



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DA
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Flying paramedic

Is it a bird? Is it a plane? No, it's a flying paramedic (The Tribune: 2020930)

<https://www.tribuneindia.com/news/health/is-it-a-bird-is-it-a-plane-no-its-a-flying-paramedic-148405>

Is it a bird? Is it a plane? No, it's a flying paramedic

Paramedics in England's remote, rugged Lake District region have been testing a jet suit that gets them to people in danger or distress in a fraction of the time it would take to travel by car or on foot.

In scenes reminiscent of a James Bond movie, test pilot and suit inventor Richard Browning hovers and moves a few metres above the rough terrain with the help of small jets mounted on his arms and back.

"Who knows what the future holds but this is a start we are very proud of," Browning said.

Developed by UK-based Gravity Industries, the technology drastically reduces response times in rough terrain, potentially saving lives.

"The potential is just huge," said helicopter paramedic Andy Mawson. "The first flight in Cumbria from a jet suit that is going to save lives and ease suffering - an incredible moment.

"It's absolutely astounding how quickly we're going to be at somebody's side that needs us."

In one test simulation, a 10-year-old girl had fallen from cliffs and sustained a serious leg injury.

After receiving the coordinates of the casualty, Browning, dressed as a jet suit paramedic, set off across rocky hills and picturesque scenery to successfully reach the girl in only 90 seconds.

The paramedic could then assess her injuries and provide treatment at the scene.

It would have taken 25 minutes for responders on foot to navigate the same terrain, the company said.

The suit has a record speed of 32 miles per hour (51 kph) and a maximum altitude of 12,000 feet (3,658 metres).

The Lake District in northern England is an area popular with novice hikers, despite its harsh terrain and fast-changing weather systems.

According to the Lake District Search and Mountain Rescue Association, the number of incidents requiring emergency responses in 2019 was 584. Reuters

Prostate cancer

IIT researchers discover new molecule as targeted therapy to treat prostate cancer (The Tribune: 2020930)

<https://www.tribuneindia.com/news/health/iit-researchers-discover-new-molecule-as-targeted-therapy-to-treat-prostate-cancer-148384>

The research has also been published in international journal ‘Cell Press, iScience’

IIT researchers discover new molecule as targeted therapy to treat prostate cancer
Photo for representation

Researchers at the Indian Institute of Technology (IIT), Gandhinagar, claim to have discovered a new molecule which can be used as a targeted therapy for prostate cancer.

The research, in collaboration with scientists at Louisiana State University Health Center, US, and the University of Manchester, has also been published in international journal “Cell Press, iScience”.

According to Sivapriya Kirubakaran, Professor at IIT Gandhinagar, who led the research, about 5.56 lakh Indians die of cancer every year, and the increasing resistance to anti-cancer drugs is also of grave concern.

“Prostate cancer, the second most commonly occurring cancer in men worldwide needs a hormone called ‘androgen’ to grow. The standard treatment method is hormonal therapy or androgen-deprivation therapy (ADT) which provides respite from disease progression. However, it could fail when cancer spreads to other parts of the body leading to a terminal phase of the disease,” Kirubakaran told PTI.

“We have discovered a new molecule called J54 which has shown great potency not only in cells but also in animals (mice model) to completely reduce tumour (prostate cancer) in 50 days

(in male mice). The median time for prostate cancer to shrink in human male patients is about 18 months, some quicker, some slower, depending on the size of tumour detected,” she added.

Sivapriya further explained that this molecule was the first selective inhibitor of the protein that causes cancer initiation and growth, mainly in the prostate.

“Since J54 combination therapy is targeted to a specific protein, it is expected to be more effective and personalised for the treatment of a particular patient. It has not shown any side effects or toxicity effects in normal cells and animals. The new molecule completely reduces prostate cancer in mice model. Also, the amount of drug used is considerably reduced when compared to known therapy. The efficacy and potency shown by J54 molecule create hope for a faster therapy of prostate cancer. The scientists are confident that the findings pave the way for a new targeted therapy for prostate cancer with fewer side effects, if proved successful in clinical and human trials,” she added. PTI

Nine in ten recovered COVID-19 patients experience side-effects

Nine in ten recovered COVID-19 patients experience side-effects (The Tribune: 2020930)

<https://www.tribuneindia.com/news/health/nine-in-ten-recovered-covid-19-patients-experience-side-effects-148371>

Nine in 10 coronavirus patients reported experiencing side-effects such as fatigue, psychological after-effects and loss of smell and taste after they recovered from the disease, according to a preliminary study by South Korea.

The research comes as the global death toll from COVID-19 passed 1 million on Tuesday, a grim milestone in a pandemic that has devastated the global economy, overloaded health systems and changed the way people live.

In an online survey of 965 recovered COVID-19 patients, 879 people or 91.1% responded they were suffering at least one side-effect from the disease, the Korea Disease Control and Prevention Agency (KDCA) official Kwon Jun-wook told a briefing.

Fatigue was the most common side-effect with 26.2% reading, followed by difficulty in concentration which had 24.6%, Kwon said.

Other after-effects included psychological or mental side-effects and loss of taste or smell.

Kim Shin-woo, professor of internal medicine at Kyungpook National University School of Medicine in Daegu, sought comments from 5,762 recovered patients in South Korea and 16.7% of them participated in the survey, said Kwon.

While the research was done online for now, lead researcher Kim will soon publish the study with detailed analysis, he said.

South Korea is also conducting a separate study with some 16 medical organisations on potential complications of the disease through a detailed analysis involving CT scans on recovered patients next year, Kwon told the briefing.

The country reported 38 new infections by midnight on Monday, for a fifth day of double-digit increases, taking the national tally to 23,699 cases, with 407 deaths.

Anti-bacterial cells of immune system

Strong activation of anti-bacterial cells of immune system linked to severe COVID-19: Study

In the current study, published in the journal Science Immunology, the scientists assessed the role played by MAIT cells in COVID-19 disease

<https://www.tribuneindia.com/news/health/strong-activation-of-anti-bacterial-cells-of-immune-system-linked-to-severe-covid-19-study-148354>

Strong activation of anti-bacterial cells of immune system linked to severe COVID-19: Study
Photo for representation

A type of the immune system's T cells known to fight against bacterial infections is strongly activated in people with moderate to severe COVID-19, according to a study which provides a better understanding of how the body responds to the novel coronavirus infection.

Researchers, including those from the Karolinska Institutet in Sweden, noted that this component of the immune system called MAIT cells make up about one to five per cent of T cells in the blood of healthy people, and are primarily important for controlling bacteria but can also be recruited to fight some viral infections.

They explained that T cells are a type of white blood cells that are specialised in recognising infected cells and are an essential part of the immune system.

In the current study, published in the journal Science Immunology, the scientists assessed the role played by MAIT cells in COVID-19 disease.

They examined the presence and character of MAIT cells in blood samples from 24 patients admitted to Karolinska University Hospital with moderate to severe COVID-19 disease and compared these with blood samples from 14 healthy controls and 45 individuals who had recovered from COVID-19.

Four of the patients died in the hospital, the study noted.

To find potential treatments against COVID-19, it is important to understand in detail how our immune system reacts, and in some cases, perhaps contribute to worsening the disease," said Johan Sandberg, a co-author of the study at Karolinska Institutet.

According to the study, the number of MAIT cells in the blood decline sharply in patients with moderate or severe COVID-19, and the remaining cells in circulation are highly activated.

Based on these results, the scientists suggested that the MAIT cells were engaged in the immune response against the novel coronavirus SARS-CoV-2. This pattern of reduced number and activation in the blood was stronger for MAIT cells than for other T cells, they said.

The study also noted that pro-inflammatory MAIT cells accumulated in the airways of COVID-19 patients to a larger degree than in healthy people.

"Taken together, these analyses indicate that the reduced number of MAIT cells in the blood of COVID-19 patients is at least partly due increased accumulation in the airways," Sandberg said.

The scientists added that the number of MAIT cells in the blood of convalescent COVID-19 patients recovered at least partially in the weeks after disease, which can be important for managing bacterial infections in individuals who have had COVID-19.

They said the MAIT cells tended to be extremely activated in the patients who died.

"The findings of our study show that the MAIT cells are highly engaged in the immunological response against COVID-19," Sandberg said.

The scientists believe the characteristics of MAIT cells make them engaged early on in both the systemic immune response and in the local immune response in the airways to which they are recruited from the blood by inflammatory signals.

"There, they are likely to contribute to the fast, innate immune response against the virus. In some people with COVID-19, the activation of MAIT cells becomes excessive and this correlates with severe disease," Sandberg added. PTI

Saliva tests

Saliva tests could quickly detect asymptomatic COVID-19 cases (The Tribune: 2020930)

<https://www.tribuneindia.com/news/health/saliva-tests-could-quickly-detect-asymptomatic-covid-19-cases-148350>

Saliva tests could quickly detect asymptomatic COVID-19 cases
Photo for representation only.

Testing self-collected saliva samples could offer an easy, quick and effective mass testing approach for detecting asymptomatic COVID-19 cases, according to a study.

The research, published in the journal *Clinical Infectious Diseases*, tested and compared the nasopharyngeal swabs and saliva samples of almost 2,000 people in Japan who did not have COVID-19 symptoms.

"Rapid detection of asymptomatic infected individuals will be critical for preventing COVID-19 outbreaks within communities and hospitals," said Takanori Teshima from Hokkaido University in Japan.

Two different virus amplification tests were performed on most of the samples: the widely available PCR test, and the less commonly used but faster and more portable RT-LAMP test.

The number of positive and negative results in all samples was very similar, with the nasopharyngeal swabs and saliva samples able to detect those with the infection in 77-93 per cent and 83-97 per cent of subjects, respectively.

Both the tests were also able to identify those without the infection in greater than 99.9 per cent of subjects, the researchers said.

The virus loads detected in nasopharyngeal swab and saliva were equivalent and highly correlated, they said.

"PCR sensitivity is much higher than previously thought 70 per cent that came from initial data of symptomatic patients," Teshima said.

While finding both nasopharyngeal and saliva samples have high sensitivity and specificity to the SARS-CoV-2, Teshima said "saliva testing has significant logistic advantages over the commonly used nasopharyngeal swab testing."

"Self-collection of saliva is painless for examinees, and more importantly, it eliminates the close contact with the examiners, reducing the risk of viral exposure," said Teshima.

"We also found that it is unlikely that the sensitivity of RT-LAMP is significantly less than that of the PCR test, suggesting that it might be a useful alternative for diagnosing COVID-19 infection, especially where diagnosis is required at the point of sample collection, like in sports venues or at airports," Teshima said.

Researchers point to a limitation of the study that they did not follow up with clinical outcomes.

They suggest that the results give good indication that mass screening using self-collected saliva and rapid RT-LAMP testing could provide easy, non-invasive, quick and relatively accurate results, with minimal risk of viral transmission to healthcare workers. PTI

Sars-Cov-2

India's 2nd nationwide sero survey shows 6.6% prevalence, says ICMR (Hindustan Times: 2020930)

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

One in every 15 individuals, or 6.6% of people, aged 10 years and above surveyed under Indian Council Medical Research's (ICMR) second national sero survey were exposed to Sars-Cov-2 – the virus that causes the coronavirus disease – showing that a vast majority of the population is still susceptible to Covid-19. Of the 29,082 people surveyed between August 17 and September 22, 6.6% of all people and 7.1% of adults had developed antibodies against the virus, ICMR director general Balram Bhargava said while presenting the findings of the repo

1 in 15

individuals above the age of 10 years are exposed to Sars-CoV-2

If extrapolated, this would mean 88mn people across India have been exposed to Covid-19

MASSIVE PROPORTION REMAINS VULNERABLE

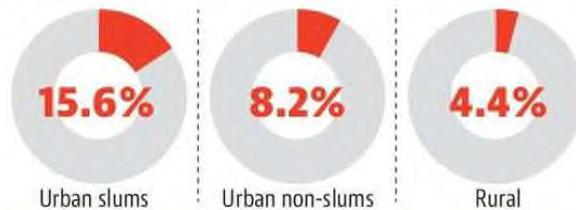
6.6% people above the age of 10 years showed past exposure, which means that 93.4% of India's populace remains vulnerable to Covid-19

"Since a large portion of the population remains susceptible to the virus, prevention fatigue is to be avoided and 5T strategy (Test, Track, Trace, Treat and Technology) must continue to be adhered to," — **Balram Bhargava**, director general, ICMR



Where seroprevalence is higher

The survey found that people living in urban slums showed the highest exposure to the virus, while those living in rural areas showed the lowest. The data showed that those living in urban slums (15.6% seroprevalence) had twice the exposure of those in non-slum areas (8.2% seroprevalence) and four times that of those in rural areas (4.4%)



No variance in age and gender: The prevalence did not differ significantly by age group or gender, officials said

"This doesn't tell us about the current situation and that's the reason why it may not be really beneficial at making policy-level decisions. However, for academic purposes, if anyone wants to study the pandemic trajectory in India some time later, it will be of help." — **Dr Jugal Kishore**, head, community medicine, Safdarjung Hospital

"It goes on to show that a large percentage of population is still susceptible to contracting the infection which is why it becomes really important to follow Covid-19 appropriate behaviour like wearing masks, maintaining social distancing, and observing hand hygiene." — **Dr VK Paul**, member (health), Niti Aayog

How it was conducted, and who it covered

All other parameters of the two surveys were the same except for the age bracket— in the first phase, the population selected was 18 years and older, and in the second phase samples were taken from those who were 10 years and older. For the purpose of the survey, blood samples were collected from 29,082 individuals across the country. The survey was conducted in the same 700 villages including wards (in urban areas) from 70 districts from 21 states covered in the first survey. The second survey was conducted between August 17 and September 22.

29,082 people surveyed between August 17 and September 22

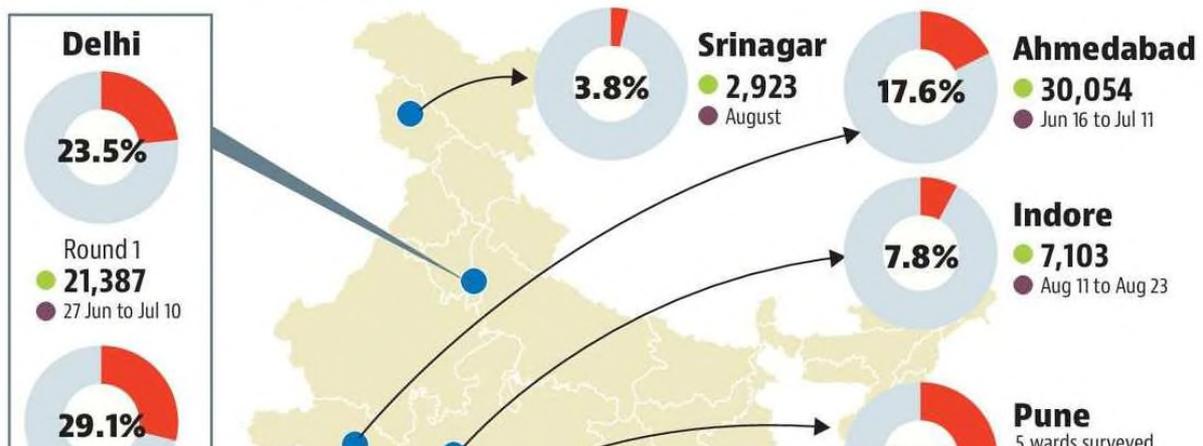
700 villages and wards

70 districts from 21 states

What local sero surveys have found

Several state governments have carried out independent sero surveys which have shown a large variance in findings. Delhi had shown 23.5% and 29.1% prevalence of infection during the first and second rounds of surveys. The initial findings of the third round of sero survey in Delhi showed that roughly 33% people have been exposed.

- Cities surveyed
- Seroprevalence
- Sample size
- Study period



Covid-19: What you need to know today (Hindustan Times: 2020930)

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



AP

R Sukumar

Less than 10 months after it emerged in Wuhan, China, the Sars-CoV-2 virus has claimed a million lives (1.002 million as this column is being written on Tuesday, according to Johns Hopkins Coronavirus Resource Center), although a report in

Bloomberg, citing Alan Lopez from the University of Melbourne's global burden of disease group, said the actual toll could be around 1.8 million.

That's probably a directionally accurate assessment, although the number itself may, according to this writer, be exaggerated. Dr Michael Ryan of the World Health Organization said in Geneva on Monday that the "current numbers" are "likely an underestimate". No country has recorded all coronavirus disease (Covid-19) deaths accurately as investigations by *The New York Times* and *The Financial Times* (and this was back in April) pointed out. Neither of those investigations covered India, but it is very likely that India's record-keeping of deaths, patchy at the best of times, suffered even more during Covid-19. The HT newsroom has reported several instances where tests weren't carried out on the dead to check whether they died on account of Covid-19. And almost every Indian state has that Kafkaesque construct, the death audit committee, which decides whether a person died of Covid-19 or because of some comorbidity.

Based on data from antibody tests and assuming (on the basis of this data), an infection fatality rate of 0.1%, Dispatch 158 on September 15 (bit.ly/33aCg41) calculated that the number of dead in India was between 110,000 and 131,500 around mid-September. India had around 80,000 deaths at the time, so this was a difference of 37.5% to 62%. The logic behind assuming an infection fatality rate of 0.1% was explained in Dispatch 152 on September 8 (bit.ly/2GcSdhx).

In terms of annual deaths from infectious diseases – there really is no point in comparing Covid-19 with others unless you are looking for a headline – the coronavirus is already ahead of everything else. And unlike deaths caused by many so-called lifestyle diseases, the ones caused by Covid-19 were sudden. India itself could cross the 100,000 mark in a few days (it ended Monday with 96,354 deaths), joining the US (over 200,000 deaths) and Brazil (around 140,000 deaths) as the only countries to have seen deaths in six digits. As of this writing, India accounts for 6.14 million of the 33.38 million cases of coronavirus disease the world has seen, or 18.41% of total cases, according to Johns Hopkins. It accounts for just around half that proportion of deaths – 96,318 out of a total of 1.02 million, or 9.6%. India's case fatality rate has always been much lower than that of many other countries. For instance, on the basis of the numbers cited above, it works out to 1.56%, around half the global CFR of 3%, and also much lower than the case fatality rates of the US (2.86%) and Brazil (3%). These numbers are likely to decrease for all countries simply because doctors have figured out ways to save lives while treating Covid-19. This is borne out by data.

According to worldometers.info, the world crossed 250,000 deaths on May 3 (252,865 to be exact). It ended the day with 3.5 million cases for a case fatality rate of 7.17%. It crossed 500,000 Covid-19 deaths on June 25 (500,028). It ended the day with 9.6 million cases. The case fatality rate on the day was 5.17%. It crossed 750,000 deaths on August 12 (754,740). It ended the day with 20.8 million cases for a CFR of 3.63%. A little over 70% of the cases the world has seen so far have been added since June 25 – a period which recorded half the deaths on account of Covid-19 thus far.

The numbers highlight an opinion that many experts are finally beginning to voice – that early action (such as aggressive testing), and better communication (especially about masks, social distancing, and public events), may have saved more lives.

City records 48 Covid deaths in 24 hrs, highest since July 16

AGE CORRESPONDENT
NEW DELHI, SEPT. 29

The national capital reported 48 Covid-19 fatalities on Tuesday, the highest in over 70 days, as the toll climbed to 5,320, while 3,227 fresh cases pushed the tally to over 2.76 lakh, authorities said.

This is the highest number of deaths reported in a day since July 16, when the city recorded 58 fatalities.

On September 26, Delhi had recorded 46 deaths, 42 the next day and 37 on September 28. The fresh cases reported on Tuesday came out of the 59,102 tests conducted the previous day.

Forty-eight new fatalities have been recorded, taking the death toll to 5320, according to the latest bulletin issued by the Delhi health department.

The active cases' tally on Tuesday rose to 27,524 from 27,123 the previous day.

The death toll from Covid-19 in Delhi stood at

Sisodia discharged from Max hospital

AGE CORRESPONDENT
NEW DELHI, SEPT. 29

Deputy chief minister Manish Sisodia, who was suffering from Covid-19 and dengue, was discharged from hospital on Tuesday, officials said. Mr Sisodia, 48, was shifted to a hospital in Saket on Thursday evening, considering his "falling" blood platelet count and low oxygen level. "He was tested negative today and his condition is better. He has been discharged from the hospital," said an official from the deputy chief minister's office.

5,272 on Monday. The Tuesday bulletin said the total number of cases has climbed to 2,76,325. The number of containment zones in Delhi jumped to 2505 on Tuesday from 2,465 on Monday.

The positivity rate on

Tuesday stood at 5.46 per cent while the recovery rate was over 88 per cent, the bulletin said, adding the case fatality rate stood at 1.93 per cent. The Delhi government has significantly ramped up testing in the past few days. The number of tests conducted and corresponding fresh cases reported, ranged from 24198 (2312) on September 1 to 61,973 (4071) on September 19.

The number of Rapid Antigen Tests conducted on Tuesday stood at 4,9526 while the RT-PCR, CBNAAT and True NAAT tests figures were 9576 in all adding to 59,102, according to the bulletin. The number of tests done per million, as on Tuesday was over 1.58 lakh while the total number of tests crossed the 30 lakh-mark.

Meanwhile, in a post shared on his Facebook page, Delhi health minister Satyendar Jain said over 77,000 Covid-19 patients have recovered in September, an average of 3,500 patients each day.

Oasis Fertility's

Oasis Fertility's groundbreaking initiative to beat COVID apprehensions with IVF @Home (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/173110.htm>

Hyderabad September 29 : Oasis Fertility - leaders in fertility care, announced the unveiling of a groundbreaking initiative, 'IVF @Home' to beat the COVID apprehensions and fears patients have while seeking treatment at hospitals, in these unprecedented times.

This is the first such initiative in the country, where IVF is being provided at the doorstep of the fertility care seeker.

The sections of the population impacted significantly by COVID are couples aspiring to be parents through IVF treatment. However, the pandemic compelled them to postpone the decision and continue to do so even now as the fear of COVID infection hasn't subsided and apprehensions of visiting a hospital continue.

Most couples opting for IVF treatment are those who exhausted all other options of conceiving children, in the process would have frittered away valuable years, some even crossing their prime reproductive years.

Any further delay in seeking IVF care may permanently close the window of opportunity for many, as they would get biologically older to bear healthy offspring. To address the concerns and fulfill the dreams of such aspiring parents, Oasis Fertility is launching the 'IVF @Home.'

"Infertility is a global public health issue and in India, one in six couples suffer from infertility, the chances of a woman getting pregnant actually deteriorates with every passing month hence it is believed that couples who make it to a fertility clinic immediately after trying to have a baby naturally for a year have got higher chances for conception. It's also a fact that a woman with a positive attitude has a higher chance of getting pregnant than a woman who has stress. A recent study found that women with high levels of alpha-amylase, an enzyme that correlates with stress, have a harder time getting pregnant" said Dr Durga G Rao, Medical Director and Co-Founder, Oasis Fertility.

"We realized that patients are scared to seek IVF treatments during COVID times and are under a lot of stress, therefore we came up with a very innovative, unique, and first of its kinds idea of offering all our deserving patients a solution of IVF treatment at home," she added.

Oasis Fertility has framed a comprehensive SOP for providing care through IVF Care @home, from the insights gained over a decade in treating patients. As per the SOP, treatment will be provided at the patient's home through contactless patient engagement, the visits to the clinic are restricted now.

A dedicated Nursing Manager will render customized, flexible White Gloves Medical Support and ensure periodic Virtual Doctor Consultations. The nurse assigned to each patient is trained to carry out treatment protocols at the patient's home.

IVF journey during the pre COVID period involved about 14 to 16 visits by the patient to the clinic, prior to embryo transfer to the women. The visits to Clinic through IVF @Home, are now curtailed to four including for Ultrasound scans, while the rest of the treatment is rendered at home.

"This is definitely a forward-thinking initiative to reach out to the patients in the current unprecedented circumstances and fulfill their dreams of parenthood in the secure confines of their homes. The protocols are framed scrupulously to be breach-proof as we take IVF treatment out of the clinic to the patient's doorstep," said Dr Sandeep, Clinical Head, Oasis Fertility.

"Oasis Fertility has been at the forefront of innovation and clinical excellence, during COVID times we have created some robust SOP's to treat our patients as the safety of the patients is our highest concern. We are launching this very unique initiative of IVF @Home, to enable patients to avail of the opportunity of fertility treatment from the comfort of their homes. A dedicated Nursing manager will be allocated who keeps monitoring the treatment remotely with virtual consultations with our doctors and a nurse would be deployed at patients home to monitor, give injections and get the investigations done from the comfort of the patients home, we also would be extending white gloves medical support to the patients at home," said Kiran Gadela, Co-Founder and Managing Director, Oasis Fertility.

"We are very excited to launch IVF Care @Home which can bring smiles to thousands of childless couples who have always desired to have a child, but due to COVID scare are not venturing out. With this, the stimulation, monitoring, injections all part of IVF Care will be done at home, the only occasions when the patient has to visit the Clinic are for the egg pick up and its transfer," said Dr Krishna, Scientific Head and Chief Embryologist, Oasis Fertility.

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Eating dairy products

Eating dairy products may cut bowel cancer risk: Study (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/173081.htm>

Eating dairy products may reduce bowel cancer risk, but there's no evidence that garlic or onions, fish, tea or coffee protect against the disease, say researchers.

For the findings, published in the journal *Gut*, the research team McGill University in Canada, trawled relevant published systematic reviews and meta-analyses of clinical trials and observational studies assessing the impact of dietary and medicinal factors on bowel cancer risk.

The medicinal factors included aspirin, non-steroidal anti-inflammatory drugs (NSAIDs), such as paracetamol and statins.

The dietary factors included vitamins or supplements (magnesium, calcium, folic acid, vitamin A, B, C, E, D, β -carotene and coffee, tea, fish and omega 3 fatty acids, dairy products, fibre, fruit and vegetables, meat and alcohol

The results showed that aspirin is likely protective against bowel cancer, lowering the risk by between 14 per cent and 29 per cent at doses as low as 75 mg/day, with a dose-response effect reported up to 325 mg/day.

NSAID use for up to 5 years was associated with a significant (26 per cent to 43 per cent) fall in the incidence of bowel cancer.

Magnesium intake of at least 255 mg/day was associated with a 23 per cent lower risk compared with the lowest intake, and high intake of folic acid was associated with a 12-15 per cent per cent lower risk.

Similarly, eating dairy products was associated with 13 per cent to 19 per cent lower risk of the disease

Fibre intake was associated with a 22 per cent-43 per cent lower risk, while fruit/vegetable intake was associated with up to a 52 per cent lower risk.

"But there was no evidence that vitamins E, C, or multivitamins were protective. Similarly, there was no evidence that β -carotene or selenium helped stave off the disease," the study authors wrote.

Similarly, although meta-analyses of observational studies suggest that statins may lower cancer risk, no positive effect was noted in meta-analyses of clinical trial data.

Most of the available meta-analyses of observational studies reported an increased risk of between 12 per cent and 21 per cent for meat, particularly red and processed meat.

Alcohol was associated with a significantly increased risk. The higher the intake, the greater the risk.

The researchers caution that the level of evidence is low or very low in most cases, mainly due to wide differences in study design, endpoints, numbers of participants, etc.

Acid reflux medicines

Acid reflux medicines may raise diabetes risk: Study (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/173033.htm>

: Researchers have found that regular use of acid reflux drugs, known as proton pump inhibitors (PPIs), is linked to a heightened risk of developing type 2 diabetes.

And the longer these drugs are taken, the greater the risk seems to be, the findings, published in the journal Gut show, prompting the researchers to advise that people taking these drugs for two or more years should have regular blood glucose check-ups to screen for diabetes.

PPIs are used to treat acid reflux, peptic ulcers, and indigestion.

They are among the top 10 most commonly used drugs worldwide.

"Long-term use has been linked to an increased risk of bone fractures, chronic kidney disease, gut infections and stomach cancer," said study authors from the Seventh Affiliated Hospital in China.

In 2014, the global prevalence of type 2 diabetes was 8.5 per cent, and the researchers wanted to find out if the widespread use of PPIs and the high prevalence of diabetes might be linked.

They drew on information supplied by 204, 689 participants (176,050 women and 28,639 men) aged 25 to 75.

According to the researchers, participants were also asked whether they had used PPIs regularly in the preceding 2 years regular use was defined as 2 or more times a week.

During the average tracking period of around 9 to 12 years across all three groups, 10,105 participants were diagnosed with type 2 diabetes.

After taking account of potentially influential factors, including high blood pressure, high cholesterol, physical inactivity and use of other medication, those who regularly used PPIs were 24 per cent more likely to develop type 2 diabetes than those who didn't.

And the longer these drugs were taken, the greater was the risk of developing diabetes use for up to 2 years was associated with a five per cent increased risk; use for more than 2 years was associated with a 26 per cent increased risk.

Further analysis showed that diabetes risk among PPI users wasn't affected by sex, age, family history of diabetes, smoking, alcohol intake, diet, physical activity, high cholesterol or regular use of anti-inflammatory drugs.

But it was higher among participants who weren't overweight or who had normal blood pressure.

For comparison, the researchers also looked at the potential impact of H2 blockers, another type of drug used to curb excess stomach acid production.

Regular use of these drugs was associated with a 14 per cent increased risk. Similarly, longer-term use was associated with a higher risk while longer time since stopping was associated with a lower risk, the study noted.

Covid-19

Covid-19 may deteriorate men's testosterone levels: Study (New Kerala: 2020930)

In a major study on patients hospitalised due to Covid-19, the researchers found that the disease might deteriorate men's testosterone levels.

The findings, published in the journal *The Aging Male*, revealed that, as men's testosterone level at baseline decreases, the probability for them to be in the intensive care unit (ICU) significantly increases.

While it has already been reported that low testosterone levels could be a cause for poor prognosis following a positive SARS-CoV-2 test, this is the first study to show that Covid-19 itself depletes testosterone.

"Testosterone is associated with the immune system of respiratory organs, and low levels of testosterone might increase the risk of respiratory infections," said study author Selahittin Cayan from the University of Mersin in Turkey,

"Low testosterone is also associated with infection-related hospitalisation and all-cause mortality in male in ICU patients, so testosterone treatment may also have benefits beyond improving outcomes for Covid-19," Cayan added.

The research team looked at a total of 438 patients. This included 232 males, each with laboratory-confirmed SARS-CoV-2. All data were prospectively collected.

A detailed clinical history, complete physical examination, laboratory and radiological imaging studies were performed in every patient. All data of the patients were checked and reviewed by the two physicians.

The cohort study was divided into three groups asymptomatic patients (46), symptomatic patients who were hospitalized in the internal medicine unit (IMU) (29), and patients who were hospitalized in the intensive care unit (ICU) (46).

In this study, the mean total testosterone decreased, as the severity of the Covid-19 increased.

The mean total testosterone level was significantly lower in the ICU group than in the asymptomatic group.

In addition, the mean total testosterone level was significantly lower in the ICU group than in the Intermediate Care Unit group.

The mean serum follicle-stimulating hormone level was significantly higher in the ICU group than in the asymptomatic group.

"We found Hypogonadism - a condition in which the body doesn't produce enough testosterone in -- (51.1 per cent) -- of the male patients," Cayan said

"The patients who died had significantly lower mean total testosterone than the patients who were alive. However, even 65.2 per cent of the 46 male patients who were asymptomatic had a loss of libido," Cayan added.

The authors state future studies should look at the concentration levels of ACE2 (Angiotensin-converting enzyme 2) -- an enzyme attached to the cell membranes of cells located in the intestines -- in relationship with the total testosterone levels.

Post-pregnancy

How to manage stretch marks during and post-pregnancy (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/172969.htm>

How to manage stretch marks during and post-pregnancy

Stretch marks are a common annoyance during and post-pregnancy and the easiest and most convenient way of reducing these marks is by following a pregnancy skincare regimen, health experts have said.

Stretch marks often appear on the belly, thighs, breasts, and hips, during their second trimester as during pregnancy the skin undergoes several changes.

Along with the appearance of stretch marks, the skin tends to sag and become dry and itchy due to lack of moisture.

However, the best part is that with early intervention, these skin changes may fade or disappear after childbirth.

"Skin tends to change during pregnancy, which means regular skincare routine probably won't be very effective. Hence, understand the nourishment that skin requires during this phase and choose a regimen accordingly," said Dr Prathibha Babshet, Ayurveda expert, Riamp;D, The Himalaya Drug Company.

For pregnant mothers, Babshet shared an essential two-step skincare routine for stretch marks during and post-pregnancy.

First, massage gently before bedtime A massage is the most effective way to reduce stretch marks. Indulging in a light massage every night before bed helps in building skin elasticity while increasing blood flow.

"The increase in blood flow also results in a lightening of the marks. New moms can include this as part of their bedtime routine with an oil specially formulated for stretch marks; preferably olive, wheat germ, almond, and sesame," she said.

Then, moisturise after a shower. When the moisture level in the skin is maintained, it not only results in soft and supple skin but also helps reduce itchiness and the appearance of stretch marks, according to the expert.

Babshet also added that opting for a cream with a herb-oil-butter complex helps provide deeper moisturisation, especially when used after a shower.

"A blend of almond oil, wheat germ oil, olive oil, mango butter, kokum butter, and shea butter, and herbs like centella, pomegranate, and licorice helps firm up sagging skin and reduces the appearance of stretch marks naturally," she said.

The experts also stressed that, apart from a good skin care regimen, it is equally important to take care of your health and body.

"It is advisable to eat a healthy diet and exercise regularly. Drinking enough water also helps keep the skin hydrated. Avoid eating junk food and eliminate caffeine from your diet," Babshet noted.

Covid phobia disrupts

Covid phobia disrupts medical checkup of heart patients: Experts (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/172924.htm>

On World Heart Day, several public health experts raised concern over the dual challenges being faced by patients with cardiovascular disease amid the raging Covid-19 pandemic.

Heart patients are more prone to develop serious complications and not seeking treatment or lack of immediate attention due to fear of catching the virus could spell doom for them.

According to (Colonel) Monik Mehta, Chief of Cardiology at Gurugram's Columbia Asia Hospital, the fear of getting infected by the Coronavirus is keeping heart patients indoors and disrupting their scheduled check-ups at a time when ischemic heart disease has emerged as the biggest cause of death among Indians.

"This may push the mortality caused by cardiovascular disease further up," he added.

There is a grave interlink between comorbidities and coronavirus infection. Patients with coronary heart disease, hypertension, diabetes, chronic obstructive lung, carcinoma, chronic kidney disease have higher chance of succumbing to the disease.

Cardiovascular diseases have become the leading cause of mortality in India. On average, over 170 lakh people die from heart-related illnesses every year. This is more than the number that dies from HIV, malaria, and cancer.

Delhi-based doctor Kamal Narayan, CEO of IHW Council, echoed similar claims that heart care has become most important during the Covid times as having a heart disease can make the infection more severe in the person. "Moreover, Covid-19 virus can cause significant damage to the heart, as we have seen cases in India and other countries as well."

Sanjeev Gupta, Senior Cardiologist at Ujala Cygnus Group of Hospitals said that during the ongoing pandemic, there has been a rise in the complication of heart ailments, which is because of the fact that many patients have not consumed their prescribed heart medication and as a result heart problems worsened, and we observed an increase in the number of cases.

"Therefore, the best way to prevent heart attack is to adopt a healthy lifestyle, including daily aerobic physical activity of 45 minutes, plenty of fresh fruits and vegetables and avoiding smoking. It's a myth that anxiety and depression can lead to heart attack, but they do facilitate heart disease," Gupta added.

About 25 to 30 per cent mortality in our country is attributable to heart attacks, brain strokes and heart failure. The Global Burden of disease in India is estimated at an age-standardized death rate of 272 per 100,000 population. It is higher than the global average of 235 per 100,000 populations. The other peculiarities in our country are a younger age at presentation, an accelerated course of disease and high mortality.

P.R. Sodani, Pro-President at Indian Institute of Health Management Research said that the heart diseases in India have increased exponentially and according to the India State-Level Disease Burden Initiative report, ischemic heart disease became the leading individual cause of death in the country in 2016 and one of the top diseases to have considerable disease burden as well.

"This can have a serious impact on the economy of the country as well, for a UN report projects that the increasing number of people developing heart diseases can cost India \$6.2 trillion by 2030. Given that India aims to become a 5-trillion-dollar economy by 2024, such a cost can substantially damage the prospects. It is for the sake of our economy that we need to take care of our people," said Sodani.

D.K. Jhamb, Director and HOD Cardiology at Gurugram's Paras Hospitals said that the pandemic has made people cautious about their health. "We should ensure that our heart

remains healthy in such unprecedented times. One should make sure that they are exercising well while being indoors as gyms are still closed. You can go to safe areas outside like nearby parks when there is relatively less rush so that you can exercise enough to prevent rise in blood pressure, sugar, cholesterol and body weight."

World Heart Day is aimed at drawing people's attention towards heart illness and the range of associated health issues.

Heart disease

Are men at a greater risk of heart disease than women? (New Kerala: 2020930)

<https://www.newkerala.com/news/2020/172881.htm>

Over the years, multiple researches have concluded that heart disease impacts men and women differently. It has been noted that in the younger age groups, men are at a far higher risk of heart disease than women; on an average, while the disease strikes men at 65 years of age, women may experience it when they are closer to 72 years.

In recent years, scientists and clinicians have poured over immense amount of data to understand this phenomenon better; as more and more data is being made available, it is observed that predisposing factors have evolved over time and increasing number of women are known to be at a higher risk of Cardio-Vascular diseases as early as in their 40s!

While it has not been certainly established why middle-aged men suffer more heart attacks than women in the same age group, shared risk factors between the two genders includes high blood pressure, high blood sugar levels, high cholesterol levels, adoption of sedentary lifestyle, smoking, obesity, and stress, says Dr Satish Jawli, Consultant, Cardio-Thoracic Surgery, Fortis Hospital, Mulund and Kalyan.

"As for women, gender specific diseases like Polycystic Ovary Disease (PCOD), Endometriosis, coupled with pregnancy triggered Diabetes and high blood pressure increases the risk of Heart disease. According to Cleveland Clinic, Endometriosis has been found to raise the risk of developing CAD by 400 percent in women under 40 years of age," he points out.

Reports also state that the symptoms of heart attack could be different in both genders; women can develop symptoms that are subtler and harder to detect -- making it easier to be missed out or ignored. "Symptoms, such as chest pains, which are considered to be classical, apply to both sexes; however, women are much more likely to experience less common symptoms such non-obvious chest discomfort, shortness of breath, indigestion, back pain, etc."

Another big factor that could lead to missing out on spotting the symptoms early is the common understanding that risk of heart disease only ups after menopause; this is untrue and women

must be encouraged to undergo heart-checks every year after the age of 35 years, says the expert.

He says what is of prime importance is to protect oneself, undergo regular health-checks and highlight any unusual symptoms to your doctor, especially if you are at an early risk.

It's never too late to lower your risk of suffering cardiac disease; Dr Jawli lists down a few things you could consider in conjunction with your physician

Maintain within range weight, blood pressure, and blood sugar levels.

Enroll the help of your doctor and a friend to help you lose weight by adopting medically certified methods; if you are obese or overweight -- weight management will play a big role.

Exercise on daily basis, a brisk walk for 30 minutes each day is a must.

Quit smoking and alcohol consumption.

Fruits, vegetables, whole grains and fish are a must in your diet; avoid consumption of animal products and processed food.

Adopt or pursue a hobby that will keep your stress levels low.

Enroll for Yoga, Aerobics, meditation, or any other class that will help you stay motivated while being on the right path towards health; these will also help you cope with stress.

With the Covid-19 pandemic, heart health of both genders is at stake, and those with cardiac diseases have noted to have had a prolonged and more stressful recovery. So it is even more imperative now to care for oneself and our families, don't delay, start now -- speak to your doctor about managing your heart health.

Antacid monotherapy

Antacid monotherapy more effective in relieving epigastric pain than in combination with lidocain New Kerala: 2020930)

<https://www.newkerala.com/news/2020/172853.htm>

Antacid monotherapy is more effective in relieving epigastric pain than in combination with lidocaine, suggests a new study.

The study will be published in the September 2020 issue of Academic Emergency Medicine (AEM), a journal of the Society for Academic Emergency Medicine (SAEM).

The lead author of the single-center study is Dr. Jaimee Warren, a first-year physician at the Royal Melbourne Hospital, Parkville, Victoria, Australia. The findings of the study are discussed with the author in a recent AEM podcast.

The double-blind, randomized clinical trial compared three different solutions for the treatment of adults with epigastric pain or dyspepsia presenting to the emergency department (ED) antacid monotherapy, antacid/lidocaine 2 percent solution, and antacid/lidocaine 2 percent viscous gel.

Warren, et al. concluded that all three treatments worked and there was no statistical difference in pain relief among the groups at 30 and 60 minutes; however, antacid monotherapy was found to be the most palatable solution, with statistically significant differences in taste, bitterness, and overall acceptability, and there were fewer side effects.

In conclusion, the study authors recommend using antacid monotherapy in place of lidocaine/antacid combination therapy for the management of dyspepsia and epigastric pain for patients in the ED.

"This study nicely demonstrates that 'more' is not always synonymous with 'better' when it comes to treating pain. Antacid alone appears to be equally efficacious to antacid-lidocaine combinations, without any of the unpleasant side effects that may discourage its use," said Robert Ehrman, MD, MS, research faculty in the department of emergency medicine at Wayne State School of Medicine in Detroit, MI.

"This is important information to provide to patients as antacids are available over-the-counter, thereby allowing patients to manage their symptoms without a visit to the emergency department," added Ehrman.

Coronainfection (Hindustan: 2020930)

https://epaper.livehindustan.com/imageview_346404_85126168_4_1_30-09-2020_4_i_1_sf.html

सर्वे: देश की 6.6 फीसदी आबादी कोरोना संक्रमित

नई दिल्ली | विशेष संवाददाता

देश में पिछले महीने तक पूरी आबादी में करीब 6.6 फीसदी लोग कोरोना से संक्रमित हो चुके थे। यानी उन्हें संक्रमण हुआ और वे ठीक भी हो चुके थे। भारतीय चिकित्सा अनुसंधान परिषद (आईसीएमआर) के दूसरे राष्ट्रीय सिरो सर्वेक्षण में यह नतीजा निकला है। जबकि मई में हुए पहले सर्वेक्षण में सिर्फ 0.73 लोगों के ही संक्रमित होने के संकेत मिले थे।

आईसीएमआर के महानिदेशक डॉक्टर बलराम भार्गव ने यहां मंगलवार को प्रेस कान्फ्रेंस में राष्ट्रव्यापी दूसरे सिरो सर्वेक्षण के नतीजे जारी किए। यह

उपराष्ट्रपति पॉजिटिव हुए

उप राष्ट्रपति एम वेंकैया नायडू जांच में कोरोना पॉजिटिव पाए गए हैं। इसके बाद उन्होंने खुद को होम कोरंटाइन कर लिया है। उनकी पत्नी की रिपोर्ट निगेटिव आई है।

सर्वेक्षण उन्हीं 21 राज्यों के 70 जिलों एवं 700 गांवों एवं वार्डों में किया गया है जहां पहला सर्वे हुआ था। पिछली बार के सर्वेक्षण में 18 साल से अधिक उम्र वालों के नमूने लिए गए थे। इस बार 10 साल से ज्यादा उम्र के लोगों को भी सर्वेक्षण में शामिल किया। देश में कुल 29 हजार 82 लोगों के नमूने जांचे गए।
➤ स्लम में ज्यादा संक्रमण पेज 19