



सत्यमेव जयते
Government of India



GOVERNMENT AYURVEDA

RESEARCH CENTRE

KRS ROAD, BRINDAVAN EXTENSION, MYSORE



**MODEL PROTOCOL FOR
COVID-19 BASED ON EXPERT
COMMITTEE REPORT**

GOVT. OF KARNATAKA

DEPT. OF AYUSH



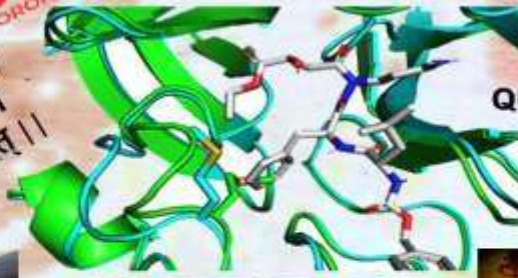
उपसर्जा इति उपसृज्यन्त इत्युपसर्जाः
प्रसङ्गाद्वात्रसंस्पर्शात्
निश्वासात्सहभोजनात् ।
सहशय्यासनाच्चापि
वस्त्रमात्यानुलेपनात् ॥

STOP
CORONA VIRUS

आयुर्वेदोऽमृतानां
COVID-19

जनपदोध्वंस

एकविंशतिरात्रेण
विषं शास्यति सर्वथा ।
21 DAYS LOCKDOWN



QUARANTINE



वाद्यस्य शब्देन हि यान्ति
नाशं विषाणि घोरान्यपि
यानि सन्ति ॥



STAY HOME
STAY SAFE



विस्राप्ति - **NOTIFICATION OF INFECTION**
पृथक्करण - **ISOLATION**
विसंक्रमण - **DISINFECTION**



तस्य मूलमधर्मः

TRADITION + TECHNOLOGY = INNOVATION

नगरी नगरस्येव रथस्येव रथीयशा । स्वशरीरस्य मेधावी कृत्येष्वतहितो भवेत् ॥ (चरक)

BE A RESPONSIBLE CITIZEN...

GOVT. AYUSH RESEARCH CENTER, MYSURU

FROM CHAIRMAN'S DESK

1.COVID 19 IS A MILD TO SEVERE RESPIRATORY ILLNESS , CAUSED BY A CORONA VIRUS (THIS VIRUS AND OTHER PATHOGENIC ORGANISMS TO BE DISCOVERED IN FUTURE ARE COVERED UNDER *BHOOTA* OF *CHARAKOKTA JWARA CHIKITSA*). IT IS TRANSMITTED BY CONTACT WITH INFECTIOUS MATERIAL (CONCEPT OF *OUPASARGIKA ROGA*).SO AS PER THE CONCEPT OF "*SANKSHEPATAH KRIYAYOGO NIDANAPARIVARJANAM*" , WE OUGHT TO MAINTAIN THE SOCIAL DISTANCE.

2.THIS DISEASE HAS *ADHARMA, PRAGNYAPARADHA, VATA-JALA DUSHTI* AS PER THE *JANPADODHWANSA* ONCEPTS. IT CAN BE TACKLED BY SUITABLE *PANCHAKARMA* (BIO-PURIFIATION), *RASAYANAS* (WHICH GIVE BLANKET-IMMUNITY), FOLLOWING PRINCIPLES OF *ACHARA RASAYANA*. THE *RASAYANAS* FOLLOWED AS PER *YUKTI DO* IMMUNO-MODULATION, BEGET *PRASHASTA RASA RAKTADI DHATUS*, GIVE *VYADHI BALA VIRODHITWA* EFFECT (RETARD THE PROGRESS OF DISEASE).*PANCHAKARMAS* IN THE MODIFIED FORM ELIMINATE UNWANTED MATERIAL FROM THE BODY. *RASAYANAS*, AS SUCH ARE INDICATED, BY CLASSICS IN 3 CONDITIONS:-

a. BEFORE THE ONSET OF THE DISEASE(FOR PREVENTION PURPOSE)

b. DURING THE DISEASE CONDITION WITH NECESSARY SUPPORT FROM ALL THE SYSTEMS OF MEDICINES USED IN SYNERGISTIC AND COMPLIMENTARY MANNER. HERE THE RESEARCHES OF B.H.U. , WHEN *CHYAVANPRASHA* WAS USED WITH ANTI TUBARCULAR DRUGS CAN BE REMEMBERED. TOXICITY OF ALLOPATHIC DRUGS IS REDUCED.PATIENTS RESISTANT TO ALLOPATHIC DRUGS RESPONDED BETTER. HERE *POTTALLI KALPAS* CAN BE SERIOUSLY THOUGHT.

c. AFTER THE RECOVERY FROM DISEASE FOR IMPROVING *AGNI, DHATU* AND *BALA* ETC.

3. IN QUARANTINE PERIOD, *DAIVA VYAPASHRAYA, YUKTI VYAPASHRAYA*, AND *SATWAVAJAYA* FOLLOWED AS PER THE PATIENT'S FAITH ARE GOOD. *AMAPACHANA* AND *RASAYANA DRAVYAS* INCREASE *VIKARA VIGHATKARA BHAVA*. A PLANNED DIET LIKE *MUDGA-AMALAKA YUSHA* WITH SUFFICIENT *DADIMA* IS GOOD. OTHER *DEEPANIYA YUSHAS, YAVAGU, DHANYAKA SIDDHA JALA* FOR *PAANA*. FOLLOWING PRINCIPLES OF *USHNODAKA PANA* AS TOLD IN *JWARA PRAKARANA* WILL AMELIORATE THE SYMPTOMS AND REDUCE THE INTENSITY OF THE DISEASE. FOR GIVING *DRAVA DRAVYAS* TO THE SUBJECT, VESSELS INDICATED IN "*TODARA SOUKHYA*" CAN BE FOLLOWED.


4. *PRANAVAHA SROTAS* IS MAINLY INVOLVED IN MANY SYMPTOMATIC PATIENTS.WHEN *PRANAVAHA SROTAS* IS INVOLVED WE SHOULD FOLLOW "*SHWASKI KRIYA*".STRICT FOLLWING OF RASAYANA RULES WILL GIVE SYMPTOMATIC RELIEF AND QUICK RESTORATION OF HEALTH.

5. TWO DECADES AGO, DURING OUTBREAK OF *ROMANTIKA* IN METAGALLI AN EXTENSION OF MYSORE," *AMRUTA VATI*" PREPARED FROM *SHUNTHI* AND *JAMBIRA RASA* HAS GIVEN GOOD RESULTS.THIS WAS APPRECIATED BY ALL THE DOCTORS . IN THE PRESENT SCENARIO ALSO *ARKA* PREPARATION/ALKALINE WATERS LIKE *KANGAN WATER* MAY BE IDEAL.

THIS IS A GLOBAL EMERGENCY."*VAIDYASAMUHO NIHSAMSHAYAKARANAM*". HERE MOST FAMOUS, "WHO-IS-WHO" IN THE FIELD OF *AYURVEDA* HAVE WORKED SYNERGISTICALLY AND HAVE COME OUT WITH MAXIMUM EFFECTIVE REMEDIES FROM REPUTED CLASSICAL TEXTS LIKE "*SIDDHA BHAIHAJYA MANIMALA*".THERE ARE EQUALLY EFFECTIVE OTHER MEDICINES WHICH HAVE BEEN EXPOUNDED IN LOGICAL MANNER.SO I HOPE AND SEE A GOLDEN-DAWN IN THE HEALTH SCENARIO BY THE COLLECTIVE EFFORTS OF *PRANABHISARA VAIDYAS*.

MY SALUTATIONS AT THE FEET OF ALL *APTAS*




Dr.ANJANEYA MURTHY N.
B.Sc.,B.S.A.M.,M.D.(AYU) F.I.C.A.(USA)

(Former Joint Director, Dept. of AYUSH,

Chairperson, COVID-19 Protocol Review Committee)

FOREWARD

As per the directions of commissioner of Ayush and inputs from the committee members based on literary review the Covid-19committee prepared a protocol

The guidelines to use the protocol

1. There is no direct ref of Covid-19in any of the classical literature hence committee members provided us inputs which relates Covid-19disease with respect to symptomatology

2. When consider the above type of literary review as there is direct ref it is not possible to name the disease but can formulate management principle based on symptomatology the help of parameters like Dosha dushya involvement of strotos samuthana and other factors

3. When we talk about curative management the committee members experience in treating disease is little and we have to think about legal aspect also hence curative management of Covid-19 can be thought of in the lines of Ayush, Govt. of India where they have formed integrated committee consists of allopathic doctors.

4. As the disease is pandemic with increasing infectivity rate, mortality rate (globally upto8/04/2020 13lacks affected by covid and 66,000 deaths have been occurred) and it is contagious and taking advantage with use of Ayurvedic medicine is not ethical research point of view

5. As there is no direct ref in the classics, direct intervention to the patient from Ayurvedic drug is not advisable, without clinical data based on the ethical grounds. Hence cell line study, preclinical study can be conducted followed by clinical study research mandate can be given.

6. From the experience of 13 lac affected Covid-19subjects allied science management broadly grouped under 3 categories

A. Critically ill patients wherein in ventilator support is a must to tackle breathing difficulty, even with sophisticated ventilator, it is not possible to give treatment.

Hence it is an alarming situation with high death rate here Ayurveda management is highly debatable, so there is little scope for Ayurvedic

management, even though it can be tried with a integrated approach for which policy decision should be taken needed.

B. In severe cases where oxygen support is needed in ICU setup more than about 10% of cases come under this category. Here also the Ayush intervention approach has little value hence an integrated approach with Ayush drugs can be thought off with suitable integrated policy.

C. In mild stages where Covid-19 is positive and chances of going to critically and sever is more than 16%, at this stage Ayush intervention can be thought of with a integrated approach as per govt of India dept of Ayush guidelines. This is the area where we can try our medicine with integrated approach or can try sole Ayurvedic approach with suitable legally protections.

7. Preventive strategy.

This is one of the important areas for Ayurveda intervention, wherein in if we can break the chain of spreading of infection, we can win the war on covid19, with simple measurable practical acceptable and validated protocol, so the committee decided to give more importance to this strategy wherein control of infection can be achieved with high validity and we can easily control stage 3 of the infection (spreading of the infection in the community) . This strategy is the need of hour.

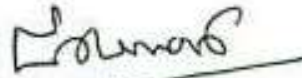
When we think of the strategy at four levels, it can be achieved with different protocols.

Level 1: preventive strategy for whole population at the lockdown period and post lockdown to prevent stage 3 and stage4.

Level 2: high level of preventive strategy is advised for regions of hotspot and buffer zone where chances of spread of infection are high.

Level 3: preventive strategy for quarantine subjects, the suspected subjects are quarantined to stop the spreading of infection in such group of subjects chances of getting covid 19 infections is 3-4%, in such subject's immune boosting drugs and disease preventing drugs and symptomatic measures with proper diet management in holistic lines, with a concept of food in the form of drugs combining the suitable yoga techniques can be safely adapted.

Level 4: in this is level our aim is to control re-infection of covid 19 in the infected subjects, studies have shown re-emergence of covid 19 in Wuhan to control this s special type of preventive strategies designed for the subjects who are already infected with covid19 and relieved of disease has to be adopted for them measures to control resurgent covid 19 with special diet yoga and other techniques like dhyana chanting of mantras(daivyapashyaya chikithsa).



Dr. Lakshmi Narayana Shenoy

Asst. Director, Govt. Ayurveda Research Centre.

Mysuru

MODEL PROTOCOL

Introduction

Corona virus disease (COVID -19) is an infectious disease caused by Severe Acute Respiratory Syndrome Corona virus 2 (SARS-COV-2). Corona viruses are a large family of viruses that causes illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not previously been identified in humans. Coronaviruses are zoonotic, meaning they are transmitted between animals and people.

Common symptoms include fever, cough and shortness of breath. Other symptoms may include muscle pain, sputum production, and diarrhoea, sore throat, loss of smell and abdominal pain. While the majority of cases are resulting in mild symptoms, some progress to pneumonia and multiple organ failure.

Lungs are the organs most affected by COVID -19, because the virus access host cells via the enzyme ACE-2, which is most abundant in the type II alveolar cells of the lungs. The virus also affects gastrointestinal organs.

According to classics of Ayurveda the origin of such kinds of diseases is by Adharma (Sinful Acts) resulted in deviation in codes and conducts with respect to physical, psychological and social activities. This resulted in unusual changes in the maintenance of equilibrium.

Though the reason for outbreak of novel corona virus 2 resulting in COVID – 19 is unknown, the presentation starts with fever due to impairment in Dhatu, Agni and Vata.

As there is no direct reference in Ayurveda for COVID-19 one has to understand the disease through protocol given by the Acharyas for such other diseases through Anukta Vyadhi as is said in charaka samhita, विकारनामाकुशलो न जिहीयात् कदाचन | न हि सर्वविकाराणां नामतोऽस्ति ध्रुवा स्थितिः॥ स एव कुपितोदोषः समुत्थानविशेषतः स्थानान्तरगतश्चैव जनयत्यामयान् बहून् ॥ तस्माद्विकारप्रकृतीरधिष्ठानान्तराणि च | समुत्थानविशेषांश्च बुद्ध्वा कर्म समाचरेत् ॥ यो ह्येतल्लितयं ज्ञात्वा कर्माण्यारभते भिषक् ज्ञानपूर्वं यथान्यायं स कर्मसु न मुह्यति॥ (Cha Su 18/44-47)

Limitations of the protocol

This protocol is developed based upon literary review done by committee members, Ayurvedic preceptors and project is prepared based on the inputs of committee members

There is no clinical evidence for this protocol, however care has been taken to a clinical approach according to Ayurvedic clinical practice and justification is given for each input in the form of research update.

Most of the preparations are classical only; more importance is given to preventive aspect then curative because data's are not available with us to prove the curative protocol.

The protocol is designed in such a way that it should be user friendly with the least or no side effects, still the preventive aspects are easy to practice and efficacious.

This protocol does not contain a tailor made prescription for covi19 because Ayurveda advocates prescriptions by the treating physicians based on his yukthi, so to promote this concept a great pool of information bank has been created by collective and untiring efforts from the length and breadth of our country by tele conferencing meeting. And stake holders are requested to act like hamsa khseera nyaya.

Protocol I designed according to trisutra Ayurveda concept based on the literary review from the experts more importance is given to the preventive aspects. Curative aspects are based on the applications of the literary input and experience of the honourable competent members in covid 19 like diseases in their clinical practice.

Most of the interventions are based on classical literature however some of them are experiences of experts for which there is no ref in the bibliography...

The protocol is developed in such way that it will be a hand book of reference for covid 19 in all future of research activities and designed to cater the need of PG and PhD scholars.

As it is a public document based on literary review any one can add their inputs to the knowledge bank and can give clinical validity with the help of inputs prescribed in the text book.

Nidana panchaka

Nidana:

'Nidana' – the causative factors of diseases, have been classified in various ways in texts.

Among them, the one which classifies nidana into Sadharana and Asadharana¹ is relevant in this context. The current pandemic and its causative agent comes under the purview of Asadharanahetu as it causes similar symptomatology in a large group of population through vayu dushti.

Diseases in Ayurveda are also broadly classified into – Nija and Agantuja. Covid-19 may be considered as an Agantuja vikara.

While explaining Agantuja jwara, Charaka classifies it into four types. Among them, the one which is caused by Vishavruksha and Anilasparsa is Abhishangaja jwara². Further, 'bhutabhishanga' has been identified as one among the causes of Vishamajvara along with other nija karana³. Here, the word 'bhuta' can be understood as that which is not visible or microscopic, and thus all pathological microorganisms may be included under the purview of this term.

The term 'Abhishanga' is interpreted as abhisparsha, alingana or being in contact with. Thus, Abhishangaja vyadhi can be understood as a condition which is caused by contact with micro-organisms. Since the present condition is mainly characterized by fever, it can be understood as 'Abhishangaja Jwara'⁴.

In the context of Kushta in nidanasthana⁵, Acharya Sushruta explains the concept of Oupasargika roga which are characterized by sankramana i.e., spread from person to person. The modes of spread of such diseases have been enlisted as- Prasanga – direct contact as in sexual contact, Gatrasamsparsha – touch, Nishwasa – Inhalation of infected air or air with infected droplets, Sahabhjana – eating foods together, Saha asana shayana – sitting or sleeping together, Sahavastra mala anulepana – using same clothes and other materials. These concepts are very much relevant even today and modern texts of communicable disease epidemiology also describe similar modes of disease transmission. All these modes of transmission described may be broadly classified into two as explained in modern texts as- direct mode of spread and by respiratory route through droplets. The diseases which are mentioned as Oupasargika by Sushruta are Jwara, Kushta, Shosha and Netrabhishyanda. COVID-19 can be understood as a type of Jwara, fever being the predominant clinical manifestation.

Acharya Charaka discusses various aspects of epidemics and pandemics in a whole chapter in vimanasthana entitled 'Janapadodhwamsa'⁶, where four factors are held responsible for such diseases, one among which is 'Vayu'. Droplet spread through air is one of the important modes of transmission of all the contagious diseases, as in this disease also.

Lakshana:

Identification of the suitable pathological model along with the associated features is important.

While referring to the details available from the places where the Covid-19 has affected maximum, and especially from China, almost 40% of the cases were very mild with no symptoms of viral pneumonia, another 40% of the cases were having moderate symptoms with mild pneumonia, 15% were having very severe symptoms and 5% were critical, at presentation. Generally 98% patients were having mild to moderate fever (*jwaram*), 76% were having cough (*kaasam*) and 44% were having myalgia (*anga mardam*) and fatigue (*tandra*).

Among those developed pneumonia, 99% were having fever (*Jwaram*), 70% were having fatigue (*tandra*), 59% dry cough (*vaatika kaasam*), 40% having anorexia (*aruci*), 35% having myalgia (*anga mardam*), 31% having dyspnoea (*s'waasam*) and 27% were having sputum production (*kaphaja kaasam*)

In another report, the main clinical features are fever (*jwaram*), cough (*kaasam*), shortness of breath (*Shwasa*). If the situation aggravated, there will be labored breathing (*Shrama Shwasa*), persistent pain or pressure in the chest (*uro vedana*), mental confusion (*moham*), inability to arouse (*samja naasham*), cyanosis (*aasya shyavata*) diarrhoea (*atisaaram*) and nausea (*Chardi*) are very minimal during the initial presentation

Many patients reported with fever, dry cough and minimal respiratory distress. Later the fever subsided, but the respiratory distress became severe and many died.

Considering all these factors, Covid-19 illness can be considered as a *Sannipata jwara* with predominance of *Kapha* and *Pitta*. Pneumonia which happens as a sequel of the progression of the disease can be considered as *Upadrava*.

Samprapti vivechana

1. Dosha – Vata Kapha pradhana along with Pitta.
Usually begins as ekadoshaja, then involvement of other doshas depending on dehabala, agnibala, chetobala.
2. Dhatu – Rasa at first, later all dhatus, even Ojas.
Involvement of dushyas predict the outcome of the disease. If all 7 dhatu, upadhatu and mala are involved, then the prognosis becomes difficult.
3. Srotas – Rasa, Prana, Maha srotas at first, later others also.
Major involvement at first will be in Rasa vaha srotas. As doshas undergo sarva Shareera sanchara, they get confined to Pranavaha srotas and produce majority of the symptoms there.
4. Sroto dushti – Sanga, Vimargagamana
5. Agni – Agni mandyata- at first Jatharagni, later dhatwagni
6. Ama – Jatharagnimandya janya, Later dhatwagnimandya janya aama
7. Udbhava sthana – Amashaya
8. Sanchara sthana – Sarva Shareera
9. Vyakta sthana – Kantha, Uras, Pranavaha srotas
10. Adhithana – Pranavaha srotas
11. Rogamarga – Abhyantara – in early stages, Trividha – in advanced stages.
12. Roga swabhava – Mrudu or Daruna depending on Rogibala.
13. Sadhyaasadhyata – Sadhya in most, Kruchra in few, Asadhya in very few.

Upadrava

Once the pathology begins, based on the host pathogen interaction, the disease progresses in the host and when not controlled it usually ends up in Upadrava.

Jwara being a pitta pradhana vyadhi, when not treated properly or when neglected or due to alparogibala and due to pathogenic influence, the disease may progress into Pitta pradhana sannipata vyadhi and manifests complications like Marmabhighata as described in Abhyantaravisarpa i.e, Sepsis, multiple organ failure, all of which present with high grade continuous fever.

In case of Kapha pradhana samprapti, its sannipatatwa might cause major involvement of Pranavaha srotas and its organs which might present with complications such as ARDS, Fibrosis, Acute cardiac injury, etc. as described in Asadhya variety of Shwasa and Hikka roga.

Management – Preventive

Not tested positive, High risk, or Low risk under Quarantine-

Rasayana modalities are the basic line of treatment in the preventive management of Janapadoshwamsa or Pandemic disorders. Here both Achararasayana and Aushadha Rasayana have important roles. Rasayana drugs improves the host defence system by its Urjaskara properties i.e; by enhancing dehabala.

Both asymptomatic cases and unexposed cases also require Swasthasya urjaskara Chikitsa.

Non pharmacological methods which may be followed -

1. Achararasayana:

Regular practice of personal, social ethics of general health to promote the physical, mental, emotional and Social health. It includes practice of general guidelines of daily and seasonal dietetics and balanced diet as per individual constitution and specific guidelines of Janapadodhwamsa.

2. Sthana parityaga – As mentioned in classics, if the cases are found to be high in number in a particular place or region, to avoid further spread, it is better to leave that place and go to safer places which are supposedly free from infection. This method is known to stop the spread of infection.

3. Other non-pharmacological methods may include

- Maintaining safe social distancing
- Keeping oneself warm
- Avoiding contact with infected persons
- Avoiding travel
- Avoiding eating viruddha, sheeta, asatmya ahara
- Gargling with warm salt water, Triphala kashaya, Yashtimadhu kashaya added with Tankana
- Steam inhalation

1. Diet & Yoga during Quarantine

Dinacarya

1. Waking up at 5.30 AM –

Bowel & Bladder clearance

Brushing

Asana & Pranayama Practice: Loosening exercises

Surya Namaskara 6 rounds, Tādāsana, Vriksāsana, Pāda-Hastāsana, Ardha Cakrāsana, Trikonāsana, Bhadrāsana, Vajrāsana, Ardha Ustrāsana, Ustrāsana, Śāsakāsana, Uttāna Mandūkāsana, Vakraśana, Makarāsana, Bhujangāsana, Śalabhāsana, Setubandhāsana, Uttāna Pādāsana, Ardha Halāsana, Pavana Muktāsana Śavāsana

Nadīśodhana or Anuloma viloma prānāyāma, Bhastrika

Morning 7 AM: Kashaya Prepared from Dhanya+ Jeeraka 100ml

Bath & Prayer: 8.30 AM

Sankalpa during prayer: I commit myself to remain in a balanced state of mind all the time. It is in this state that my development reaches its greatest possibility. I commit to do my duty to self, family, at work, to society, and to the world, for the promotion of health and harmony.

Breakfast: 9.00 AM for breakfast any easily digestible rice items can be given for example, Akki Rave Uppittu, Pongal, Rice Ganji etc.

For hydrating the body instead of plain water seasonal drinks like Shunthi jala, Vijayasara jala, Musta jala, Madhoodaka, Dhanyaka jala, Sariva jala etc. depending on the seasonal variation can be selected.

After breakfast: News paper reading/watching TV/ Book reading/ Novel reading/ Watching Motivational talks/ Listening to spiritual discourses/ Movies or any other individual activity can be planned.

Lunch: 1.30 to 2.00 PM Depending on the dietary habits of the individual easily digestible vegetarian diet can be considered.

Post lunch: **No day sleep** if he is young. Aged persons & Children are allowed on the need basis.

The activities which are planned in before lunch session can be advocated here with modification on need basis.

Evening 5.00 to 7.00 PM A session of Dhyana can be advised, (Audio command dhyana are available in the market/internet/online)

Dinner 8.30 PM: Depending on the dietary habits of the individual easily light vegetarian diet can be considered.

Post Dinner 9.00 to 10.00 PM: Spiritual reading

Going to bed at 10.00 PM

Sadvritta(Good Conducts) to be practiced during quarantine:

Person should be; Truthful, free from anger, avoidance of alcohol & sex, do not indulging in violence & exhaustion, practicing some sacred chants, cleanliness, giving respect to elders, peaceful, pleasing in their speech, compassionate, free from ego, no narrow-mindedness.

Practicing of Sadvritta will help the stimulation of Psycho-neuro-immunological response of the body, their by protecting the individual against the chance of getting infection.

Grains & Pulses that can be used in diet: Rice, Wheat, Barley, Jowar, Ragi, Greengram dal, Tuar dal. (selection of the grain & pulses should be dependent on the habits & habitat of the individual)

Vegetables: Ridge gourd, Snake gourd, Bottle gourd, Bitter gourd, Beans, Carrot, Onion

Greens: Coriander, Pudeena and other leafy vegetables

Note: All Vegetables & greens should be baked with sufficient quantity of water, decant the water & then fry the vegetables in Ghee or oil before adding it to diet.

Dairy products: Milk in diluted form (1:1 dilution), Butter & Ghee in appropriate quantity, Properly churned butter milk can be used.

Fruits: Pomegranate, Papaya, Citrus fruits in limited quantity.

To be avoided: Black gram, Bengal gram, All types of sprouts, All types of tubers, Green chilli, Tomato, Oil fried items, Curds, Non Veg foods, Fish, Egg

Other beneficial practices include:

Gandoosha / Kavala (mouth rinsing and gargling)

With warm Salt water / Turmeric water / Triphala Kashaya / Yashti Kashaya - Need Basis

Dhoomapaana (Medicated smoke inhalation / fumigation):

Haridra +/- Vacha, Lashuna - Need Basis

Steam inhalation:

Dashamoola Kashaya / Tulasi boiled water - Need Basis

Ajasrika Rasayana mentined by Dalhana is must.

For front line personnel like, Doctors, paramedical staff, Ambulance drivers, Police and whoever is in direct contact with quarantined and infected individuals.

The procedures listed below can be followed on need basis. The doctors etc. who are expected to be quarantined as per rules can follow these during quarantine period

- Achara rasayana
- Nutritious diet at the place of work
- 20 minutes meditation during their duty period(on shift basis)
- Stress relaxing procedures at home
- Rasayanas like Agasthya hareetaki at their place of work
- Pratimarsha nasya before leaving for work as per SOP
- Application of Narikelanjana(Collyrium) as per SOP
- Kavala after returning home as per SOP

- Padabhyanga before bed
- Usha pana as per SOP
- Taking takra after food
- Taking milk before bed
- Avoid physical, mental & Verbal stress
- No Coffee/Tea, smoking, tobacco chewing, Alcohol, sex
- Follow the videos related to personal protection released by GOI
- Proper shelter & hot water for drinking to police at their place of work

Preventive measures in HOT SPOT areas

Apart from the above mentioned, following steps can be adopted

- Shadanga paneeya/Dhanyaka siddha jala/Musta jala for drinking purpose based on prakruti
- Tulasi in front of each house
- Chanting the mantras based on belief systems
- Agnihotra as per SOP
- Fumigation with shweta sarshapa
- Oushadha siddha jala for snana
- Personal hygiene
- Domicile environment hygiene
- Brahmi as vegetable in the diet
- No addiction to mobile & mass media
- Positive mental confirmatory thoughts
- Playing indoor games with family members
- Increasing family bonding
- Adequate night sleep for 6-8 hrs
- Be relaxed; covid 19 is curable.
- Fan of medicated leaves like neem
- Applying medicated paste made out of neem bark & sandal wood

Preventive measures during resurgence

- Follow all the above & in addition pay attention to agni, bala
- Laghu deepaneeya ahara
- Mudgamalki yusha with pomegranate seeds
- Purana lohita shali
- Avoiding abhishyandi & guru ahara
- No adhyashana, vishamashana
- No day sleep & heavy physical activity after food
- Get trained for yogasans & doing it to the extent of the half strength
- Avoid sedentary life

- Be physically active
- Continue physical distancing
- As far as possible use seasonal fruits & vegetables

Management – Curative

There are 3 strategies for curative management. As this is a model protocol the curative management can be considered with the acceptance of policy makers and also within the legal frame work. As the disease is pandemic and under surveillance scanner, policy decision is a must for curative management.

For the management purpose disease can be broadly classified into 3 categories

1. **Critical illness** where in ventilator interventions is must, which have fatal complications, it may be considered as asadhya.(1-2% of the cases)
2. **Severe cases** need ICU set up with Oxygen therapy, here integrated approach may be tried with suitable policy. Dosham, Dooshyam, Balam, Kalam, Analam, Prakrutim, Vayah, Satvam, Satmyam, Aharam, Avastha should be considered and the drugs like jwaraghna, shvasahara pranavasroto dushti hara, ojobardhaka, balya rasayan drugs may be tried and the list of drugs with dosage & anupana is given in the compendium prepared by expert committee for COVID 19 Dept. of Ayush. GOK.
3. **Mild cases:** The management, it can be considered in two ways. One with integrated approach & other with Ayurveda classical intervention. A policy should be formulated for the management. Principle of management for both is elaborately discussed in the compendium prepared by expert committee for COVID 19 Dept. of Ayush. GOK*.

To conclude, among the ocean of herbs following are easily available, safe & without complications. They give quick results. All these are kitchen remedies with wonder full results. They can be easily accepted by the patient's community & doctors community

1. Single herbs like Shunthi kashaya with madhu in peenasa kasa shvasa for quick effect
2. Pippali with madhu in obese patients, when shwasa kasa & jwara are present. This improves medha & agni.
3. Haridra powder with milk cream in dry cough
4. Tulsi patra swarasa with madhu in Jwara
5. Lashuna kalka in jwara

Advise to general public:

General guidelines issued by Dept. of AYUSH can be followed



Government of Karnataka



Department of AYUSH

AYURVEDA'S IMMUNITY BOOSTING MEASURES FOR SELF CARE

- 1 **Drink warm water throughout the day.**
- 2 **Daily practice of Yogasana, Pranayama and meditation for at least 30 minutes as advised by Ministry of AYUSH (#YOGAatHome #StayHome #StaySafe)**
- 3 **Haldi (Turmeric), Jeera (Cumin), Dhaniya (Coriander) and Lahsun (Garlic) is recommended in cooking.**





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Simple Ayurvedic Procedures



1. **Nasal application** - Apply sesame oil / coconut oil or ghee in both the nostrils (Pratimarsh Nasya) in morning and evening.



2. **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.

Simple Ayurvedic Procedures



1. Steam inhalation with fresh Pudina (Mint) leaves or Ajwain (Caraway seeds) can be practiced once in a day.



2. Lavanga (Clove) powder mixed with natural sugar / honey can be taken 2-3 times a day in case of cough or throat irritation.



3. These measures generally treat normal dry cough and sore throat. However, it is best to consult doctors if these symptoms persist.



Government of Karnataka



Department of AYUSH

AYURVEDA'S IMMUNITY BOOSTING MEASURES FOR SELF CARE

1



Take Chyavanprash 10 gm (1 tsf) in the morning

2



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) or fresh lemon juice to your taste, if needed)

3



Golden Milk - Half teaspoon Haldi (turmeric) powder in 150 ml hot milk, once or twice a day

WHO Guidelines for Basic protective measures against the new coronavirus

Wash your hands frequently

Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.

Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.

Maintain social distancing

Maintain at least 1 metre (3 feet) distance between yourself and anyone who is coughing or sneezing.

Why? When someone coughs or sneezes they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.

Avoid touching eyes, nose and mouth

Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and can make you sick.

Practice respiratory hygiene

Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately.

Why? Droplets spread virus. By following good respiratory hygiene you protect the people around you from viruses such as cold, flu and COVID-19.

If you have fever, cough and difficulty breathing, seek medical care early

Stay home if you feel unwell. If you have a fever, cough and difficulty breathing, seek medical attention and call in advance. Follow the directions of your local health authority.

Why? National and local authorities will have the most up to date information on the situation in your area. Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also protect you and help prevent spread of viruses and other infections.

Stay informed and follow advice given by your healthcare provider

Stay informed on the latest developments about COVID-19. Follow advice given by your healthcare provider, your national and local public health authority or your employer on how to protect yourself and others from COVID-19.

Why? National and local authorities will have the most up to date information on whether COVID-19 is spreading in your area. They are best placed to advise on what people in your area should be doing to protect themselves.

- Follow the guidance outlined above.
- Stay at home if you begin to feel unwell, even with mild symptoms such as headache and slight runny nose, until you recover. **Why?** Avoiding contact with others and visits to medical facilities will allow these facilities to operate more effectively and help protect you and others from possible COVID-19 and other viruses.
- If you develop fever, cough and difficulty breathing, seek medical advice promptly as this may be due to a respiratory infection or other serious condition. Call in advance and tell your provider of any recent travel or contact with travelers. **Why?** Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also help to prevent possible spread of COVID-19 and other viruses.

*There s no clinical trial data for COVID 19 hence list of drug s along with the treatment principle is given in the compendium.