

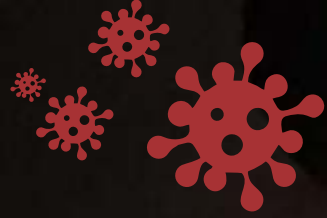
APRIL 2020



AAPDA SAMVAAD



Let's fight COVID-19 together!



The Lockdown Chronicle

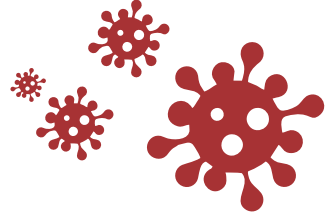
As the world grappled with the COVID-19 pandemic, India – home to 1.35 billion people – stayed indoors in response to Prime Minister Narendra Modi's appeal for a Junta Curfew on March 22. When the clock struck 5 in the evening, the country reverberated with the sound of clapping and clanging of utensils in a show of solidarity and gratitude to each and every person involved in providing the front line of defence against the coronavirus. The junta was indeed united against the virus.

It was the beginning of a long haul to contain the spread of the pandemic as was evident in series of tweets by Shri Modi cautioning people against complacency. He further urged people to follow the



instructions being issued by the central government and the state governments from time to time.

On March 24, the Prime Minister announced a complete lockdown in the country for a 21-day



period. He urged people to do just one thing in the next 21 days - Stay inside their homes.

In a bid to rally people amid the ongoing lockdown, Shri Modi asked people to switch off lights and light a diya for 9 minutes at 9 PM on April 5 to dispel the darkness created by coronavirus and to show that people are together in this fight against the pandemic. Millions across the country stepped out on their balconies, terrace and lawns to light a lamp or flash their mobile phone torch.



Addressing the nation on the last day of Lockdown 1, Shri Modi announced its extension till May 3.

The next day, Ministry of Home Affairs issued consolidated revised guidelines regarding lockdown measures to be taken by Ministries/Departments of Government of India, and State/UT Governments for containment of COVID-19 epidemic in the country. Certain additional activities, which were exempted from lockdown Measures under these, came into effect from April 20.

On May 1, the government further extended the nationwide lockdown for two weeks, till May 17. This phase, however, will be less severe than the first two phases with several relaxations applicable in all



three zones - red, orange and green - except in containment zones.

Throughout this, the Government has taken several steps along with the States/UTs for prevention, containment and management of COVID-19 through a graded, pre-emptive and proactive approach. The situation is regularly being reviewed and monitored at the highest level.

On May 3, at the cusp of the second and the third phase of lockdown, the armed forces facilitated the health workers spearheading the fight against COVID-19. In a mega effort, aerial flower shower and performances by military bands were organised as a 'thank you' note.

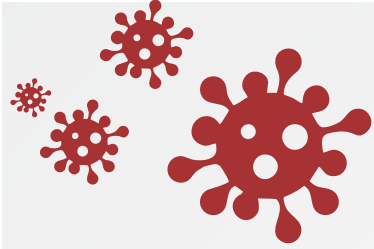
The lockdown seems to have achieved its purpose; it has slowed down the rate of doubling of COVID-19 cases in the country. Medical facilities have been ramped up; standardised protocols put in place.



During an interaction with the chief ministers through videoconferencing in mid-April, the Prime Minister spoke of 'jaan bhi, jahan bhi', a clear departure from the earlier 'jaan hai to jahan hai', thus indicating the gradual easing of the lockdown with bolstered economic activity and preparedness measures in place.

As and when that happens, let us keep working to break the chain of transmission - continue to maintain physical distancing; follow hand and respiratory hygiene; disinfect and regularly clean all frequently touched surfaces; wear a face mask whenever stepping out of the house; and download "Arogya Setu" app.

Stay Safe.



LET'S FIGHT **COVID-19** TOGETHER!



Stories of help and hope, and collective will from across the country

*Agni: Shesham Rina: Shesham,
Vyadhi: SheshamTathaivacha |
Punah: Punah: Pravardheta,
Tasmaat Shesham na Kaaryet ||*

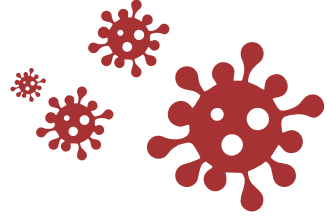
Fire, Debt and Illness, if taken lightly, grow again at the first opportunity, assuming dangerous proportions- so it is important to treat them completely!

No one disagreed with the Prime Minister when he cautioned against over-enthusiasm and consequent negligence. Speaking during his 'Mann Ki Baat' address on April 26, Shri Narendra Modi urged everyone to remain cautious. He reiterated, "Maintain a distance of two yards and keep yourself healthy!"

Responding to the COVID-19 health crisis, the Government of India announced a 21-day nationwide lockdown on March 24, and once again till May 17. It is extremely important for all of us to follow all guidelines/advisories during the lockdown period and beyond, whenever that may be, to help prevent the spread of COVID-19. These include very simple precautions such as following good



respiratory and hand hygiene at all times, and maintaining a safe distance - 6 feet - from everyone, especially those suffering from fever, cold or cough.



All of us are in this together.

As the Prime Minister rightly said, India's fight against Corona is people-driven... where every individual is eager to contribute. People have come forward to selflessly help others, the 'strength of their resolve has led to the beginning of a new transformation too in India.' From children donating their piggybanks to a nonagenarian stitching washable masks to fight COVID-19, we bring you stories of help and hope, and collective will from across the country. They will put a smile on your face and inspire you to do your bit for your country and fellow countrymen.

Mizoram granny does her bit



Pi Nghakliani has not only donated her meagre monthly pension to Mizoram Chief Minister's Relief Fund but is also stitching masks for the poor and handing them out to whoever needs it. In a tweet, Chief Minister Zoramthanga has appreciated the contribution of the nonagenarian, who stitches around 10-20 washable masks every day.

"It is a time to ask what we can do, nothing too small or too big," says Ms. Nghakliani.

Source: The New Indian Express

Differently-abled tailor stitches masks



Bhagaban Tanti, a differently-abled tailor, is providing free masks to the needy in Kolab village, Koraput district, Odisha. He stitches around 20 to 30 masks every day.

"I asked some locals to spread the word about masks being provided for free at my shop to those in need. After they did so, tribals and destitute persons have been coming to my unit to collect masks", said the tailor, who also briefs them about the importance of wearing masks.

Source: The New Indian Express

Two boys donate their piggybanks



Two boys from Tripura's Udaipur town donated their 'Laxmibhanda' (clay piggy banks) to the Chief Minister's Relief Fund to help in the fight against the coronavirus pandemic.

While Titas Debnath (5) said he was inspired by his grandmother, a gram panchayat member, Agniva Datta (11) said he got the idea after watching news about donation drives on TV.

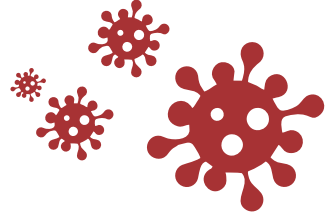
Chief Minister Biplab Kumar Deb lauded the two boys for setting a bright example.

Source: The Indian Express

Volunteers to help people manage mental stress

Thousands of persons have registered themselves as volunteers to help people manage their mental stress in the ongoing coronavirus crisis under an initiative launched by the Assam State Disaster Management Authority. The volunteers, called Pratirodhi Bondhus, will also be engaged in an exercise of contact-tracing of the COVID-19 cases in the state, officials have said.

The volunteers will be trained to support the frontline workforce in non-medical activities as per guidelines of the National Disaster Management Authority and the UNICEF for COVID-19 response.



The response has been so overwhelming that the desired number of volunteers has been reached. The application has been temporarily stopped.

Acid Attack Survivors become Covid Warriors



Soon after the inauguration of "The Orange Cafe" - a restaurant run by acid attack survivors in Varanasi - in February, it had to close shop because of the countrywide lockdown. Undaunted, five of acid attack survivors running the restaurant, Ms. Badama Devi, Ms. Sangeeta Kumari, Ms. Shanno Sonkar, Ms. Vimla Devi, and Ms. Somvati, started preparing and distributed food packets for the needy.

With about 200 food packets prepared daily, since 30th March, they have been able to distribute thousands of food packets so far and continue to do so. The beneficiaries comprise the most vulnerable and marginalized - daily wage earners, migrant labourers, rickshaw pullers, single women, old age and differently-abled people.

The Red Brigade Trust and Police administration of Durgakund, Varanasi, are extending their support for this cause. "The Orange Cafe" was set up with the help of Care Today Fund of India Today group in partnership with ActionAid to help acid attack survivors begin a new life.

Retd. Army Officer donates 15 lakh to PM-CARES

Mohinder Singh, a retired junior commissioned officer (JCO) from the Army, has donated Rs 15.11 lakh saved from his pension earnings to the PM-CARES Fund.

"The nation is battling the coronavirus crisis. Everyone needs to come forward and help the needy. I am glad that I am able to help," said the 85-year-old who had participated in the 1971 India-Pakistan war. He and his wife were applauded by the bankers and police personnel present at the bank when they handed over the cheque.

Source: Amar Ujala





The "Aarogya Setu" App

On April 2, the Government of India launched the 'AarogyaSetu' mobile app with an aim to bring about health and wellness of every Indian. Developed in public-private partnership, this app is a definite step towards India's fight against COVID-19.

The app enables people to assess themselves for their risk of catching the Corona Virus infection. It calculates such risk based on their interaction with others, using Bluetooth technology, algorithms and artificial intelligence. This can be easily installed in a smart phone.

Once installed, the app detects other devices with AarogyaSetu in the proximity of that phone. It then calculates the risk of infection based on certain parameters if the person carrying any of these devices has tested positive. The effectiveness of this app will increase as more and more people use it.

The App will help the Government take necessary timely steps for assessing the risk of spread of COVID-19 infection, and ensuring

isolation where required.

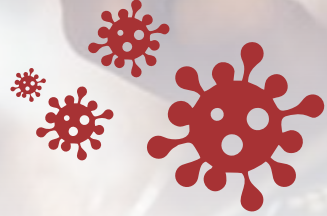
The App's design ensures privacy-first. The personal data collected by the App is encrypted using state-of-the-art technology and stays secure on the phone until it is needed for facilitating medical intervention.

Available in 11 languages, the App has a highly scalable architecture.

This app is a unique example of the nation's young talent coming together to respond to a global crisis. Urging people to download the app, Prime Minister Shri Narendra Modi called it "a fantastic use of technology to combat coronavirus." In a series of tweets, he said, "Tracks the spread of COVID-19 and notifies you if someone around you is suffering from it. Also lists help-desk numbers of various states."

If you haven't downloaded this app yet, do it now - it is your health in your hands.

मैं सुरक्षित। हम सुरक्षित। भारत सुरक्षित।



Lockdown Blues: Minding Our Minds

Lockdown is meant to prevent the spread of infection from one person to another, to protect ourselves and others. However, staying at home for such a prolonged period can be boring, restricting and saddening. Here are some tips to combat the loneliness of physical distancing and stay positive and cheerful.



Create quality time: If you share your home with others, why not make a special occasion of every day events, like dinner, or even tea time? Encourage everyone to make an effort, perhaps dress up.



Go old school: Play board games with those you are in lockdown with, or cards, chess, checkers. These help you bond more closely, and feel less alone in a way no computer game or film can.



Break bad habits: Do your phone conversations with loved ones, especially your parents/children seem repetitive? So change: why not read a book aloud over the telephone with them, a few pages at a time? You can take turns, so that in a little time, you've read an interesting book and become closer.



Gather the whole family- online: Almost every social media platform now allows you to set up conference video calls with family in far flung places. Give people notice, allow for time differences, and don't forget to support elders who may need a little tech help.



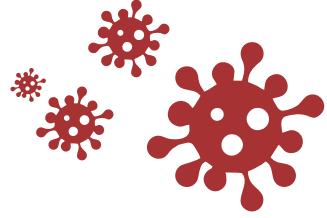
Count your friends: Seriously, make a list of all those people you have considered your friends over the years, and you'll realise there are people you have lost touch with. Reach out to them, chances are you will both be pleasantly surprised.



Volunteer: Join a group helping those who need assistance. That way, you can both feel good and make new friends.



Pets are therapy: Spend time with your own, or offer to walk a neighbour's dog. Don't be shy, your neighbours and their dogs will thank you.



Some of us are more sensitive to our environment, and are feeling anxious, panicky and even depressed. Depression is much more than sadness; it is a mental disorder. If you are experiencing five of the following symptoms of depression during the last two weeks, seek help.



Depressed,
low or irritable mood



Lowered interest and
no pleasure in activities (anhedonia)



Weight / appetite
disturbance



Sleep disturbance
(increased/decreased)



Fatigue/ loss of energy



Feeling agitated /
slowed down



Feelings of worthlessness



Poor concentration,
indecisiveness



Recurrent thoughts of
death or suicidal thoughts



Based on inputs from Dr H. S. Aditya.

Dr Aditya is a consultant neuropsychiatrist and Medical Director of Manasa Neuropsychiatric Hospital, Bangalore. He is an NHS consultant and has served as Clinical Director in a Scottish health board. He is a graduate of the Scottish Clinical Improvement Leadership program. In 2019, he was elected a Fellow of the Royal College of Psychiatrists, UK.



Boost Your Immunity

Follow these Ministry of AYUSH recommendations, based on Ayurvedic literature and scientific publications, for preventive health measures and boosting immunity with special reference to respiratory health.

Measures for Enhancing Immunity

- Drink warm water throughout the day.
- Daily practice of Yogasana, Pranayama and Meditation for at least 30 minutes.
- Spices like Haldi (Turmeric), Jeera (Cumin), Dhaniya (Coriander) and Lahsun (Garlic) recommended in cooking.

Simple Ayurvedic Procedures

- Nasal Application- Apply Sesame Oil/Coconut oil or Ghee in both the nostrils (Pratimarsh Nasya) in morning and evening.
- Oil Pulling Therapy- Take 1 table spoon Sesame or Coconut Oil in mouth. Do not drink, swish in the mouth for 2 to 3 minutes and spit it off followed by warm water rinse. This can be done once or twice a day.

Ayurvedic Immunity Enhancing Tips

- Take Chyavanprash 10gm (1tsf) in the morning. Diabetics should take sugar free Chyavanprash.
- Drink Herbal Tea/Decoction (Kadha) made from Tulsi (Basil), Dalchini (Cinnamon), Kalimirch (Black Pepper), Shunthi (Dry Ginger) and Munakka (Raisin) – once or twice a day. Add jaggery (Natural Sugar) and/or fresh Lemon Juice to your taste, if needed.
- Golden Milk- half tea spoon Haldi (Turmeric) powder in 150 ml Hot Milk – once or twice a day.

Actions During Dry Cough/Sore Throat

- Steam inhalation with fresh Pudina (Mint) leaves or Ajwain (Caraway Seeds) can be practiced once in a day.
- Lavang (Clove) powder mixed with Natural Sugar/Honey can be taken 2-3 times a day in case of cough or throat irritation.
- These measures generally treat normal dry cough and sore throat. However, it is best to consult doctors if these symptoms persist.

COVID-19: A preliminary study on efficacies of some Siddha Formulations



Dr. Sudha Seshayyan

Vice-Chancellor

The Tamilnadu Dr.M.G.R. Medical University

Medical Science, as practised by our ancestors, was based on Nature and Spirituality. The human body was looked as a ‘whole’ with representative elements of the Cosmos. Therefore, the energies and activities of the Cosmos influenced the body and its functions.

One of the ancient systems of Indian Medicine is the Siddha system which has been practised more so in the southern part of the country. The word ‘siddha’ derives from ‘siddhi’, which means perfection. Those who attain the powers of perfection are called the Siddhars. The Siddhars formed a school of great knowledge and wisdom and were originally eighteen in number, called the Moolavarga Siddhars.

The descendants of the Siddha School had comprehensive and composite knowledge of medicine, alchemy, chemistry, botany, metallurgy, physics, astronomy, astrology and many more. Their healing art included principles of metaphysics and philosophy too.

Many of the formulations that these experts gave are used for various kinds of ailments by medical personnel practising the Siddha system of medicine as well as a home remedy in almost every village of Tamil Nadu. Most of these

formulations are concoctions and decoctions of widely available plants, herbs and culinary material. The formulations are prepared in specific combinations and have focussed use.

A medicinal concoction called the Nilavembu Kudineer has been used with tangible results in the prevention and management of Dengue. Various such kudineers like Adathoda kudineer, Kandankathiri kudineer, Verkkombu kudineer have been used by the proponents of the Siddha system in the treatment of different types of Phlegmatic diseases.

In the wake of COVID-19, Siddha experts recommended the use of Kapha Sura Kudineer which is a medicinal concoction of 15 plant components - Aadathodai (*Justicia adathoda*), Akkarakaaram (*Anacyclus pyrethrum*), Karpooravalli or Omavalli (*Anisochilus carnosus*), Kadukkaai (*Terminalia chebula*), Kandu bharangi or Siru thekku (*Premna herbaceae*), Koraikkizhangu (*Cyperus rotundus*), Koshtam (*Saussurea lappa*), Seendhil (*Cocculus cordifolius*), Siru kaanchori (*Tragia involucrata*), Thippili (*Piper longum*), Chukku (*Zingiber officinale*), Nilavembu (*Andrographia paniculata*), Neer mulli (*Hygrophila spinosa*), Vattathiruppi (*Sida*

acuta) and Lavangam (*Syzygium aromaticum*).

Considering the beneficial effects that could be harnessed if the efficacies of the ancient formulations are scientifically standardised, the Tamil Nadu Dr MGR Medical University performed *in silico* analyses of some of the components of the Kapha Sura kudineer, especially with regard to their anti-microbial / anti-viral properties.

Three important proteins / protein complexes of the Sars-Cov 2 viral genome were specifically chosen for the docking studies. These are the

Spike Protein, the 3-Chymotrypsin-like cysteine protease (3CLpro) and the RNA-dependant RNA Polymerase (RdRp). Seven of the 15 components of kapha sura kudineer were chosen in the first phase of the analyses. The results of the docking analyses are tabulated in Fig. 1.

The studies revealed that almost all of the active ingredients have the capacity to bind with the chosen proteins of the virus, thereby indicating properties that could interfere with viral entry into host cells, viral replication and viral functional activity.








Plant / Herb	Botanical Name	Active Ingredient	Significant Result	
Adathoda	<i>Justicia adathoda</i>	Vasicine	Binds moderately with all 3 proteins	
Kadukkaai	<i>Terminalia chebula</i>	Arjungenine, Chebulinic Acid, Terflavin B, Ellagic Acid	All four, esp. Che. Acid, Ter B & Ella. Acid bind with high negative energy	
Karpoora valli	<i>Anisochilus carnosus</i>	Luteolin, Apigenin, Carvacrol, Beta Selinene	All of them bind with the 3 proteins – Luteolin & Apigenin bind more	
Koraikkizhangu	<i>Cyperus rotundus</i>	Cadalene, Rotundone	Both bind with all 3 proteins moderately	
Koshtam	<i>Saussurea lappa</i>	Costunolide	Binds moderately	
Seenthil	<i>Cocculus cordifolius</i>	Berberine	Berberine binds with the 3 proteins	
Thippili	<i>Piper longum</i>	Piperine, Sesamin, Caryophyllene, Terpinolene	All of them bind with the 3 proteins – Piperine & Sesamin more	

Fig. 1.

- The negative binding energy testing reveals all the bioactive components chosen are capable of interacting with all the three proteins.
- RdRp has a comparatively higher binding affinity to many of the components than the other two proteins. Terflavin B of Kadukkaai has the highest of all.
- To the Spike Protein, Terflavin B has the highest binding followed by Chebulinic acid of Kadukkaai, Sesamin of Thippili and Luteolin of Karpoora valli.
- To the proteases, Ellagic acid of Kadukkaai has the highest binding followed by Sesamin of Thippili and Chebulinic acid of Kadukkaai.
- Terflavin B and Chebulinic acid of Kadukkaai have shown high binding with all three proteins. Further studies can be done to use them as drugs.

In a bid to analyse other such widely used herbs and plants, we proceeded to do further in silico analyses of the active ingredients of other common plants. The results, as obtained are reproduced in Fig. 2.

- Again, it was noted that all the active components bound with all the three proteins.
- Again, RdRp has higher binding than the other two proteins. Galangin of Arathai has the highest binding.
- Galangin has highest binding with Spike Protein, followed by Chrysofenol of Nochi, Echitamine of Elilai paalai and Alangine of Azhinjil.
- Galangin has highest binding with Proteases, followed by Echitamine and Chrysofenol.
- Overall, Galangin and Echitamine have shown high binding with all three proteins. So, are good drug candidates.

More studies and analyses are, of course, required to qualify and quantify the efficacies and potencies of the various formulations and concoctions.

However, these in-silico studies have widened the perspectives of the healing art and have proven the sensitivities of Indian ancient wisdom. More remains to be understood and put into use.





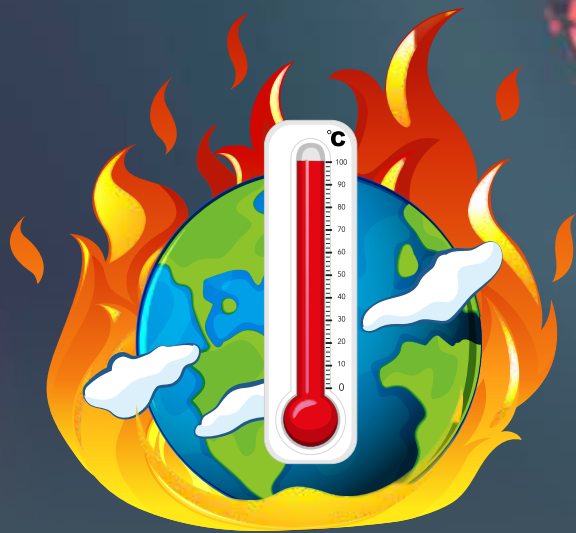
Plant / Herb	Botanical Name	Active Ingredient	Significant Result	
Nochi	Vitex negundo	Casticin, Chrysofenol D, Terpinen 4-ol, Beta Caryophyllene	All show binding with the 3 proteins though Terpinen 4-ol is lower of all	
Ezhilai paalai	Alstonia scholaris	Echitamine	Shows high binding with all 3 proteins	
Arathai	Alpinia galangal	Galangin	Shows high binding with all 3 proteins	
Azhinjil	Alangium salvifolium	Alangine	Binds with all 3, though more with Spike & RdRp	

Fig. 2.



#BeatTheHeat #COVID-19

Going out? Avoid exposure to Heat Wave

- Listen to Radio; watch TV; read Newspaper for local weather news and new #COVID-19 hotspots in and around your location of work.
- Drink sufficient water, as often as possible, even if not thirsty. As far as possible, carry your own water.
- Wear lightweight, light-coloured, loose, cotton clothes. Use protective gear – a face mask, umbrella/hat, shoes/chappals, hand sanitisers, sun glasses, and sunscreen.
- Avoid strenuous activities when the outside temperature is high.
- Avoid alcohol, tea, coffee and carbonated soft drinks, which dehydrate the body
- Avoid high protein food, spicy or oily food and do not eat stale food
- Ensure physical distancing - 6 Feet - from your co-workers/vendors/customers.
- Keep your workplaces cool; use curtains, shutters or sunshade.
- Follow good respiratory/hand hygiene practices and take related safety precautions.
- If you feel ill, see a doctor immediately.

Beat The Heat. Fight the Virus.



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