

A Conceptual Study on Prevention & Management of Covid-19 Pandemic with Special Reference to *Janapadodwamsa*

Anamika Khatana¹, Rakesh Khatana²

¹Assistant Prof. Department of Rog-Nidan, Shri Dhanwantri Ayurvedic Medical College & Research Centre, Chhata, Mathura (UP), ²PG Scholar Department of Kaumarbhritya, Mahatma Gandhi Ayurved Collage Hospital & Research Centre, Salod Datta Meghe Institute of Medical Sciences, Wardha, Maharashtra, India

Abstract

Introduction: Ayurveda being one of the oldest surviving Medical Tradition, has a key role to play in this crucial situation. Covid-19 it is not a simple infectious disease it is a pandemic disease caused by Coronavirus which reflects in human but stay as a host in animals. These viruses contain seven different strains; of which SARS-COV-2 is responsible for Covid-19. Its spread through droplets via air due to sneezing, cough, talking and direct or indirect contact with an infected patient such as handshake, touch surfaces contact by an infected person. This virus causes the severe acute respiratory syndrome. Its incubation period varies between 2 to 14 days, the disease can transmit from symptoms less person to person. **Material & Methods:** Covid-19 research information was collected from the world health organization, books, research papers, journals. Ayurveda literature from reference books, internet, and opinions of experts utilize as a review. **Observations and Results:** COVID-19 can be provisionally understood from the Ayurvedic perspective as *vātakapha* dominant *sannipātajvara* of *āgantū* origin with *pittānubandha*. The asymptomatic, presymptomatic, mild, moderate, severe and critical stages of COVID-19 with varying clinical presentations have been analysed on the basis of *nidāna*, *doṣa*, *dūṣya*, *nidānapañcaka* and *ṣaṭkriyākāla*. **Conclusion:** It will be good to take preventive measures which boost our immunity in these times. Ayurveda extensive knowledge base on preventive care by which each individual can achieve by uplifting and maintain his or her immunity. In Ayurveda, Immunity comes under the heading of *Vyadhiksamatwa*. In Ayurveda, many single drugs or compound formulation were mentioned as *Rasayana* to boost up Immunity (*Bala* or *Vyadhiksamatwa*).

Keywords: *Vyadhiksamatwa*, *Janapadodwamsa*, pandemic diseases, Coronavirus.

Introduction

The present Pandemic of COVID-19 has brought the so-called human activity to a standstill, and has forced the entire world to seek very seriously for its cause, mechanisms of pathogenesis and its solution.¹ Ayurveda being one of the oldest surviving Medical Tradition, has

a key role to play in this crucial situation. Covid-19 it is not a simple infectious disease it is a pandemic disease caused by Coronavirus which reflects in human but stay as a host in animals. These viruses contain seven different strains; of which SARS-COV-2 is responsible for Covid-19.² Its spread through droplets via air due to sneezing, cough, talking and direct or indirect contact with an infected patient such as handshake, touch surfaces contact by an infected person. This virus causes the severe acute respiratory syndrome. Its incubation period varies between 2 to 14 days, the disease can transmit from symptoms less person, and its vaccine trial is going on all of this situation makes disease fatal. As COVID-19 is proving to the world, tiny viruses are powerful biological agents, capable of rapidly effecting

Corresponding Author:

Rakesh Khatana

Mahatma Gandhi Ayurved College Hospital & Research Centre, Datta Meghe Institute of Medical Sciences, Wardha, Maharashtra, India. Email – rakesh.khatana2011@gmail.com, Orcid ID - <https://orcid.org/0000-0003-2322-8297>

massive damage and fatality³. And yet, they're so simple: a virus is merely comprised of pieces of genetic material—either RNA or DNA—wrapped in a protein envelope, which is known as a “capsid.” Yet this tiny organism carries with it a mortality rate (death rate). The present work uses the model of *Janapadodhwamsa* of *Acharya Charaka* and *Maraka* of *Acharya Sushruta* along with the model of *Masurika* of *Acharya Madhava* to explain the Pathogenesis of COVID –19 with modern correlation. The study identifies it as *Nija Jwara* and *Oupasargika Roga*, proposes a Diagnostic Protocol based on ⁴*Acharya Charaka's Jwara* model, identifies factors affecting its severity or complicating its course, along with their modern correlation and proposes management guide lines for different stages and various subsets of patients; while describing the general contraindication of drugs, their potential interaction with concomitant modern medicines, criteria for selection etc⁵. The study also identifies important preventive principles along with medications with aim to restore balance between man and nature.

Material & Methods

Covid-19 research information was collected from the world health organization, books, research papers, journals. Ayurveda literature from reference books, internet, and opinions of experts utilize as a review

Observations and Results

The Causative factors

The causative factor of *Janapadodhwansa*⁶:-

- *Adharma*; means persons are following path those are not beneficial to humanity as well as animals.
- *Pradhnyaparadha*; it means a person doing the action by his intellect, past restraint memory and present memory is deranged, its reason for increasing disease-causing elements called *Doshas*.
- *Opasarga*; *Acharya Sushruta* mentioned *opasarga* elements are, direct contact of an infected person, sexual intercourse, inhalation, sharing same diet-cloths and placed. These reasons are responsible for skin disease, fever, *Shosha* (tuberculosis), ophthalmic conjunctivitis and contagious disease.

- The organism of other species those are not seeing by open eyes that enter inside the human body and cause *Janapadodhwansa*.

- Another reason is war due to the large population affected and killed.

- Due to the disorder of seasonal weather.

Causes of Infectious disease

Acharya Sushruta mentioned *Bhoot* *Grahapida* under the eading *Amanussopasarga Pratisedham* chapter it means an infectious disease caused by non-human being or invisible matter.⁷ It is innumerable. Causes are external injuries, impurity, uncleanness, violence, coitus, demand worship and breaking the rules.⁸

Patho-physiology

Most patients with COVID-19 predominantly have a respiratory tract infection associated with SARS-CoV-2 infection. However, in a small proportion of cases, they can progress to a more severe and systemic disease characterized by the Acute Respiratory Distress Syndrome (ARDS), sepsis and septic shock, multiorgan failure, including acute kidney injury and cardiac injury. Autopsy findings in China and European countries showed endothelial damage of pulmonary vasculature, microvascular thrombosis and hemorrhage linked to extensive alveolar and interstitial inflammation that ultimately result in COVID-19 vasculopathy, pulmonary intravascular coagulopathy, hypercoagulability, ventilation perfusion mismatch, and refractory ARDS. Hypoxemia, secondary to ARDS may also activate the coagulation cascade.⁹

Disturbance of air/*Air Currents*: Power Sector (Thermal)/Industrial pollution/Military activity related Pollution/Automobile and Aviation sector related Pollution.

Disturbance to Ecology of water bodies: Pollution of water bodies/Sand mining from river beds/Unregulated damming etc./Contamination of Ocean beds.

Disturbance to Land Ecology: Rapid Urbanization and huge constructional activity with non-eco-friendly materials/Over exploitation and destruction of mountains, forests & ecosystems. Destruction of other life forms like Animals/Plants/Birds and displacement

from their natural habitats/Usage of Non-Biodegradable toxic materials like plastics pesticides etc.¹⁰

Activities of this kind vitiate and disturb the balancing forces of nature and gives rise to abnormal air currents, Cyclones, Floods, non-seasonal rains, extreme weather conditions etc. Destruction of Amazon wild forests or Destruction of Australian forests due to wild fire, Extreme weathers, non-seasonal rains experienced around Europe, Australia, India etc. can be taken as *Aristas* (warnings).

The vitiation of air currents, seasons, seasonal irregularities and disturbance of land and water ecology simultaneously induces leads to vitiation of *doshas* (Cytokines) in humans causing mass susceptibility to the same illness, while also affecting the *oshadhis* (food yielding plants), thus reducing the nutritive value and leading to under nourishment. When this combines with the causative factors causing *agni mandya* (sluggish metabolism) it leads to infectious diseases like COVID-19, probably more in future if corrective actions are not taken. The predominant pulmonary involvement of covid-19 can be explained by the commonality of *pranavaha srotas* vitiating factors with that of *vata*, (*Kshaya*-weight loss, *vega sandharan*-constipation, *rukshata*-low fat high fibre diet intake, *vyayamat kshudhitasya*-inappropriate excessive exercise.¹¹

It is the site of *Kaphadosha*, Due to accumulation of *Kapha* causes *Rasavaha*, *swedavaha*, *ambuvaha*, *pranavasrotasdhusti* (inflammation). *Srotavahrodha* results in an obstruction of *Vayu*, and *Pitta Dosha* results in a Fever, Cough, Difficulty in breathing, Pneumonia to severe respiratory failure. It's all depends on *Vyadhishamatva* (Immunity).¹²

Clinical Features:-

In case you're still unsure the three most important symptoms of coronavirus infection are:

- Dry cough
- Fever
- Difficulty Breathing

Other common symptoms are:

- Nasal congestion

- Phlegm accumulation
- Sore throat (pharyngitis)
- Fatigue
- Muscular aches (myalgias)
- Diarrhea
- Headache
- Joint pains

Principles of Ayurvedic Prevention and Management of Coronavirus:-

For any condition affecting *pranavaha srotas* (respiratory channels) one should apply the treatment protocols recommended for *Shvasaroga Chikitsa*—Breathlessness, cough, and related disorders.¹³

- To reduce the aggravated and accumulated *Vata* and *Kapha doshas*.
- To purify *rasavaha srotas* (blood plasma)
- To purify and unblock *pranavaha srotas*
- Secondarily to optimize *agni*.

Treatment

- *Sarve Abhyanga* (full body external friction-type oil massage) with *Dhavantaram* taila, *Dashmooladi* taila, or *karpooradi* taila with added *lavana* (crushed rock salt).
- *Ruksha sweda* (dry heat), *nadi sweda* (steam administered locally through tubes).
- *Pinda sweda* (boluses of hot herbalized rice balls) applied to chest and back.
- *Vamana* (physician-assisted gentle vomiting) using *Madanaphala* decoction + *yastimadhu* + *vacha* = salt
- Alternating *Anuvasana* and *Niruha basti* (oil-based and decoction-based enemas)

Preventive

Your best line of defense is to choose a healthy lifestyle. Following general good-health guidelines is the

single best step you can take toward naturally keeping your immune system strong and healthy. Every part of your body, including your immune system, functions better when protected from environmental assaults and bolstered by healthy-living strategies such as these:¹⁴

- Try to minimize stress
- Eat a diet high in grain, fruits and vegetables.
- Exercise regularly.
- Maintain a healthy weight.
- If you drink alcohol, drink only in moderation.
- Get adequate sleep.
- Observe meticulous hygiene, such as washing your hands frequently
- Don't smoke.

Conclusion

Ayurveda has the ability to deal with any disease. In the case of Covid-19, Ayurveda has preventive as well as curative aspects. Preventive aspects are *Dinacharya*, *Rasayana* and Panchakarma therapies. The therapeutic element contains *Rasayana*, *Panchakarma*, medicinal formulation, mantra therapies and spiritual therapies. The present need for Ayurveda researchers in clinical trials on the patient of Covid-19. Ayurveda cures disease and strengthens physical as well as mental levels. The present proposal is based on classical understanding of Ayurveda and it needs to be emphasized that as of date there are no known curative medicines for this virus. Hence this approach has to be applied pragmatically, taking into consideration various aspects, like a proper evaluation of the individual patient based on Ayurvedic parameters, with due advice and inputs from the colleagues from Modern medicine, proper discussion in an integrative scenario of possible drug to drug interaction and limitations of therapy, one's own experience with usage of particular drugs, with proper preventive contact and respiratory precautions in place, and results being documented systematically particularly when dealing with sick patients and critical conditions. But we strongly feel that Covid-19 presents a very valuable opportunity for Ayurveda to join hands with Modern Medicine and enrich itself and Science in general for betterment of

Mankind.

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