



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Friday 2020724

Coronavirus threat

Over 49% believe coronavirus threat is exaggerated (The Tribune: 2020724)

<https://www.tribuneindia.com/news/health/over-49-believe-coronavirus-threat-is-exaggerated-117024>

Over 49% believe coronavirus threat is exaggerated
Photo for representation only.

An unprecedented 49 per cent of people believe that the coronavirus threat is hyperbolised, even as the number of confirmed cases in the country surged past 12 lakh on Thursday.

According to the IANS-CVoter Covid-19 Tracker with a sample size of 1,723, 49.3 per cent of people believe that the threat from the pathogen is exaggerated, while 41.2 per cent refute it. The poll was conducted on respondents from across the country between March 16 and July 22.

Interestingly, the day when the first lockdown was imposed, a lot more people felt the situation was exaggerated. On March 23, 53.4 per cent people thought the threat was over-amplified, while a mere 33.1 per cent believed it was grave.

Ten days after the country was put behind the doors, the number of people who believed in the gravity of the situation started increasing. On June 1, when the country was flung open as part of 'Unlock 1.0', the percentage stood at 53.1 per cent.

Meanwhile, on the first day of 'Unlock 2.0', which is still in the play, the percentage of such people came down a notch, at 48 per cent. On July 22, however, the percentage plummeted to 41.2 per cent.

Even though, the graph of people who believed that the situation was more overstated than the reality was at its peak at the start of the lockdown, it crashed down on May 9, and shot up again on and after June 8.

The data holds importance at a time the country is facing the wrath of the deadly virus, which has claimed over 30,000 lives and infected as many as 12 lakh Indians. India has also logged the world's third-largest case load, after the US and Brazil.

Lab-made 'mild virus'

Lab-made 'mild virus' mimics coronavirus, can aid drug, vaccine discovery (The Tribune: 2020724)

<https://www.tribuneindia.com/news/health/lab-made-mild-virus-mimics-coronavirus-can-aid-drug-vaccine-discovery-116956>

Lab-made 'mild virus' mimics coronavirus, can aid drug, vaccine discovery

Scientists have genetically modified a "mild virus" which generates antibodies in humans just like the novel coronavirus, but without causing severe disease, an advance which they say will enable more labs across the world to safely test drugs and vaccine candidates against COVID. The researchers from the Washington University School of Medicine in St Louis in the US engineered the mildly infecting vesicular stomatitis virus (VSV) which virologists widely use in experiments by swapping one of its genes for one from the novel coronavirus SARS-CoV-2.

According to the study, published in the journal Cell Host & Microbe, the resulting hybrid virus infects cells, and is recognised by antibodies in humans just like SARS-CoV-2, but can be handled under ordinary laboratory safety conditions.

Since the novel coronavirus spreads easily via aerosols, and is potentially deadly, the scientists said it is studied only under high-level biosafety conditions.

They said scientists handling the infectious virus must wear full-body biohazard suits with pressurised respirators, and work inside laboratories with multiple containment levels and specialised ventilation systems.

While necessary to protect laboratory workers, the study note that these safety precautions slow down efforts to find drugs and vaccines for COVID-19 since many scientists lack access to the required biosafety facilities.

"I've never had this many requests for a scientific material in such a short period of time," said study co-senior author Sean Whelan from the Washington University School of Medicine.

"We've distributed the virus to researchers in Argentina, Brazil, Mexico, Canada and, of course, all over the US," Whelan said.

In order to create a model of SARS-CoV-2 that would be safer to handle, the scientists said they started with VSV, which they added is "fairly innocuous and easy to manipulate

genetically.” VSV, according to the researchers, is a workhorse of virology labs, and primarily a virus of cattle, horses and pigs.

They said it occasionally infects people, causing a mild flu-like illness that lasts three to five days.

The researchers removed the VSV’s gene for its surface-protein, which it uses to latch onto and infect cells, and replaced it with the one from SARS-CoV-2, known as the spike (S) protein.

They said this switch created a new virus, dubbed VSV-SARS-CoV-2, that targets cells like the novel coronavirus, but lacks the other genes needed to cause severe disease.

The scientists then used serum from COVID-19 survivors and purified their antibodies, and showed that the hybrid virus was recognised by these antibodies very much like a real SARS-CoV-2 virus that came from a COVID-19 patient.

The study found that antibodies which prevented the hybrid virus from infecting cells also blocked the real SARS-CoV-2 virus from doing so.

It said the patient serum proteins that failed to stop the hybrid virus also failed to deter the real SARS-CoV-2.

The scientists also found that a decoy molecule was equally effective at misdirecting both viruses and in preventing them from infecting cells.

“Humans certainly develop antibodies against other SARS-CoV-2 proteins, but it’s the antibodies against spike that seem to be most important for protection,” Whelan said.

“So as long as a virus has the spike protein, it looks to the human immune system like SARS-CoV-2, for all intents and purposes,” he added.

According to the researchers, the hybrid virus can help scientists across the world evaluate a range of antibody-based preventives and treatments for COVID-19.

They said the new virus could be used to assess whether an experimental vaccine elicits neutralising antibodies, and to measure whether a COVID-19 survivor carries enough neutralising antibodies to donate plasma to COVID-19 patients.

According to the study, the hybrid virus may also help identify antibodies with the potential to be developed into antiviral drugs.

“One of the problems in evaluating neutralizing antibodies is that a lot of these tests require a BSL-3 facility, and most clinical labs and companies don’t have BSL-3 facilities,” said Michael Diamond, who is also a professor of pathology and immunology at the Washington University School of Medicine.

“With this surrogate virus, you can take serum, plasma or antibodies and do high-throughput analyses at BSL-2 levels, which every lab has, without a risk of getting infected. And we know that it correlates almost perfectly with the data we get from bona fide infectious SARS-CoV-2,” Diamond said.

Since the hybrid virus looks like SARS-CoV-2 to the immune system but does not cause severe disease, it is a potential vaccine candidate, he said, adding that the scientists are currently conducting animal studies to evaluate this possibility. PTI

Covid-19: What you need to know today

Covid-19: What you need to know today ((Hindustan Times: 2020724)

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

India's Covid-19 positivity rate – the proportion of people testing positive to those tested – is increasing. The weekly average is around 11.7% now. The number has steadily increased. It was around 8.1% a month ago. In early May, it was as low as 3%. Contrary to what this trend may immediately suggest, and concerns being expressed by some experts, a rising positivity rate in India, under the current context, is actually good news.

India has thus far carried out around 11,310 tests per million of the population. This number too has been increasing steadily; over the past week for instance, India carried out 333,697 tests a day on average. It should be doing a million a day, but the current number is still higher than the 143,565 tests a day it was conducting in mid-June. This increase is responsible for the country's rising positivity rate.

As regular readers of this column know, the positivity rate increases with testing till a point, then plateaus, and then eventually starts declining as a country, state, or city starts testing adequately. At the current level of testing, India has tested around 1.1% of its population. That's way too low. There are countries that have done 10-12%, but given India's size and population, the country should be aiming for testing at least 5% of the population.

It is important to understand how to read the positivity rate. A low rate is desirable, but only when accompanied by adequate testing. There are states that show a low positivity, but this isn't because they have few cases, but because they aren't testing enough. Uttar Pradesh, Odisha and Bihar, for instance, have low positivity rates, but are clearly not testing enough, and so while absolute numbers may suggest that they are better off than other states in managing Covid-19, they actually aren't. In fact, the reverse is probably true.

Telangana and Gujarat have higher positivity rates, but they too are clearly not testing adequately (which is actually even more worrying).

In contrast, Delhi has a high positivity rate (cumulatively), but the number is way off its peak (when the trend in daily positivity rates is seen; for instance, it was only 5.7% on Thursday), an indication that things have gotten better in the Capital (which is also reflected in the falling number of daily cases). And it is testing a lot (around 4.4% of its population has been tested at last count). Tamil Nadu presents another narrative. It is testing adequately (it has tested 2.8% of its population at last count, a significant number for a state with a population of around 80 million), and is just about maintaining its positivity rate (which means the daily cases are still

high) – an indication that the state is on the long plateau that comes before the dip. The state's positivity rate is way off the peaks it once scaled, perhaps an indication of just how badly inadequate testing can skew this metric in either direction.

It's easy to understand – given this behaviour – why most experts maintain that a positivity rate between 7% and 12% (some are a lot more specific and put the number at 10%) is a reflection of adequate testing. Given the Tamil Nadu example, this proportion seems to correspond with the ideal positivity rate in the plateau-phase of the curve.

So, how high can India's positivity rate go? That's a tough question to answer, but if the country were to sharply increase testing – say, reach the million-test-a-day mark that I've been suggesting – it will reach this peak very soon.

Still better, it won't stay there very long if it keeps up the intensity of testing.

Covid patient ((Hindustan Times: 2020724)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=14996308>

Cop tests +ve again, raises worry about Covid relapse

50-year-old policeman had tested positive for corona in May

AGE CORRESPONDENT
with agency inputs
NEW DELHI, JULY 23

The case of a Delhi policeman having a relapse of the novel coronavirus has baffled experts and the doctors treating him and has raised the question whether a recovered patient can contract the infection again.

The policeman, 50, had tested positive for the virus in May and was treated at the Indraprastha Apollo hospitals between May 15 and 22. Thereafter, he had tested negative and resumed duty.

However, on July 10, he again felt unwell with a fever and dry cough and got himself tested on July 13.

The report came positive through the rapid antigen test as well as the RT-PCR test, said Dr Rajesh Chawla, Senior Consultant, Respiratory and Critical Care Medicine, Apollo Hospitals.

▶ The policeman had tested +ve for the virus in May and was treated between May 15 and 22. Thereafter, he had tested negative and resumed duty. However, on July 10, he again felt unwell and got himself tested on July 13

▶ The policeman, who has no other underlying ailment, complained of chest pain on July 16 and was admitted to the hospital, the senior doctor said, adding that he is stable and his vitals are being monitored

The policeman, who has no other underlying ailment, complained of chest pain on July 16 and was admitted to the hospital, the senior doctor said, adding that he is stable and his vitals are being monitored.

"The first time he was tested for coronavirus, he had no symptoms. There was a camp in the hospital and since his friend got tested, he also got tested and came positive," he said.

The second time the policeman was tested for antibodies too, but it was found that he did not have

antibodies, he said.

What could be the reasons for the relapse of infection?

"If it was within a month," said Dr Chawla, "I would have said that it was a dead virus that was giving a positive result. But that is not the case."

"The other thing could be that it was a false positive when he was tested the first time, although it is very rare in RT-PCR test but still it can occur. The third, of course, is reinfection because he did not have antibodies. I have not seen any other such patient," he said.

Dr Mugdha Tapdiya, Senior Consultant, Internal Medicine, Fortis Hospital, Vasant Kunj, concurred with Dr Chawla.

It is possible that a right level of antibodies was not developed against the virus which meant that when the patient was exposed again, he got reinfected, she said.

She also did not rule out the possibility that the first result was a false positive.

Earlier this week, a similar case had surfaced in the national capital after a nurse employed at a civic-run dedicated Covid hospital had tested positive again after recovering.

However, the municipal authorities had claimed there was nothing to worry as it is ostensibly the "dead virus" left in her body from the previous infection.

The officials had said that her IgG antibody level is "very high, which also corroborates this explanation".

Holistic fitness.

The four pillars of well-being (The Hindu: 2020724)

<https://www.thehindu.com/sci-tech/health/The-four-pillars-of-well-being/article16316823.ece>

Beyond rippling biceps and flat abs is a goal that is much harder to attain: holistic fitness. Beyond rippling biceps and flat abs is a goal that is much harder to attain: holistic fitness.

Holistic fitness includes physical, emotional, mental and spiritual fitness

The word 'holistic' has made its way into common vocabulary, especially in the health and wellness industry. What does it mean?

It's a basic and intuitive concept on which our very existence should rest, not just health and fitness. It is a multidimensional web of our foundational pillars and their interconnections. There is an Indian proverb that says that everyone is a house with four rooms — physical, mental, emotional and spiritual. Most of us tend to live in one room most of the time but we need to go into every room every day, even if only to keep it aired.

So, holistic fitness includes physical, emotional, mental and spiritual fitness. It should be clear that a lacuna in one is bound to affect the whole chain and strip 'holistic' of its meaning. A whole can be viewed as a sum of its parts. But it would be flawed to not recognise that it's not just the adding up that delivers a functional equation. The health of each part will impact the health of the whole.

Physical fitness: Human beings are designed for movement. The advent of modern lifestyle with increasing dependence on automation and reduced physical labour has coincided with the rapid growth of several illnesses. Physical activity is an important aspect of health and one should target at least 30 minutes of meaningful, challenging activity everyday and follow a progressive approach since the body keeps getting used to regular efforts. Just focussing on diet is not enough. The medical fraternity realises and routinely prescribes physical fitness as a prescription to combat ill health. Not without reason.

Emotional fitness: Perhaps the toughest to attain and appreciate, given its role in the spectrum of holistic fitness and life, in general. It is the ability to cope with what life throws your way, loving yourself for who you are, understanding and accepting your weaknesses, and being able to reach out to those around. It does not imply false bravado. True emotional fitness requires one to be accepting of one's self and those around and realising that controlling negative emotions and building positive ones require reflection and work.

Mental fitness: The brain, like the body, needs constant challenge to remain sharp and active. As we age, this need becomes even greater — to keep the neurons firing and retain cognitive and inferencing abilities. Taking active interest in the world around us, solving puzzles, engaging in mentally stimulating challenges and brain teasers are some ways of keeping the brain activated. These help arrest age-related slowdown and keep us tuned to everything around us. Physical activity is known to complement and enhance mental agility. Our emotional state too has a direct bearing on our mental ability to retain information and experiences, process them, and perform accordingly.

Spiritual fitness: This refers to developing the ability to understand and experience the interconnection of the self with the universe. It does not simply mean religion (though religion can be a part of it). It includes inculcating and polishing all the innate qualities that allow one to feel a better communion with a higher sense of being. This could be through several channels including prayer, good deeds, compassion, and meditation. A stable mind and body are a strong foundation to spiritual health. The state of our emotional health is often the trigger to seeking it. Each of the three components in turn gets enriched by spiritual health.

Holistic fitness needs to equally address all these aspects. If we think about it, all these elements define our true state at any point in life. One or more elements are usually missing because we become caught up in chasing a part. It means we are not living to our full potential. You must seek and cater to each component. For most people, this realisation dawns late, but there is always a good time to correct your course. And that time is now. It's certainly true that one

may only experience some elements better as one gets older by virtue of accumulated life experiences, but there is no reason for not pursuing whatever can be addressed now.

Menopause

Life beyond the hot flashes (The Hindu: 2020724)

<https://www.thehindu.com/sci-tech/health/Life-beyond-the-hot-flashes/article15429409.ece>

Exercise releases 'feel good' pheromones that contribute to a feeling of general well-being. Exercise releases 'feel good' pheromones that contribute to a feeling of general well-being.

That much-dreaded journey to menopause need not be all misery if you make some simple but healthy changes in lifestyle

Menopause marks the end of the monthly menstrual cycle for women. It's the time when the ovaries cease to function and the woman can no longer reproduce. Though it is a biological phenomenon, it represents a major transition in a woman's life and is often accompanied by very individual physiological and emotional changes. This makes it complex to understand.

Menopause is not a sudden phenomenon, but rather a gradual process. There is no definite age or timeline that can be authoritatively assigned to it. Most women reach menopause between the ages of 45 and 55, the average age being around 51.

Some reach menopause before 40 or 45. The transitional period leading to menopause is referred to as 'perimenopause' and the period after menopause has set in is called 'postmenopause'.

This journey is different for each woman and the onset of symptoms can be up to 10 years before menopause finally sets in. Medical and surgical conditions (chemotherapy and radiation therapies for certain types of cancers, hysterectomy, etc.) can influence its onset.

Perimenopausal symptoms typically include hot flashes, night sweats, aches and pains, headaches, skin dryness and itching, tiredness (could be result of disturbed sleep), frequent urination/ incontinence, increased risk of urinary tract infection, vaginal dryness, reduced libido, weight gain (especially around the abdomen) and worsening of adult acne. Since small amounts of the male hormone testosterone are still being produced by the body, this could lead to some hair growth on the chin, upper lip, chest or abdomen.

Cognitive and emotional changes such as forgetfulness, irritability and mood swings may also occur. These are likely a complex response to all factors brought on by hormonal fluctuations at the physical level (causing physical discomfort) and at a much deeper mental level (such as lack of self-esteem). This period could also coincide with other stressful life events inducing emotional symptoms that should not be trivialised.

Long-term risks of menopause could include osteoporosis (thinning of bones/ reduced bone density) leading to fractures and increased risk of heart disease, heart attack, high blood pressure and stroke.

While different women experience and respond to symptoms differently, there are certain practices that help in management of menopause.

Diet: Incorporate a wide variety of fresh fruits and vegetables (preferably seasonal), fibre-rich foods, cereals, whole grains, small portions of lean meats, chicken or fish and adequate amounts of calcium and Vitamin D in your diet. Eat low-dairy foods (look for dairy-free substitutes if required, preferably guided by a good nutritionist). Increase intake of fluids. Reduce caffeine and alcohol intake.

Exercise: Regular physical activity and exercise play an important role in maintaining good health, bone density and in mitigating unpleasant symptoms. Aim for at least 30-45 minutes most days of the week. Resistance exercises are especially beneficial to help prevent osteoporosis. Exercise releases 'feel good' pheromones that contribute to a feeling of general well-being, relaxation and positivity. If you are used to higher or more intense levels of activity, there is no definite reason to give them up now. Just pay attention to your body and what it tells you. Dynamically re-adjust as required.

Avoid smoking: It increases all the long-term risks mentioned.

Get regular pap and breast checks: These could be performed generally every two years or as recommended by your doctor.

Hormone replacement therapy: Because hormone levels may fluctuate rapidly, sometimes on a daily level, for individual women, any treatment should be undertaken strictly under doctor's guidance. These treatments are not without risks, so the need, duration and dosage need strict justification and monitoring.

Natural remedies: Nature provides a wide variety of herbs and plants that form the basis of several natural therapies. However, it is safer and recommended to consult a licensed/registered practitioner rather than go by hearsay. If following any other treatments or medications, it is prudent to be better informed to avoid unpleasant side effects.

Think positive: Understand what your body is going through, accept it as nature's cycle and keep a positive outlook. Our thoughts affect our bodies so express your feelings and concerns with your doctor, family and friends. Simply sharing can often make a positive impact.

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Vaccine

Coronavirus | India will have to deliver vaccine on a scale never seen before: Oxford scientist Andrew Pollard (The Hindu: 2020724)

<https://www.thehindu.com/sci-tech/health/coronavirus-india-will-have-to-deliver-vaccine-on-scale-never-seen-before-oxford-scientist/article32163865.ece>

Director of the Oxford Vaccine Group Andrew Pollard shares with Narayan Lakshman deep insights into the coronavirus endgame scenarios that might now be on the table

As the world continues to grapple with the debilitating human toll of the ongoing COVID-19 pandemic, experts such as Andrew Pollard, Director of the Oxford Vaccine Group and Chief Investigator on its COVID-19 trials, have been at the forefront of research, most significantly regarding vaccine development. The remarkable progress made by Professor Pollard and his team, captured by data published this week in the Lancet, holds out hope that an effective and safe vaccine might be available earlier than originally assumed, during 2021. He shared with Narayan Lakshman deep insights into the coronavirus endgame scenarios that might now be on the table.

Smoking,

Smoking, vaping up Covid-19 risk in young people (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130878.htm>

Smoking, vaping up Covid-19 risk in young people

New research adds to the growing body of evidence that young people who smoke and vape have an increased chance of becoming seriously ill from the Covid-19 virus.

Based on the findings and the recent Covid-19 patient case studies, the research team reviewed the role of smoking and vaping that may play in the cerebrovascular and neurological dysfunction of those who contract the virus.

The study, published in the International Journal of Molecular Sciences, "Our study has shown smokers of tobacco and vaping products are more vulnerable to viral and bacterial infection than are non-smokers," said study researcher Luca Cucullo from the Texas Tech University Health Sciences Center (TTUHSC) in the US.

In his previous research, Cucullo demonstrated how tobacco smoke can impair a person's respiratory function. From there, it can affect the vascular system and eventually the brain. Because Covid-19 also attacks the respiratory and vascular systems, the research team wanted to see if there were any reported cases indicating the virus may also affect the brain and lead to the onset of long-term neurological disorders like ischemic strokes. They also looked for evidence showing smoking and vaping can otherwise worsen the outcomes for COVID-19 patients, which Cucullo said seems to be the case.

According to the findings, published in the 'International Journal of Molecular Sciences', some case studies demonstrate there are indeed stroke occurrences in Covid-19 patients and the rates appear to be increasing every day.

In fact, one study comprised of 214 patients found that 36.45 per cent of Covid-19 patients had neurological symptoms, further indicating the virus is able to affect the cerebral vascular system.

"But how does this happen?" the researchers said.

There are within the human body approximately 13 blood coagulation factors that can be increased due to hypoxia, a condition that occurs when the body is deprived of sufficient amounts of oxygen at the tissue level, as occurs with smoking.

The researchers said that Covid-19 appears to also raise some blood procoagulant, especially the von Willebrand Factor, a blood-clotting protein that primarily binds carries coagulation factor VIII and promotes platelet adhesion at the site of wounds.

"When the coagulant factor will be increased in our body, there will be a higher chance of clot formation. Ultimately, it will be responsible for several vascular dysfunctions, for example, hemorrhagic or ischemic stroke," the study authors wrote.

Because Covid-19 and smoking or vaping each increases blood coagulation factors that may eventually affect the cerebral vascular system, the research team believes the stroke risk may be higher still for Covid-19 patients who smoke.

Food and Nutrition

Eating foods with green tea extract may reduce norovirus risk (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130798.htm>

Eating foods with green tea extract may reduce norovirus risk

Adding green tea extract to prepared foods may lower chances of catching the highly contagious norovirus, say researchers.

Norovirus is a very contagious virus that causes vomiting and diarrhoea and people of all ages can get infected and sick with norovirus.

It's transmitted from person to person and through consumption of contaminated water and food.

"Norovirus is a tough virus to work with - it is a non-enveloped virus, which is the type more resistant to sanitizers and antimicrobial agents," said study senior author Melvin Pascall from the Ohio State University in the US.

"However, because it has public health concerns and has been implicated in a number of foodborne outbreaks, we wanted to look at the effects of green tea extract on norovirus," Pascall added.

In a study, published in the International Journal of Food Science, the research team revealed that adding green tea extract to a film-forming substance created a safe-to-eat barrier that killed norovirus as well as two types of bacteria.

According to the study, they created the films with a base substance called chitosan, a sugar found in the exoskeleton of shellfish.

Chitosan is marketed as a weight-loss supplement and used in agricultural and medicinal applications and has been studied extensively as a safe and readily available compound for edible film development.

Previous studies have suggested that chitosan has antimicrobial properties. But norovirus might exceed its bug-fighting abilities. In this study, the researchers found that chitosan by itself did not kill the virus. To test the effects of green tea extract, the researchers dissolved it alone in the water and added it to a chitosan-based liquid solution and dried film.

Several different concentrations of the extract showed effectiveness against norovirus cells, with the highest level tested in this study killing them all in a day.

"We had tested the chitosan by itself and it didn't show much antimicrobial activity against the virus," Pascall said.

"But when we added the green tea extract to chitosan, we saw that the film had antiviral properties -- so we concluded the antiviral properties were coming from the green tea extract," Pascall informed.

The scientists introduced at least one million virus cells to the solution and dried films. Those containing green tea extract lowered the presence of virus cells within three hours.

"The films with the highest concentration of green tea extract reduced norovirus to undetectable levels by 24 hours after the exposure," the authors noted.

Immune system treatment

Immune system treatment to reduce stress can prevent cancer metastases, study explains (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130770.htm>

A new approach from Tel Aviv University can save the lives of cancer patients! Researchers have found that the short time period around tumour removal surgery (the weeks before and after surgery) is critical for the prevention of metastases development, which develops when the body is under stress.

According to the University researchers, patients require immunotherapeutic treatment as well as treatment to reduce inflammation and physical and psychological stress. The research was conducted by Prof. Shamgar Ben-Eliyahu of TAU's School of Psychological Sciences and Sagol School of Neuroscience and Prof. Oded Zmora from Assaf Harofe Medical Center.

The research results were published in the journal Cancer.

Immunotherapeutic treatment is a medical treatment that activates the immune system. One such treatment is the injection of substances with similar receptors to those of viruses and bacteria into the patient's body. The immune system recognizes them as a threat and activates itself, thus preventing metastatic disease.

Prof. Ben-Eliyahu explains that surgery for the removal of the primary tumour is a mainstay in cancer treatment. But the risk of developing metastases after surgery is estimated at 10 per cent among breast cancer patients, at 20-40 per cent among colorectal cancer patients, and at 80 per cent among pancreatic cancer patients.

According to Prof. Ben-Eliyahu, when the body is under physiological or psychological stress such as surgery, groups of hormones called prostaglandin and catecholamine are produced in large quantities. These hormones suppress the immune system cells' activity and indirectly increase the development of metastases.

Additionally, these hormones help tumour cells left after the surgery to develop into life-threatening metastases. Exposure to those hormones causes tumour tissues to become more aggressive and metastatic.

"Medical and immunotherapeutic intervention to reduce psychological and physiological stress and activate the immune system in the critical period before and after the surgery can prevent the development of metastases, which will be discovered months or years later," Prof. Ben-Eliyahu said.

Prof. Ben-Eliyahu added that anti-metastatic treatment today skips the critical period around the surgery, leaving the medical staff to face the consequences of treating progressive and resistant metastatic processes, which are much harder to stop.

Prof. Ben-Eliyahu's research contradicts the assumption, widespread in the medical community, that immunotherapeutic treatment for cancer patients in the month before and after the surgery is not recommended.

Protein diet

Want to live longer? Follow a plant-based protein diet (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130631.htm>

Want to live longer? Follow a plant-based protein diet

If you want to lead a healthy, long life, read on. Researchers have found that diets high in protein, particularly plant protein, are associated with a lower risk of death from any cause.

Diets high in protein, particularly protein from plants such as legumes (peas, beans and lentils), whole grains and nuts, have been linked to lower risks of developing diabetes, heart disease and stroke.

While regular consumption of red meat and high intake of animal proteins have been linked to several health problems, the study published in the journal *The BMJ*, said.

But data on the association between different types of proteins and death are conflicting.

So researchers based in Iran and the US set out to measure the potential dose-response relation between intake of total, animal, and plant protein and the risk of death from all causes, cardiovascular disease, and cancer.

They reviewed the results of 32 studies that reported risk estimates for all-cause, cardiovascular, and cancer mortality in adults aged 19 or older.

All studies were thoroughly assessed for bias (problems in study design that can influence results).

Mathematical models were then used to compare the effects of the highest versus lowest categories of protein intake, and analyses were done to evaluate the dose-response relations between protein intake and mortality.

During a follow-up period of up to 32 years, 113,039 deaths (16,429 from cardiovascular disease and 22,303 from cancer) occurred among 715,128 participants.

The results show that a high intake of total protein was associated with a lower risk of all-cause mortality compared with low intake.

Intake of plant protein was associated with an eight per cent lower risk of all-cause mortality and a 12 per cent lower risk of cardiovascular disease mortality.

Intake of animal protein was not significantly associated with risk of cardiovascular disease and cancer mortality, the study said.

A dose-response analysis of data from 31 studies also showed that an additional three per cent of energy from plant proteins a day was associated with a five per cent lower risk of death from all causes.

"These findings have important public health implications as intake of plant protein can be increased relatively easily by replacing animal protein and could have a large effect on longevity," the researchers said.

"While further studies are required, these findings strongly support the existing dietary recommendations to increase consumption of plant proteins in the general population."

Covid-19 treatment

Why chloroquine should not be used for Covid-19 treatment (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130494.htm>

The antimalarial drug chloroquine widely rumoured to help prevent Covid-19 is not able to prevent infection of human lung cells with the novel coronavirus, say German researchers.

The current study, published in the journal Nature, revealed that chloroquine is, therefore, unlikely to prevent the spread of the virus in the lung and should not be used for the treatment of Covid-19.

"In this study, we show that the antiviral activity of chloroquine is cell type-specific and that chloroquine does not block the infection of lung cells," said study researcher Stefan Pohlmann from German Primate Centre (DPZ) in Germany.

It is known that SARS-CoV-2 is able to use two different routes to enter cells.

First, after attaching to the cells, the virus can fuse directly with the plasma membrane and introduce its genetic material into the host cell. Second, it can enter the interior of the cells upon uptake via transport structures, called endosomes.

In both cases, the attachment of the virus to the cells and subsequent entry is mediated by the viral spike protein.

For this purpose, the spike protein must be activated either by the enzyme cathepsin L (in endosomes) or by the enzyme TMPRSS2 (on the cell surface).

Depending on the cell type, both enzymes or only one of them can be available for activation.

Since chloroquine inhibits the infection of monkey kidney cells with SARS-CoV-2, chloroquine has been tested in clinical trials as a possible candidate for the treatment of Covid-19.

However, how chloroquine inhibits the infection of monkey kidney cells was not clear.

The current study shows that chloroquine inhibits viral entry into these cells, most likely by blocking cathepsin L activity.

This raised the question of whether chloroquine also inhibits the infection of lung cells that are known to produce TMPRSS2 but only a small amount of cathepsin L.

The study shows that chloroquine does not prevent SARS-CoV-2 entry into human lung cells and the subsequent spread of the virus in these cells.

"This means that in future tests of potential Covid-19 drugs, care should be taken that relevant cell lines are used for the investigations in order not to waste unnecessary time and resources in our search for effective Covid-19 therapeutics," Pohlmann added.

Recently, a study published in the journal *Annals of Internal Medicine*, revealed that the famous anti-malarial drug hydroxychloroquine (HCQ) was ineffective for Covid-19 patients with early and mild symptoms.

Common BP drugs

Common BP drugs don't increase risk of Covid-19 severity (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130480.htm>

Researchers have revealed that a widely used class of drugs to treat patients with hypertension, cardiovascular disease and diabetic kidney disease does not increase the risk of developing a severe Covid-19 infection as previously feared.

There have been concerns by the medical community worldwide that the drugs -- ACE inhibitors and angiotensin receptor blockers (ARB) -- might have caused an increase in ACE2, the main receptor for SARS-CoV-2, which could possibly increase the risk for this infection and its severity.

But the new findings, published in the journal of the American Society of Nephrology, revealed a decrease in ACE2 in mice kidney membranes and no change in lung membranes.

"This study supports the concept that there is no increased risk for Covid-19 infection by using ACE inhibitors and angiotensin receptor blockers," said study researcher Daniel Batlle from the Northwestern University in the US.

For the findings, the research team examined the effect of ACE2 and ARBs in the lungs, which are considered one of the main targets for SARS-CoV-2 entry into the body.

ACE inhibitors and ARBs are a category of drugs called RAS blockers.

These drugs, by different mechanisms, block the actions of a peptide that causes narrowing of blood vessels and fluid retention by the kidneys, which result in increased blood pressure.

The drugs help blood vessels relax and expand and decrease fluid retention, both of which lower blood pressure.

To examine this issue, the team measured ACE2 in isolated kidney and lung membranes of mice that were treated with either captopril, a widely used ACE inhibitor, or telmisartan, an ARB also widely prescribed.

Since the recognition that ACE2 is the main receptor for SARS-CoV-2, there have been multiple studies discussing the potential risk for susceptibility and worse clinical course of Covid-19 in patients treated with RAS blockers.

Much of the speculation comes from previous animal studies where some RAS blockers were reported to upregulate ACE2 in the heart and kidney vasculature.

"My lab has long worked with ACE2, and this was a critical question that needed to be addressed," Batlle said.

"We had no bias one way or another, and the kidney findings showing lower ACE2 in treated animals were a bit unexpected," the authors wrote.

Anxiety

Study finds new insights into different aspects of anxiety (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/130037.htm>

While there is no definite cure for anxiety, a team of researchers sheds light on the source of unease and tension to help effectively treat anxiety as soon as the symptoms appear.

The study conducted by researchers of the University of Trento, which has just been published in Scientific Reports, pursues these goals and helps draw a line between different aspects of anxiety and to find the best treatment for each one.

The team of researchers focused on what goes on in the brain of people with the two main types of the condition trait and state anxiety, respectively the temporary and the stable, chronic form of the disease.

Nicola De Pisapia, a researcher of the Department of Psychology and Cognitive Science of the University of Trento and scientific coordinator of the study, explained the difference between the two "If you are feeling very tense today, but you usually are calm and quiet, you have high state and low trait anxiety."

"Whereas if you are unusually quiet, while in general you feel nervous, you may have low state and high trait anxiety. Therefore, state anxiety is a temporary condition, while trait anxiety is usually a stable feature of a person," the researcher said.

Clinical experience shows, among other things, that individuals with trait anxiety have difficulties managing stressful situations, are at risk of depression, have altered cognitive functions, are less socially competitive and tend to develop psychopathological disorders.

Differentiating between trait and state anxiety is helpful to choose the most appropriate treatment for patients and to prevent the condition from becoming chronic.

"Our study makes it clear that it is fundamental to treat individuals with state anxiety so that they do not develop trait anxiety, which is a chronic condition. One way to treat it is to reduce anxiety as soon as it manifests itself, for example using relaxation techniques, physical activity, and other means that improve personal well-being in general", commented De Pisapia.

The goal of the study was to better understand the neural bases of the two types of anxiety.

"Our research group studied and investigated with MRI the anatomy and activity of the brain at rest in more than 40 individuals. We then correlated our measurements to variations in state and trait anxiety in the participants in the study with standard questionnaires which are also used in clinical practice," commented De Pisapia.

De Pisapia added, "We found that the most stable aspects of trait anxiety are associated with specific anatomic traits which are therefore constant, and lead to developing repetitive and self-generated negative thoughts, while the features of state anxiety correlate to functional connectivity of the brain, which is a transient and dynamic activity".

In other words, trait anxiety correlates to permanent anatomic features (in the anterior cingulate cortex and medial prefrontal cortex) while state anxiety manifests with temporary reactions in the brain activity.

The study conducted by the University of Trento also led to findings that can be useful in clinical practice.

"Based on our results- a strategic improvement in anxiety regulation in high trait anxiety individuals could be achieved via pharmacological and/or neurostimulation methods (for example with Transcranial Magnetic Stimulation or transcranial Direct Current Stimulation). Finally, these findings may lead to the creation of new diagnostic tools and treatments aimed at ameliorating the symptoms of anxiety disorders and treat them before they become chronic", concluded Nicola De Pisapia.

Covid-19 antibodies

Researchers develop new tools to rapidly test Covid-19 antibodies (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/129909.htm>

Researchers have developed new tools to rapidly test the ability of antibodies to neutralise SARS-CoV-2, the novel coronavirus responsible for the Covid-19 pandemic.

The approach, published in the *Journal of Experimental Medicine* (JEM), will help researchers understand whether patients are susceptible to reinfection by Covid-19 and assess the effectiveness of experimental vaccines, as well as develop antibody-based therapies against the disease.

People infected with Covid-19 produce neutralising antibodies that prevent the virus from infecting cells by binding to the spike protein on the virus's surface.

Early studies have suggested that the strength of this antibody response varies greatly between patients, and it remains unknown how long any such neutralising antibodies persist in the blood to provide protection against reinfection.

"Whether elicited by natural infection or vaccination or administered as a convalescent plasma or in recombinant form, neutralising antibodies will likely be crucial for curtailing the global burden of Covid-19 disease," said study researcher Paul D Bieniasz from the Rockefeller University in the US.

"For this reason, the availability of rapid, convenient, and accurate assays that measure neutralising antibody activity is crucial for evaluating naturally acquired or artificially induced immunity against Covid-19," Bieniasz added.

According to the study, the research team developed a number of safer, surrogate viruses that can be used in place of Covid-19 to test the neutralising activity of antibodies targeting the coronavirus spike protein.

The surrogate viruses are versions of either the human immunodeficiency virus type-1 (HIV-1) or vesicular stomatitis virus (VSV) that produce the SARS-CoV-2 spike protein instead of their own surface proteins.

Some of these surrogate viruses are unable to replicate, making them even safer to use in the laboratory.

Moreover, the viruses are engineered to generate fluorescent or luminescent infected cells, making it easy for researchers to track infection and measure how well this process is blocked by potential neutralising antibodies.

The researchers tested the ability of convalescent patient plasma samples and purified antibodies to block the entry of the surrogate viruses into human cells grown in the laboratory.

"Each of the surrogate virus-based assays generated quantitative measurements of neutralising activity that correlated well with neutralisation measured using authentic SARS-CoV-2," said study author Theodora Hatziioannou.

"We think that these surrogate viruses and assays will be of significant use in curtailing the Covid-19 pandemic," the researchers concluded.

Typhoid

Low levels of awareness about typhoid: Survey (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/129865.htm>

With 2.2 million cases of typhoid being recorded in India alone in 2016, typhoid fever poses a serious disease burden in the country. However, a recent survey reveals that only 66 per cent of people are aware of the typhoid vaccination that can prevent the typhoid fever.

Typhoid tends to affect children most, with peak incidence occurring in children aged 5-15 years.

The survey, conducted by Abbott in partnership with Babygogo, revealed that about one fifth of respondents in Delhi who did not vaccinate their children (18 per cent) considered typhoid to be 'not at all serious' or 'mild/easily manageable'.

The survey was conducted across eight cities -- Ahmedabad, Bangalore, Chennai, Hyderabad, Kolkata, Mumbai, New Delhi and Pune -- to understand the perceptions and barriers surrounding typhoid vaccination. A total of 1,337 respondents were surveyed online on awareness levels, motivation and behaviours surrounding vaccination against typhoid in India. 37 per cent of caregivers surveyed had children aged 0 to 6 months, 39 per cent had children aged 6 months to a year and 24 per cent of people had children 1-2 years old.

Findings revealed that there are higher levels of awareness for mandatory vaccines, i.e., vaccines given in National Immunization Program of the country (NIP) such as rotavirus (82 per cent) compared to vaccines not given in NIP such as influenza (67 per cent) and typhoid (66 per cent).

Other findings of the survey suggest that key reasons for not vaccinating include absence of vaccine recommendation by the pediatrician (48 per cent) and non-inclusion in the list of NIP vaccines (36 per cent).

Misleading Symptoms and Delay in Treatment

Commenting on these findings, Dr. Shyam Kukreja, Director and Head, Department of Pediatrics, Max Super Specialty Hospital, Delhi, said "The Indian sub-continent has the highest typhoid disease burden. The disease spreads through the oro-faecal route and therefore, improvement in the quality of drinking water and sanitation are some solutions to control the disease. The interim solution is vaccination against typhoid, particularly in high endemic

regions. Typhoid conjugate vaccine is the most efficacious vaccine developed against typhoid, and is also effective in younger children under the age of 2 years."

Myths on causes of the disease

Survey findings also show that myths about the disease are highly prevalent. As a bacterial bloodstream infection, typhoid fever spreads through contaminated water and food, often due to lack of hygiene and access to drinkable water. Yet 57 per cent of survey respondents nationwide inaccurately attributed the cause of typhoid to a change of weather or season. Only a minority of mothers in Delhi identified close contact (18 per cent), touching contaminated surfaces (25 per cent) or eating food cooked by a typhoid patient (21 per cent) as risky behaviours that could spread typhoid.

Prevention helps lessen infections and drug resistance

Studies have shown that vaccinations can help lower the incidence of infection, but 8 per cent of the respondents in Delhi stated that they prefer to take the risk of getting a serious medical condition than to receive a vaccination for it.

Dr. Kukreja added, "Moreover, vaccination helps in reducing the disease burden but there is low level of awareness regarding the benefits of typhoid vaccine. The findings also indicate that the vast majority of people surveyed have low levels of awareness about typhoid and the specific precautions that need to be taken to protect themselves and their families. Education around the benefits of getting children vaccinated is required which in turn can play a key role in ensuring higher immunization rates to protect children from this disease."

Dr. Srirupa Das, Medical Director, Abbott India, explains, "The findings shed light on awareness levels, motivation and behaviors around typhoid vaccination in India. They suggest that increased awareness on typhoid and ways to prevent it, such as improved hygiene levels and vaccination, can contribute to lessening India's health burden due to typhoid infections. As part of our mission of helping people live healthier lives, we support educational initiatives on typhoid fever in India, especially amongst new mothers and parents in general."

Cancer

Does Marijuana lead to head and neck cancer? (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/129861.htm>

Cannabis sativa, otherwise known as marijuana, is one of the most commonly used illicit drugs in the world. Today there is a growing public support for marijuana law reform than ever before; around the globe a lot of countries are in favour of legalizing marijuana.

In India, marijuana use is deeply rooted in popular culture as well as in religious activities. With growing consumptions of weed, pot or joints (as cannabis is known popularly), what is being evaluated is what are the harms and benefits of cannabis.

The AIIMS Delhi study found that in India, there are around 7.2 millions users of marijuana and the prevalence of lifetime marijuana use is very high.

Epidemiologic evidence for an association between cannabis and head and neck cancer (HNC) is limited and conflicting. Few case reports and case series have suggested a causative role for cannabis in cancers at different sites including the lip, tongue, nasopharynx, pyriform fossa, tonsillar fossa, pharynx and larynx.

Some of the cases have been striking due to the patients young age and lack of other risk factors, suggesting that cannabis may be an early initiator of head and neck cancers. There have been 3 case-control studies of cannabis and cancers of the oral cavity and 2 case-control studies of head and neck cancer. In only one of these five case-control studies was there a statistically significant association reported between cannabis use and cancer.

There is a tangible gap within current literature in understanding the role of cannabis in causing cancer. Several studies have shown precancerous histologic and genetic abnormalities in the respiratory tracts of cannabis smokers, and carcinogenic effects of cannabis smoke have been shown in-vitro and in different in vivo animal models.

An increased risk of lung cancer with cannabis smoking has also been reported. Studies have revealed that smoking marijuana has many of the same harmful substances as tobacco, and often more of them. Among them hazardous are Benzo(a)pyrene, Benz(a)anthracene, Phenols, Vinyl chlorides, Nitrosamines, Reactive oxygen species.

To understand what is going on, we need to distinguish between two elements found in marijuana plants Tetra Hydro Cannabinol (THC) and Cannabidiol (CBD). CBD presents the benefits of marijuana, without making a person 'high', whereas, THC is the psychoactive ingredient which gives the person a high.

The carcinogenicity of delta9-tetrahydrocannabinol (THC) is not clear, but according to laboratory studies, it appears to have antitumor properties such as apoptosis as well as tumor-promoting properties such as limiting immune function and increasing reactive oxygen species.

Tar that is present in Marijuana is similar carcinogens to that of tar from tobacco cigarettes, However, each marijuana cigarette maybe more harmful than a tobacco cigarette since more tar is inhaled and retained when smoking marijuana. Smoking Marijuana involves inhaling approximately three times the amount of tar and retention of one-third more the amount of tar in the respiratory tract when compared with tobacco smoking.

More molecular alterations have been observed in bronchial mucosa specimens of marijuana smokers compared to nonsmokers. Field cancerization effect may occur on the bronchial epithelium due to marijuana smoking exposure. One study also found cancers at the oropharyngeal subsite is most associated with marijuana.

Entire aero-respiratory mucosal layer field has an increased risk of getting cancer due to this. Several case studies have shown an association of marijuana smoking with head and neck

cancers and oral lesions. However, in a cohort study with 8 years of follow-up, marijuana use was not associated with increased risks of all cancers or smoking-related cancers. Molecular mechanism activated by the presence of tetrahydrocannabinol (THC) in the bloodstream, accelerates cancer growth in patients with human papillomavirus (HPV)-positive head and neck squamous cell carcinoma.

Unlike smoking and alcohol, marijuana has not been concretely established as a risk factor for Head and Neck Cancer (HNC) and there is no validated clinically significant cut-off for marijuana frequency/use.

Within the setting of HNC, there is data to show marijuana use at a frequency of less than three times per week or at least once monthly is associated with oropharyngeal and HPV-related cancers. Patients were found to have predominantly HPV positive oropharynx cancer and more likely to be single (not married) with statistically significant less tobacco use. When the relationship was assessed for cannabis use up to 5 years before diagnosis, it was found the magnitude of the risk was increased for both head and neck cancers and lung cancer to 8 percent and 10 percent, respectively.

Dementia

Older adults who can distinctively smell roses may have lower risk of dementia, study explains (New Kerala: 2020724)

<https://www.newkerala.com/news/2020/129573.htm>

Elderly people who can smell the roses, turpentine, paint thinner, and lemons, may have a lower risk of dementia, research suggests.

In a study by UC San Francisco, researchers tracked close to 1,800 participants in their seventies for a period of up to 10 years to see if their sensory functioning correlated with the development of dementia. At the time of enrollment, all participants were dementia-free, but 328 participants (18 per cent) developed the condition over the course of the study.

Among those whose sensory levels ranked in the middle range, 141 of the 328 (19 per cent) developed dementia. This compares with 83 in the good range (12 per cent) and 104 (27 per cent) in the poor range, according to the study, which was published in *Alzheimer's and Dementia* The Journal of the Alzheimer's Association.

The UCSF researchers' focus was on the additive effects of multiple impairments in sensory function, which emerging evidence shows are a stronger indicator of declining cognition.

"Sensory impairments could be due to underlying neurodegeneration or the same disease processes as those affecting cognition, such as stroke," said first author Willa Brenowitz, Ph.D., of the UCSF Department of Psychiatry and Behavioral Sciences, and the Weill Institute for Neurosciences.

"Alternatively, sensory impairments, particularly hearing and vision, may accelerate cognitive decline, either directly impacting cognition or indirectly by increasing social isolation, poor mobility, and adverse mental health," Brenowitz added.

While multiple impairments were key to the researchers' work, the authors acknowledged that a keen sense of smell, or olfaction, has a stronger association against dementia than touch, hearing, or vision. Participants whose smell declined by 10 per cent had a 19 per cent higher chance of dementia, versus a one to three per cent increased risk for corresponding declines in vision, hearing, and touch.

"The olfactory bulb, which is critical for smell, is affected fairly early on in the course of the disease. It's thought that smell may be a preclinical indicator of dementia, while hearing and vision may have more of a role in promoting dementia," said Brenowitz.

The 1,794 participants were recruited from a random sample of Medicare-eligible adults in the Health, Aging, and Body Composition study. Cognitive testing was done at the beginning of the study and repeated every other year. Dementia was defined by testing that showed a significant drop from baseline scores, documented use of a dementia medication, or hospitalization for dementia as a primary or secondary diagnosis.

Multisensory testing was done in the third-to-fifth year and included hearing (hearing aids were not allowed), contrast-sensitivity tests for vision (glasses were permitted), touch testing in which vibrations were measured in the big toe, and smell, involving identifying distinctive odors like paint-thinner, roses, lemons, onions, and turpentine.

The researchers found that participants who remained dementia-free generally had higher cognition at enrollment and tended to have no sensory impairments. Those in the middle range tended to have multiple mild impairments or a single moderate-to-severe impairment. Participants at higher risk had multiple moderate-to-severe impairments.

"We found that with deteriorating multisensory functioning, the risk of cognitive decline increased in a dose-response manner," said senior author Kristine Yaffe, MD, of the UCSF departments of Psychiatry and Behavioral Sciences, Epidemiology and Biostatistics, and Neurology, as well as the San Francisco VA Health Care System.

"Even mild or moderate sensory impairments across multiple domains were associated with an increased risk of dementia, indicating that people with poor multisensory function are a high-risk population that could be targeted prior to dementia onset for intervention," the author added.

The 780 participants with good multisensory function were more likely to be healthier than the 499 participants with poor multisensory function, suggesting that some lifestyle habits may play a role in reducing risks for dementia.

The former group was more likely to have completed high school (85 per cent versus 72.1 per cent), had less diabetes (16.9 per cent versus 27.9 per cent), and were marginally less likely to have cardiovascular disease, high blood pressure, and stroke.

विशेष निगरानी समूह के सर्वे और जांच में प्रशासन को उम्मीद से काफी कम मामले मिल रहे

जोखिम वाले क्षेत्रों में कम संक्रमण

राहत

1

नई दिल्ली | वरिष्ठ संवाददाता

कोरोना के बढ़ते मामलों के बीच दिल्ली वालों के लिए एक अच्छी खबर है। दिल्ली में हाई रिस्क वाले क्षेत्रों में लोगों के लिए बनाए गए विशेष निगरानी समूह के सर्वे और टेस्टिंग में प्रशासन को उम्मीद से कम संक्रमण मिल रहा है।

दिल्ली सरकार की ओर से 10 जुलाई को कोरोना महामारी से लड़ने के लिए नए संशोधित दिशा-निर्देश जारी किए थे। इसके तहत हाई रिस्क वाले क्षेत्रों के लोगों की जांच करने के लिए विशेष निगरानी समूह बनाया गया था। 10 जुलाई से अभी तक दिल्ली के चार जिलों में लगभग 10 हजार लोगों की सूची तैयार की जा चुकी है। बाकी जिलों में सूची तैयार करने और जांच करने का काम तेजी से चल रहा है।

कम संक्रमण से प्रशासन खुश: दिल्ली में जिन चार जिलों में अभी सर्वे तेजी से किया गया है उनमें उत्तरी, पूर्वी, मध्य और दक्षिणी जिले शामिल हैं। इन सभी जिलों में संक्रमण की दर 3 से 5 प्रतिशत के बीच रही है। दिल्ली के सभी जिलों में अलग-अलग स्थानों पर कैंप लगाकर रैपिड एंटीजन किट की मदद से जांच की जा रही है। जिला प्रशासन के अधिकारियों का मानना है कि उन्हें लगा था कि हाई रिस्क वाले क्षेत्रों में संक्रमण अधिक मिलेगा, लेकिन अच्छी बात रही कि संक्रमण बेहद कम संख्या में लोगों को मिल रहा है।



दरियागंज स्थित हैप्पी स्कूल में बने कोविड सेंटर में गुरुवार को कोरोना जांच के लिए स्वैब नमूना एकत्र करता स्वास्थ्य कर्मचारी। • सोनू मेहता

कहां कितने मामले सामने आए

जिला	सर्वे	स्क्रीनिंग	कोविड जांच	पॉजिटिव
उत्तरी	5978	5542	5157	135
पूर्वी	988	988	399	6
मध्य	1897	1897	1317	12
दक्षिणी	891	640	43	22

विशेष निगरानी समूह और उसके काम

विशेष निगरानी समूह के तहत ड्राइवर, प्लम्बर, इलेक्ट्रीशियन, होमरेस्टक हेल्पर, मैकेनिक, जरूरी सामान की डिलीवरी वाले लोग आदि की स्क्रीनिंग और सर्विलांस से जुड़े निर्देश दिये गए हैं। समूह में रिक्शा, ऑटो, टेक्सी वाले और सामान वाहक लॉरी वाले भेड़ और डेली वर्कर्स जैसे पलम्बर, इलेक्ट्रीशियन, कारपेंटर, मैकेनिक, खाना और जरूरी सामान जैसे ग्रॉसरी, किराना, पार्सल और पोस्ट सप्लाय करने वाले लोगों को शामिल किया गया है। जिन जगहों पर स्पेशल सर्विलांस ग्रुप ज्यादा इकट्ठा होते हैं ऐसे पॉइंट्स को कवर करना अनिवार्य है। अगर समूह में कोई पॉजिटिव केस पाया जाता है तो कोविड प्रोटोकॉल के तहत उसकी देखभाल किया जाना अनिवार्य है।

कुल मरीजों में से रिकॉर्ड 85.63 प्रतिशत ठीक हुए

नई दिल्ली | वरिष्ठ संवाददाता

2

राजधानी में कुल मरीजों 127364 में से रिकॉर्ड 85.63 प्रतिशत यानी 109065 मरीज स्वस्थ होकर अपने घर लौट चुके हैं। गुरुवार को जारी आंकड़ों के अनुसार पिछले 24 घंटे में 1415 लोग स्वस्थ होकर अपने घर लौटे हैं। इसके बाद अब दिल्ली में अब 14554 एक्टिव केस रह गए हैं।

पिछले कई सप्ताह से दिल्ली में एक्टिव केस की संख्या लगातार गिरती जा रही है। दिल्ली में पिछले 24 घंटे के दौरान 1041 नए संक्रमित मरीज सामने आए हैं और जिसके बाद अब दिल्ली में संक्रमित मरीजों का कुल संख्या

24 घंटे में 26 की मौत

पिछले 24 घंटे में 26 संक्रमितों की मौत हुई है। इसके बाद दिल्ली में कोरोना से मरने वालों का कुल आंकड़ा 3745 पहुंच गया है। दिल्ली में संक्रमण से मरने वालों की प्रतिशत 2.94 रह गई है। जो देश की मृत्यु दर से काफी कम है।

127364 पहुंच गई है। जिसमें से 14554 लोगों का उपचार विभिन्न जगहों पर किया जा रहा है।

अभी तक दिल्ली में 889597 लोगों की जांच की गई है। जिसमें से गुरुवार तक 127364 लोग संक्रमित मिले हैं। एक लाख लोगों पर 46,820 लोगों की जांच की जा रही है।

घर पर इलाज कराने वालों के ठीक होने की रफ्तार में कमी

होम आइसोलेशन में इलाज करवा रहे मरीजों के स्वस्थ होने की रफ्तार धीमी हो रही है। पिछले एक सप्ताह (16-22 जुलाई) में 11951 मरीज स्वस्थ हुए थे। इनमें होम आइसोलेशन में रह रहे सिर्फ 1686 मरीज स्वस्थ हुए। जबकि, 9 से 15 जुलाई के बीच 13473 मरीज ठीक हुए थे। इनमें होम आइसोलेशन में रहने वालों की संख्या 2600 थी। स्वास्थ्य विभाग के अनुसार 22 जुलाई तक दिल्ली में 19822 बिस्तर खाली थे। यहां संक्रमितों को भर्ती किया जा सकता है। इनमें कोरोना अस्पताल में 12133, कोविड केयर सेंटर में 7292 और कोविड हेल्थ सेंटर में 397 शामिल हैं। जबकि, 22 जुलाई तक घरों में इलाज करवाने वाले 7966 मरीज थे। ऐसे में घर पर इलाज करवा रहे मरीजों से ज्यादा दिल्ली के अस्पतालों में बिस्तर खाली पड़े हैं।