalition for Epidemic Preparedness Innovations (CEPI), has launched a scheme COVAX.

The aim of the collaboration is to accelerate the development of Covid-19 vaccines and enable equitable access for every country in the world.

The COVAX Facility enables governments to spread the risk of vaccine development and ensure their populations can have early access to effective vaccines.

Even more importantly, the COVAX Facility is the mechanism that will enable a globally-coordinated rollout for the greatest possible impact.
The facility will help to bring the pandemic under control, save lives, accelerate economic recovery and ensure that the race for vaccines is a collaboration, not a contest, according to the WHO chief.

"The fastest route to ending the pandemic and accelerating the global economic recovery is to ensure some people are vaccinated in all countries, not all people in some countries," he noted.

**Zinc levels**

**Lower zinc levels in blood may up death risk in Covid patients (New Kerala: 2020924)**


In a major study, researchers have found that having a lower level of zinc in the blood is associated with a poorer outcome in patients with Covid-19.

According to the research team, increased intracellular zinc concentrations efficiently impair replication or reproduction of a number of viruses.

However, the effect of plasma zinc levels on SARS-COV-2 is not yet understood.

In this study, the researchers explored whether plasma zinc levels at admission are associated with disease outcome in Covid-19 patients.

"Lower zinc levels at admission correlate with higher inflammation in the course of infection and poorer outcome," said study author Roberto Guerri-Fernandez, Hospital Del Mar, Spain.

"Plasma zinc levels at admission are associated with mortality in Covid-19 in our study," Guerri-Fernandez added.

The authors did a retrospective analysis of symptomatic admitted patients to a tertiary university hospital in Barcelona over the period from March 15, 2020 to April 30, 2020.

Data on demography, pre-existing chronic conditions, laboratory results and treatment were collected.

Clinical severity of Covid-19 was assessed at admission.

Fasting plasma zinc levels were measured routinely at admission in all patients admitted to the Covid-19 Unit.

Computer modelling and statistical analyses were used the assess the impact of zinc on mortality.
During this period of study 611 patients were admitted. The mean age was 63 years, and 332 patients were male (55 per cent). During this period total mortality was 87 patients (14 per cent).

This study includes 249 of these patients (of whom 8 per cent) died.

Mean baseline zinc levels among the 249 patients were 61 Micrograms per decilitre (mcg/dl). Among those who died, the zinc levels at baseline were significantly lower at 43 mcg/dl vs 63.1 mcg/dl in survivors.

Higher zinc levels were associated with lower maximum levels of interleukin-6 (proteins that indicate systemic inflammation) during the period of active infection.

The statistical analysis also showed each unit increase of plasma zinc at admission to hospital was associated with a seven per cent reduced risk of in-hospital mortality.

Having a plasma zinc level lower than 50mcg/dl at admission was associated with a 2.3 times increased risk of in-hospital death compared with a plasma zinc level of 50mcg/dl or higher.

"Further studies are needed to assess the therapeutic impact of this association," the authors noted.

The study was scheduled to be presented at this week’s ESCMID Conference on Coronavirus Disease (ECCVID).

**Mental health**

**Greater father involvement in infant parenting is beneficial for paternal mental health: Study (New Kerala: 2020924)**


A father’s involvement in the parenting of an infant is associated to a lower risk of experiencing paternal depressive symptoms during the first year of the child's life, according to a study.

The study was published in the open-access journal Frontiers in Psychiatry.

The investigators in the larger study conducted home interviews with 881 low-income ethnically and racially diverse fathers from 5 different sites in the US, one month after the birth of a child and controlling for social and demographic variables, they examined the three parenting indicators father time spent with the infant, parenting self-efficacy and material support for the infant. They also assessed paternal depressive symptoms at regular intervals (1, 6 and 12 months after birth) using the Edinburgh Postpartum Depression Scale.

The authors found that all three indicators - the greater amount of time fathers spent with their newborn, parenting self-efficacy and ability to provide material support - predicted lower rates
of depressive symptoms in the fathers during the following year. The authors also found that only parenting self-efficacy was associated to a higher risk of clinical depression, with the percentage of fathers with symptoms indicating clinical depression being 10% after 1 month, 15% after 6 months and 12% after 12 months.

"We found that fathers who were more involved with their infants shortly after their birth were less likely to be depressed a year later," says Dr Olajide N. Bamishigbin Jr., Assistant Professor of Psychology at California State University, Long Beach, USA, and first author of the paper. "In our paper, we suggest a few reasons that greater father involvement in parenting would lead to less depression in fathers. For example, fathers who are more involved during infancy may feel more competent as parents and be more satisfied in their role as parents over time, and this could contribute to lower depressive symptoms."

The present study is one of the first to focus on a larger community sample of low-income fathers from diverse racial/ethnic backgrounds and is paving the way for more research into specifically paternal well-being after the birth of a child. While previous research has focused on paternal involvement as an outcome or a predictor of mother- and child-focused outcomes, this is the first study to examine the link between early paternal involvement with the infant and later paternal depressive symptoms during the first year after a child is born.

"Family researchers are recognizing, more and more, the vital roles fathers play in the lives of their children and the functioning of the entire family unit," said Bamishigbin. "As researchers who care deeply about paternal health, we are excited to be a part of this growing field."

The findings of this study have important implications for future research on the contributors to father involvement, the effects of early involvement, the link between parental self-efficacy and depression, and the relationship between paternal and maternal depression. The authors emphasise that a deeper understanding of these and related variables might be helpful in designing interventions for expecting fathers and shaping public policies.

"In our study, greater early involvement was related to less depression later on. This is very important because, it suggests that, if fathers are involved with their infants early and often, their mental health, and the health of the entire family unit, may fare better," said Bamishigbin. "This is why we suggest that paid paternal leave policies which can allow fathers the opportunity to be more involved with their kids and gain confidence as a parent early on in their lives, without having to worry about their economic security, and may help allow fathers more opportunities to be involved with their kids and be part of shaping healthier and thriving future generations. In turn, this may improve the well-being of the entire family."

**Covid-19 herd immunity**

**Covid-19 herd immunity may be impractical strategy: Study (New Kerala: 2020924)**

Achieving herd immunity to Covid-19 is an impractical public health strategy, say researchers, adding that, immunity is not perfect and achieving it through widespread exposure is very unlikely.

The study, published in the journal Proceedings of the National Academy of Sciences, investigated the suppression and mitigation approaches for controlling the spread of SARS-CoV-2, the virus that causes Covid-19.

"The herd immunity concept is tantalizing because it spells the end of the threat of Covid-19," said study lead author Toby Brett from University of Georgia in the US.

"However, because this approach aims to avoid disease elimination, it would need a constant adjustment of lockdown measures to ensure enough people are being infected at a particular point in time," Brett added.

The research team sought to determine if and how countries could achieve herd immunity without overburdening the health care system.

They developed an age-stratified disease transmission model to simulate SARS-CoV-2 transmission in the UK, with spread controlled by the self-isolation of symptomatic individuals and various levels of social distancing.

Their simulations found that in the absence of any control measures, the UK would experience as many as 4,10,000 deaths related to Covid-19, with 3,50,000 of those being from individuals aged 60-plus.

They found that using the suppression strategy, far fewer fatalities were predicted 62,000 among individuals aged 60-plus and 43,000 among individuals under 60.

If self-isolation engagement is high (defined as at least 70 per cent reduction in transmission), suppression can be achieved in two months regardless of social distancing measures, and potentially sooner should school, work and social gathering places close.

To instead achieve herd immunity given currently available hospital resources, the UK would need to adjust levels of social distancing in real time to ensure that the number of sick individuals is equal to, but not beyond, hospital capacity.

"If the virus spreads too quickly, hospitals will be overwhelmed, but if it spreads too slowly, the epidemic will be suppressed without achieving herd immunity," the team wrote.

They further noted that much is unknown about the nature, duration and effectiveness of Covid-19 immunity, and that their model assumes perfect long-lasting immunity.

The team cautioned that if immunity is not perfect, and there is a significant chance of reinfection, achieving herd immunity through widespread exposure is very unlikely.

"We recognize there remains much for us to learn about Covid-19 transmission and immunity," said study authors.
Coronavirus Patient (Hindustan: 2020924)

https://epaper.livehindustan.com/imageview_333784_85214198_4_1_24-09-2020_4_i_1_sf.html
कोरोना से जंग

136 फीसदी बढ़े होम आइसोलेशन में मरीज

दिल्ली में कोरोना संक्रमण के मामलों में इजाफा होने के बाद होम आइसोलेशन में अभी मरीजों की संख्या बढ़ रही है। सितंबर में एक से 21 तारीख के बीच होम आइसोलेशन में रहने वाले मरीजों की संख्या में 136 फीसदी से अधिक की वृद्धि देखी गई है। कोरोना के सक्रिय मरीजों की संख्या में 94 फीसदी की बढ़ोतरी हुई है।

एक सितंबर को 8119 थी गिनती
एक सितंबर को 8119 मरीज होम आइसोलेशन में थे, जबकि 21 सितंबर को यह संख्या बढ़कर 19213 तक पहुंच गई। यानी करीब 136 फीसदी की बढ़ोतरी। दिल्ली सरकार के होम आइसोलेशन मॉडल को अन्य राज्य भी अपना रहे हैं।

94 फीसदी सक्रिय मरीज बढ़े
कोरोना की जांच बढ़ने से सक्रिय मरीज भी बढ़ी संख्या में बढ़े है। एक सितंबर को दिल्ली में कोरोना के सक्रिय मरीज 15870 थे वही 21 सितंबर को संख्या बढ़कर 30941 हो गई है यानि 94 फीसदी से ज्यादा सक्रिय मरीजों की संख्या बढ़ी है।

2804 ज्यादा मरीज अस्पताल में हुए भर्ती
कोरोना संक्रमण के मामले बढ़ने से होम आइसोलेशन के साथ ही अस्पतालों में भी मरीजों की संख्या बढ़ रही है। 21 सितंबर को दिल्ली के अस्पतालों में आए 2804 ज्यादा मरीज।
आफत : दिल्ली में कोरोना के मामले 2.5 लाख के पार

नई दिल्ली | कार्यालय संवाददाता

दिल्ली में बुधवार को कोरोना के 3714 नए मरीजों की पुष्टि हुई है। इसे मिलाकर अब तक कुल 2,56789 मामले सामने आ चुके हैं। वहीं, कोरोना के कारण 36 लोगों की मौत हो गई।

साथ ही कोरोना के नए मामलों से ठीक होने वाले मरीजों की संख्या बुधवार को अधिक रही। सिंबार में पहली बार ठीक होने वाले मरीजों की संख्या एक दिन में रिकॉर्ड 4465 हो गई है। स्वास्थ्य विभाग के हेल्थ बुलेटिन के अनुसार, बुधवार को 59580 सैंपल की जांच हुई है।

इसमें रॉपिड एंटीजन टेस्ट से 49221 और आयामसीआर से 10359 लोगों की जांच की गई। संक्रमण की दर 6.23 प्रतिशत रही। बीते 10 दिनों में मृत्यु दर 0.89 प्रतिशत हो गई है। दिल्ली में 2697333 लोगों की कोरोना जांच हो चुकी है।