

AYURVEDIC PERSPECTIVE TOWARDS THE PROPHYLAXIS OF COVID-19

Hemlata Soni^{*1} and Kartar Singh Bansal²

¹Lecturar, Department of Kayachikitsa, Guru Nanak Ayurvedic Medical College and Hospital, Sri Muktsar Sahib, Punjab, India.

²Lecturar, Department of Kayachikitsa, Gangasheel Ayurvedic Medical College & Hospital in Bareilly, Uttar Pradesh, India.

Article Received on
14 June 2020,

Revised on 04 July 2020,
Accepted on 24 July 2020

DOI: 10.20959/wjpr20208-18332

*Corresponding Author

Dr. Hemlata Soni

Lecturar, Department of
Kayachikitsa, Guru Nanak
Ayurvedic Medical College
and Hospital, Sri Muktsar
Sahib, Punjab, India.

ABSTRACT

The COVID-19 pandemic in India is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. India currently has the largest number of confirmed cases in Asia. India's case fatality rate is relatively low at 2.8%, against the global 4.7%, as of 6 July. The most common symptoms of COVID-19 are fever, tiredness and dry cough. Some patients may have sore throat, diarrhea, runny nose and nasal congestion. Some people become infected but don't develop any symptoms. About 80% recover from the disease without needing

special treatment. Around 1 out of every 6 people who gets COVID-19 become seriously ill and develop difficulty in breathing. Older people, and those with underlying medical problems like high blood pressure, heart problem or diabetes, are most likely develop serious illness. There is no vaccine and no specific antiviral medicine to prevent or treat COVID-19. Ayurveda recommends measures for a healthy lifestyle rather than the mere prescription of medicine. *Charaka Samhita* describes epidemic management and define immunity as the ability to prevent disease. The intervention include *Panchakarma* therapy (therapeutic cleaning procedure) and *Rasayana* therapy (immunomodulators).

KEYWORDS: COVID-19, *Rasayana*, *Panchkarma*, Yoga therapy.

INTRODUCTION

Covid-19 is new pandemic diseases caused by virus known as Corona virus known as SARS-CoV-2, previously known as 2019 novel corona virus. The first case of COVID-19 in India, which originated from Wuhan, China, was reported on 30 January 2020.^[1] India currently has the largest number of confirmed cases in Asia. India's case fatality rate is relatively low at 2.8%, against the global 4.7%, as of 6 July. Although COVID-19 originating from animals but it affects human and it is primarily transmitted in a similar way to the common cold, via contact with droplets of infected individual's upper respiratory tract secretion, e.g. sneezing or coughing. The most common symptoms of COVID-19 are fever, tiredness and dry cough. Some patients may have sore throat, diarrhea, runny nose and nasal congestion. Some people become infected but don't develop any symptoms. About 80% recover from the disease without needing special treatment. Around 1 out of every 6 people who gets COVID-19 become seriously ill and develop difficulty in breathing. Older people, and those with underlying medical problems like high blood pressure, heart problem or diabetes, are most likely develop serious illness.¹ There is no vaccine and no specific antiviral medicine to prevent or treat COVID-19. The current prophylactic measures are insufficient, and suggested option such as hydroxychloroquine are still under investigation.^[2]

The infectious disease in Ayurveda is mentioned under *Aupasargika Vyadhi* and its Epidemiology is elaborated under the heading of *Janapadodhwamsa*, where community of different *Ayu*, *Bala*, *Prakruti*, *Ahara*, *Desha* and *Satmya* are affected, diseased or died suddenly. Acharya *Susrutha* give especial attention to the infectious disease and believe that diseases like; *Kustha*, *Jwara*, *Shosha* and *Netrabhisyand* etc. are *Sankramak* (contagious) disease and spreads by contaminated objects like body contact (*Gatra sansparshat*), inhalation (*Nishwashat*), sharing of beds (*Saha sayyasanat*), sharing the foods (*Saha bhojanat*) and sharing the flowers/ ornaments/ clothes etc (*Maalya*).^[3] *Charaka* also emphasized role of *Vayu*, *Udak*, *Desha* and *Kala* towards the *Janapadodhwansha* (epidemics). Vitiated *Doshas* & *Dhatu*s along with decreased level of *Bala* make person more susceptible to such diseases. Ayurveda further describe that the immunity of individual plays major role towards the prevalence of *Sankramak* disease. Vitiated *doshas* along with microbial invasion leads depletion of strength of *Dhatu*s which further affect immunity and pathological progression of infectious disease increases badly.

Ayurveda recommends measures for a healthy lifestyle rather than the mere prescription of medicine. *Charaka Samhita* describes epidemic management and define immunity as the ability to prevent disease. The intervention include *Panchakarma* therapy (therapeutic cleaning procedure) and *Rasayana* therapy (immunomodulators). Local and systemic intervention to boost the immune system have been advocated to manage respiratory illness.

Local therapeutic management

The eyes, nose and mouth are the main portals of entry of droplets carrying the SARS-COV-2. Prior to the final assault in the lungs, the virus gains access to the throat region and stays for some hours. Ayurveda classics mention several interventions that may help to improve the immunologic response of the mucus membranes. Thus the process of the virus transmission into the lung is reduced such as:

1. **Nasya:-** As the term '*Nasya*' indicates, this is a nasal practice. In this practice, Ayurvedic oil is instilled through the nostrils. It is a therapy for the nose, sinuses, throat and head. It helps to cleanse and strengthen the nasal pathway and increase the ease of breathing.^[4] Apply *Anu Tail*, sesame oil, coconut oil or Ghee in both the nostrils (Pratimarsh Nasya) in morning and evening.
2. **Gandusha (Oil pulling therapy):-** *Gandusha* means oil pulling or retention of Ayurvedic oils/decoction in the oral cavity. Take 1 table spoon medicated oil in mouth. Do not drink, Swish in the mouth for 2 to 3 minutes until you feel your mucous membranes are well absorbed with the oil and spit it off followed by warm water rinse. This can be done once or twice a day. Traditionally, sesame and coconut oils are used for *Gandusha*.^[5] We can also add ingredients like *Neem* oil, turmeric, clove oil, etc. for their effective and antimicrobial properties.^[6] Besides providing comprehensive oral and dental health, *Gandusha* cleanses the ear, nasal and throat passages. It prevents dryness in the throat and promotes overall sinus health while helping us breathe freely.
3. **Steam inhalation^[7]:** During dry cough and sore throat steam inhalation with fresh *Pudina* (Mint) leaves, *Ajwain* (Caraway seeds), Eucalyptus oil, Cinnamon or *Tulsi* leaves can be practiced once in a day. Inhaling steam is one of the major treatments for respiratory complications and is recommended for conditions with common cold, flu, bronchitis, sinusitis, asthma, and allergies. Steam inhalation moistens dry air passages and mucus is loosened and eliminated easier by coughing or by blowing the nose.

4. **Administrative hot water:** According to *Aacharya Charaka* if hot water is taken, this results in a downward movement of *Vata* (flatus), stimulation of *Agni* (digestive enzyme), drying up of *kapha* and easy digestion of *Ama*. The presence of *Ama* is linked to increased susceptibility to infection.^[8] Boiled water requires less time and energy to hydrate our organs and tissues, helping our body function at maximum capacity and with optimal health.
5. **Drink herbal tea/decoction (*Kadha*):** It 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 improve the taste, if needed.
6. **Golden Milk:** Half tea spoon *Haldi* (turmeric) powder in 150 ml hot milk - once or twice a day. The golden spice turmeric is known for its anti-oxidant and anti-inflammatory properties. Curcumin, the compound present in turmeric is a very potent agent and aids in healing of wounds and infections. This is the reason, it is often suggested to have turmeric milk.^[9]

Systemic therapeutic management

If we have a healthy immune system, our body can safeguard you from any disease, even the novel coronavirus or COVID-19. While as of now, there is neither any vaccine available nor proven home remedy to protect you from the COVID-19, there are some Ayurvedic measures including healthy diet, *Rasayana* therapy, *Panchakarma* Therapy, *Dhupana Karma* and Yoga therapy improving lung health and immune system.

1. **Rasayana therapy:** *Rasayana* comes under *Swasthya Urjaskara Chikitsa* (rejuvenating therapy). As it act at the level of *Dhatu*s (tissues) in a *Swastha* person administration of *Rasayana Aushadies* proves to be very effective in stimulation of immunity and prevention of any diseases. Due to its effects on improving immunity, *Rasayana* therapy may have direct relevance to the prophylaxis of SARS-COV-2 infection.

Table no. 1: Rasayana aushad.

S. no.	Category	Drugs
1.	Single Drugs	<i>Amalaki, Ashwagandha, Shatavari, Guduchi, Tulasi, Yashtimadhu, Nimba, Bhumyamalaki, Bhringaraja, Rasona, Pippali, Vidari, Kirata Tikta, Shilajatu.</i>
2.	Compound Preparations	<i>Chyawanprash Avaleha: 10 - 12 gm</i> <i>Drakshavaleha: 10 - 12 gm</i> <i>Indukantam Grutham: 10 - 12 gm twice daily before food, when hungry</i> <i>Aravindasava: 15 - 20 ml with equal quantity of warm water after food</i> <i>Balachaturbhadra Churna: 1 - 2 gm with honey</i> <i>Haridra Khanda: 3 - 5 gm intermittently with honey/ warm water</i>

2. **Aachar Rasayana (behavioural therapy)^[10]:** Acharaya Charaka in *Chikitsa Sthana* describes *Aachara Rasayana* and said one who follows very optimistically all codes of conduct (*Aachara Rasayana*) need not take other *Rasayanas* and those who take other *Rasayanas* without following code of conduct do not receive the optimum results of *Rasayanas*. So it is need to follow *Aachara Rasayana* to get result even in epidemic diseases. Some of conducts of *Aachar Rasayana* are as follows Truthfulness, Freedom from anger, Non-indulgence in alcohol, Nonviolence, Calmness, Engaged in meditation, Cleanliness, Perseverance, Charitable, Religious, Respectful toward teachers, parents and elders, Using ghee regularly, Controlling the senses, Positive attitude, Self-control, Devoted to Vedic scriptures.

3. **Sadvrit Palan (Code of right conduct)^[11]:** These codes are very important in the prevention of disease and promotion of health. Some codes of conduct that are fruitful to avoid COVID-19.

- Always follow a routine of nail cutting, hair cutting and shaving at least three times in a fortnight.
- Have a bath once or twice daily, as the season may be.
- One should not take food without wearing precious stones in hand, without taking bath and with torn apparel. Don't eat food without washing hands, mouth, feet and face. Do not eat food in an improper place, a crowded place.
- Do not eliminate sputum, flatus, faeces and urine in front of the wind, fire, water, the moon, the sun and the teachers.

- Everyone should pay respect to the Gods, Cows, Teachers (preceptors) elderly people and those who have accomplished spiritual perfection.
- Always covered mouth by hand during coughing and sneezing.
- One should not abandon relatives, affectionate who have helped in times of difficulty and who know the deep secrets of the family.

4. **Dhupana (fumigation):**^[12] of the house every evening with antimicrobials such as *Neem* leaf, *Sarshapa* (*Brassica campestris* L), *Loban* (gum bezamin/benzoin - *Styraxbezoin* Dryand), *Karpura* (*Cinnamomum camphora* (L) J. Presl.), Ghee etc. Also usage of *Aparajita Dhooma Choorna* (A.h. Jwara Chikitsa) as per availability can be adopted.

5. **Yoga and Panchakarma therapy:** Stress and depression are increasing the risk of acute respiratory infection. In Ayurveda several meditation and *Pranayama* are described. Meditation is found to reduce inflammation markers and *Pranayama* is known to improve lung capacity.^[13] *Panchakarma* therapy help in detoxification including removal of microbial toxins thus recommended for chronic condition of infectious disease.

6. **Ayush 64:** Recent publication has brought attention to possible benefit of hydroxychloroquine, a drug used as anti-malarial drug, in the treatment of patients of SARS-CoV-2.^[14] AYUSH-64 is a formulation of simple combinations of the *Ghansatwas* of *Katuka* (*Picrorhiza kurroa*), *Saptaparna* (*Alstonia scholaris*), *Kiratatiktaka* (*Swertia chirata*) and the powder of *Kuberakshi* seeds (*Caesalpinia bonducella*).

CONCLUSION

The main objective of Ayurveda is *Swasthasya Swasthya Rakshanam* i.e. to maintain health of a healthy person. Prevention is best way to avoid COVID-19. The Ministry of AYUSH, Government of India, has already issued a very useful advisory in this context.^[15] The practicing Vaidya has to have his/her own discretion in selecting medicines based on the stage of the disease, symptom complex and availability of the drugs in their locality. Use of Ayurvedic measures including healthy diet, *Rasayana* therapy, *Panchakarma*, *Dhupana karma* and Yoga therapy improving lung health and immune system. Thus conclude the Ayurveda has a whole science of self-care including an entire methodology of right living for optimum health.

REFERENCES

1. Wu Z, McGoogan JM. Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. JAMA 2020 Feb 24 [Epub ahead of print]; DOI: 10.1001/jama.2020.2648.
2. World Health Organization. WHO SOLIDARITY Clinical trial for COVID 19 treatments. Online document at: <https://www.who.int/solidarity-clinical-trial-for-covid-19-treatments>, accessed, 2020; 8.
3. Bhishagratna Kaviraj Kunjalal, Sushruta Samhita- Nidana English translation, Chowkhamba Sanskrit Series Office, Varanasi, 2007; 3(6): 33-34.
4. Johnsen J, Bratt B, Michel-Barron O, et al. Pure sesame oil vs isotonic sodium chloride solution as treatment for dry nasal mucosa. Arch Otolaryngol Head Neck Surg, 2001; 127: 1353–1356.
5. Ministry of AYUSH, Government of India. Ayurveda's immunity boosting measures for self care during COVID 19 crisis. Online document at: <http://ayush.gov.in/event/ayurveda-immunity-boosting-measures-self-care-during-covid-19-crisis>.
6. Vanka A, Tandon S, Rao SR, et al. The effect of indigenous Neem Azadirachta indica [correction of (Adirachta indica)] mouth wash on *Streptococcus mutans* and lactobacilli growth. Indian J Dent Res, 2001; 12: 133–144.
7. Abbott DJ, Baroody FM, Naureckas E, et al. Elevation of nasal mucosal temperature increases the ability of the nose to warm and humidify air. Am J Rhinol, 2001; 15: 41–46.
8. Sumantran VN, Tillu G. Cancer, inflammation, and insights from Ayurveda. Evid Based Complement Alternat Med., 2012; 2012: 306346.
9. <https://www.ndtv.com/photos/news/coronavirus-outbreak-5-foods-items-to-boost-your-immunity-and-safeguard-you-from-infections-98969#photo-408610>.
10. Vaidhya Jadavaji Trikamji Acharya editor (1st edition). Charaka Samhita of Agnivesha, revised by Charaka and Dridhabala. With commentary: Ayurveda- Deepika. Varanasi. Chaukhamba Prakashan. chikitsa sthan, 2011; 1(4): 30-37.
11. Charak Samhita with Charak Chandrika Hindi commentary, by Dr. Tripathi Brahmanand, Chaukhamba Surbharti Prakashan, Sutra Sthan, 2007; 8(19): 199-103.
12. Charak Samhita with Charak Chandrika Hindi commentary, by Dr. Tripathi Brahmanand, Chaukhamba Surbharti Prakashan, chikitsa Sthan, 2007; 3: 307-308.

13. Abel AN, Lloyd LK, Williams JS. The effects of regular yoga practice on pulmonary function in healthy individuals: a literature review. *J Altern Complement Med*, 2013; 19: 185–190.
14. <https://doi.org/10.1016/j.antiviral.2020.104762>.
15. Ministry of AYUSH, Government of India. Ayurveda's immunity boosting measures for self-care during COVID 19 crisis. Online document at: <http://ayush.gov.in/event/ayurveda-immunity-boosting-measures-self-care-during-covid-19-crisis>, accessed April 10, 2020.