

Review Article on Ayurvedic Perspective of Covid- 19

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Abstract –

Today, the whole world is suffering from corona pandemic and Covid 19 is challenging task to the mankind. According to Ayurveda, Covid 19 comes under the 'Janapadadhwansa Vyadhi' or 'Maraka' Vyadhi. 'Maraka' means an epidemic. Ayurveda has explained the epidemic diseases, their causes, pathophysiology and treatment also. Adharma, pollution of water, air, earth, food, medicine or seasonal variation are its major causes. Individual immunity plays an important role in this aspect. This article will try to elaborate Covid - 19 with the help of Ayurveda.

Keywords - Covid - 19, Immunity, Vyadhikshamatva, Janapadadhwansa, Pandemic diseases, Ayurveda, Epidemic diseases.

Introduction –

Entire world is facing an experience of Corona Pandemic since November 2019. A large population including medical, paramedical professionals, police corps, and sanitization workers have lost their lives in the beginning. WHO declared it as 'Mahamari' or 'Global pandemic' on 11 March 2020. At present, more than 213 countries and territories are having Covid - 19. WHO, many researchers, medical professionals tried to understand the disease Covid-19 but every time, every day, they came across new different facts or aspects. So, I decided to correlate Covid -19 with the help of Ayurveda. This article will put a light, how Ayurveda has its aspect towards Covid- 19, what are the measures that can be applied against it.

Materials and Methods-The methodical collection of data from classical texts of Ayurveda as well as related pharmaco clinical research articles and dissertations works published till date have been collected using PubMed & manual search of bibliographies as a sources.

As the whole world is suffering from pandemic but some nations are facing 3rd or 4th wave of Covid- 19 outbreak. Covid - 19 is an infectious disease caused by Novel Corona Virus 2, now called as 'Severe Acute Respiratory Syndrome 2' (SARS-COV 2). The disease is believed to be predominantly transmitted by droplets through inhalation or physical contact with infected person, infected respiratory droplets. Ayurveda having scientific,

holistic and time tested principles to prevent such epidemics as well as their management. An epidemics and infectious diseases are well explained in Ayurvedic texts as 'Aupasargic vyadhi', 'Aagantuj Vyadhi', 'Janapadadhwansa Vyadhi'. A large population, irrespective of their bala (strength), food habits, behaviour, psychological state affected by the same disease at the same time which may destroy the community in huge, it is called as Janapadadhwansa Vyadhi. 'Janapada' means large population or community. 'Udhwansa' means to get destroyed. Janapadadhwansa is the situation in which destruction or death of large population spread over a small locality country or a part of the world. It has been mentioned that vitiation of factors common to all inhabitants of a particular territory i.e., Vayu (air), Jala (water), Desha (land), Kala (season) may lead to simultaneous manifestations of similar diseases leading to the societal collapse.

Nidan/Hetu of Covid-19- 'Sushruta' has explained about an epidemic diseases and in Sutrasthana, chapter 6th, he described about 'Vyapanna Rutu' as a cause of epidemic diseases. In recent days, we are facing lots of changes in the climate as well as the world is experiencing conditions opposite to the particular season i.e., 'Rutuviparyaya' all over. According to 'Sushruta', these changes are because of 'Adharma'. The discipline, rules, commitments, the right things are to be followed by the people of the society i.e., 'Dharma'. But when not followed by the people, it is called as 'Adharma'. Today, our lifestyle has changed, selfishness has increased and the

importance of Dharma has reduced. Instead of taking care of Mother Nature, everyone is busy in gaining their own happiness. According to Ayurveda, this seasonal variation leads to vitiation of water, air, herbs, medicines which ultimately give rise to outbreak of epidemics. Sushruta has evolved the term ‘Maraka’ i.e., epidemics. Atharvaveda has explained the spread of the disease by two types of the ‘Krimi’ or worms.

1. One that can see with eyes and,

2. One that cannot see with eyes. Krimi or worms mixed with mountain, forest, food products animals and liquids enters in the body through food, water and wound. To treat this with earth, fire, sun, some Mantras are explained.

Bahujana sadharana hetu i.e., common etiological factors:

Common factors pertaining entire community are water, air, desha (land), kala, seasonal variations. As per texts, these are common etiological factors for all communicable diseases. Out of this, air and kala responsible for Covid -19.

A-Avoidable factors:

- **Adharma** - Violation of stipulated behaviour. The activities contributing to destruction of sustaining principles of life or nature (air, land, water) derived as, “Dhaarayeteti Dharmah, Na Dharmah Adharma” hence, Adharma is deemed as all those activities contributing to destruction of water, air, land etc.

1. **Disturbance of Air- Power sector**, industrial pollution, military activity or aviation related Pollution.
2. **Disturbance of Ecology of water bodies-** Contamination or pollution of water bodies, sand Mining, contamination of ocean bed.
3. **Disturbance of land ecology-** Rapid and huge urbanisation/construction activity with non eco-friendly materials, over exploitation and destruction of ecosystem life forms i.e., birds, plants, animals and displacement from their natural habitat, use of non-biodegradable material. This kind of activities vitiates and disturb the balancing force of nature which ultimately vitiates air currents, seasonal irregularities, disturbances of land and water/ecology. It leads to vitiation of dosha (cytokines) in humans

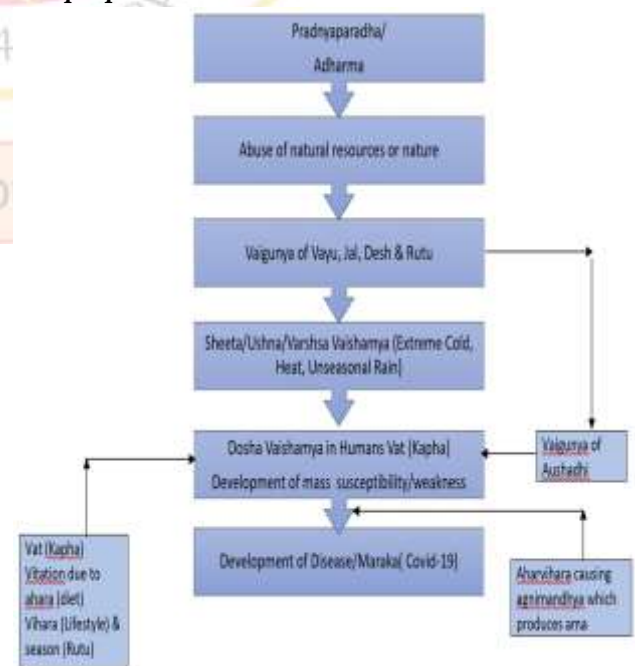
causing mass susceptibility to the same illness giving rise to ‘Agnimandya’ (sluggish metabolism) that leads to infectious diseases or Covid-19.

- **Pradnyaparadha** - Imprudent conduct and unjust human actions (wrong behaviour), such as interference with the bio-ecology, pollution etc.
- **Shastraprabhava** - Wars & weapons.
- **Curse.**
- **Poisonous flowers smell.**
- **Bhutasanghata** - Pathogens, uncleanliness, infective etiology.
- Sexual contacts with affected person.
- Physical touch or direct contact with infected person (gatra-sansparsha), close breathing or inhalation of respiratory droplets (Nishwasa), sharing meals with affected person (Sah-Bhojana), sharing bed i.e., sleeping or lying alongside an infected person (Sah Shaiyya), sharing chairs/benches (Sah-Aasana), Vasramalyanulepanat i.e., use of contaminated or infected articles, ornaments, clothes etc.
- **Low immunity**

B. Inevitable/Disastrous factors:

- Abnormal variation in seasonal cycles.
- Air vitiation.
- Cosmic changes.

Samprapti-



Pathogenesis of Covid - 19-

- Low immunity, exposure to air vitiated with virus, sudden vitiation of all 3 doshas, sthasanshraya - affected systems primarily nose, upper respiratory tract, digestive system, blood and circulatory system. If not treated lower respiratory tract, multiple organs involvement.
- Anshansh Kalpana
- Dosh involvement- According to Ayurveda, it is ‘Vat-Kapha’, ‘Pradhan’, ‘Sannipataj Vyadhi’.
 1. Vata-Prana, Udana, Samana, Vyana, Apana.
 2. Pitta-Pachaka, Sadhaka, Bhrajaka.
 3. Kapha-Avalambaka, Bodhaka.
 4. Dhatu-Rasa, Rakta, Mansa, Meda.
 5. Mala-Sweda, Mala, Mutra.

In later stages, all doshas, dhatus and malas are involved.

‘Oja’ i.e., ‘sar’ of saptadhatu/body tissues and is a seat of ‘Bala’ (immunity/strength). According to Ayurveda, it is vital in the defence mechanism of the body. The deficiency or alteration (Oja kshaya/Ojanash) in quantity or quality of Ojas of particular dhatu or in general leads to immune compromised disease. It is stated in texts, ‘Oja-kshaya’ or ‘Oja-nash’ as one of the factor of the aetiopathogenesis of main dhatu disturbance or the complication of the disease.

It has been clearly stated in the texts that all the diseases cannot be named with specific nomenclature, instead the physician tries to examine the factors involved in disease pathogenesis such as ‘Sammuthana Vishesha’ (etiology of the disease), ‘Adhishtana Vishesha’ (site of the disease manifestation) and ‘Vikara prakruti’ (pathophysiology of the disease) for planning a rational line of the treatment.

Considering its rapid spread and onset of symptoms, high grade fever, blood vitiation (CRP increased inflammation), nausea, vomiting increase in stickiness of blood (styan guna- increase in d-dimer). Covid - 19 is considered as ‘Sannipatic Jwara’ in which all 3 doshas are prominent. The patient symptoms may vary according to the intensity of vitiation of doshas.

Symptoms-

- **Asymptomatic-** People with good immunity may not have any symptoms.
- **Mild symptoms-** People with nonspecific symptoms of upper respiratory tract such as cough, cold, sore throat, nasal congestion, fever, malaise, and headache. No signs of dehydration, sepsis, shortness of breath.
- **Moderate symptoms-** High grade fever, dyspnoea, anosmia, nausea, abdominal discomfort, low oxygen saturation, pulmonary ground glass opacities in CT lungs with score more than 10.
- **Fatal symptoms-** Oxygen saturation very low, unable to breath, inflammatory markers test increased. In cytokine storm, multiple organ involvement, cardiac symptoms etc.

As per Ayurveda, ‘Vyadhi-Kshamatva’ plays an important role to protect us from these epidemic diseases and it is different at individual level. Vyadhi-Kshamatva is body capacity to inhibit disease to manifest and increase its symptoms. Chakrapani, the commentator of Charaka describes concept of Vyadhi-Kshamatva as body’s natural response to prohibit contact of disease producing factors with body and also inhibits entry and progress of disease in the body. Individual with obesity (Sthaulya), bad food and behaviour habits, ma nourishment, weak (Durbala) have low immunity. Vyadhi-Kshamatva is dependent on individual strength which is described by Ayurveda in strength examination parameters, such as body proportion, muscle strength and tone, strength of functioning of organs and sense organs, working and exercising capacity, digestive capacity, state of mind, tolerance to thirst, hunger as well as sun, wind exposure etc.

Vyadhi-Kshamatva is of 3 types-

- a) Sahaj (Constitutional Strength) - From birth, comes from parents and is inherited.
- b) Kalaj (Temporal Strength) - The time of the day, season age are important. (Youth have better Vyadhi-Kshamatva than child/old people). Also, it is better in winter season than summer.
- c) Acquired/Adaptive (Yuktikruta) - Increase in Vyadhi-Kshamatva with specific change in

the life style and medicines. A person with good Vyadhi-Kshamatva, even though, exposed to virus, he may not suffer with the disease or will be symptomless or with minimum symptoms.

Treatment of Covid-19: 'Sushruta' has described the common treatment plan for all epidemic diseases.

- Sthana Parityaga - Leave the infected place.
- Quarantine
- Home - Dhum sevana to purify the atmosphere.
- Hygiene and sanitisation.
- Daiva - Vapashraya treatment chanting mantras, pray to God.

As the fear causes many diseases, mental peace is very important.

The disease can be treated either

1. Preventive and,
2. Curative.

1. Preventive:

- Advice to implement all Vyadhi-Kshamatva increasing habits, food and medicines.
- Proper following of daily regimen i.e., 'Dincharya' as per Ayurveda for proper functioning of the body and maintain the state of equilibrium. To wake up early morning i.e., 'Brahmya Muhurta' keeps alert and active. After exposure to bright light in morning, releases the neurotransmitter like 'Serotonin'. 'Dantdhavan' stimulates the taste perception and increases salivation. The saliva contains lysosomes and secretory IgA which act as antibacterial.
- Dhupana i.e., fumigation of air with Tulsi (Holy Basil), Nimb (Azardirecta Indica), Nirgudi, Ajwain, Camphor etc.
- Using proper purification methods, try to avoid vitiation of earth, water, air, climate.
- Preventive measure to avoid the vitiation of air, water, earth, climate.
- Collection of food, medicine from unaffected area.

- To follow the rules and regulation of Dharma.
- To instruct people to follow good habits, to speak truth, to follow kindness and good morals, i.e., 'Sadvrutta'.
- Do daily 'Abhyanga' (Body Massage) with sesame oil or medicated oil,

- I. Take steam bath,
- II. Steam inhalation,
- III. Take a bath (Snana) to clean the body when come to home. It removes sweat and other impurities from the body.

- Nasya i.e., to put nasal drops of cow ghee, sesame oil or medicated oil to prevent virus entry and to increase the strength of nasal mucosa and keeps the channel clear for breathing.

- Kaval – Gandusha - Cleans and strengthens the oral cavity, keeps the sinuses clear and the channel patent.

- Daily exercise (Vyayama) increases the oxygen supply to the remote tissues. The perspiration after Vyayama take out the accumulated toxins from the body.

- Suryanamaskara or Sun Salutation, body strengthening 'Yogasanas' increase the flexibility, increase the muscle tone and strength.

- Pranayama (Anuloma - Viloma) particularly 'Bhasrika', 'Kapalbhati' for 10 min. 'Ujjayi' breathing facilitates maximum oxygen retention by the body and helps in strengthening the lung capacity.

- Avoid over exertion (Ati - Shrama), exposure to morning breeze (Pragvata), late night sleep (Jagaran). Daytime sleep (Divaswap), suppression or initiation of natural urges.

- Dhupana (Fumigation) with Guggulu (Commifera Mukul), Agar, Tulsi, Nirgundi, Tejpan, Ela (Cardamom), Twack (Cinnamon), Camphor (Karpura) etc. and medication.

- Panchakarma - Body purification, detoxification with Panchakarma to avoid accumulation of doshas in the body and to

prevent disease. Vamana, Virechana, Nasya plays an important role to prevent Covid- 19. Panchakarma is done according to Avastha of disease, Dosha - Dushya vitiation.

- Shirodhara - Application of lukewarm oil on anterior fontanelae reduces the stress and anxiety.
- Rasayana Chikitsa - Rasayana should be administer after Panchakarma. The Rasayanas like Guduchi (Tinospora Cordifolia), Amala (Emblica Officinalis), Ashwagandha (Withania Somnifera), Pippali (long Pepper/Piper Longum), Licorice (Yashtimadhu), Garlic, Tulsi. Pippali can be used as ‘chausashtha pippali yoga’ (64 Pippali course) for strength. Chyavanprash, Amalaki Rasayana, Agastiprash like some rasayanas are very useful. ‘Suvarnajal’ can be used.
- Light, unctuous, warm, freshly cooked diet fortified with spices like black pepper, cardamom, cinnamon, ajwain, cumin, garlic, ginger, turmeric, tulsi is preferred. The food which is habitual since birth and nourishing is recommended for that particular person.
- Luke warm water (Ushna Jal Pan), medicated water like ‘Shadangodaka’ made from Musta, Parpat, Usher, Vetivir, Chandana, ginger etc. Also, frequent intake of hot water with added mint leaves, coriander leaves, fennel, ajwain.
- Steam inhalation with addition of bronchodilators like ‘Vasa’, ‘Bharangi’ which helps in preventing the accumulation of cough in upper respiratory tract and clears the airways and aids smooth respiration.
- Neti - Easy and effective purification method to clean the upper respiratory tract is described in Yoga. In Pune, Doctors of Dinanath Mangeshkar Hospital are doing regular Neti while serving Covid - 19 patient, not a single doctor is affected by corona.

- Community Sanitization - Spraying of decoction made from nimb, nirgudi, shigru, nilgiri, curry leaves along with camphor (karpura), alum (turati), and cow urine (gomurta).
- According to Vagbhata, sanitization can be done with sunrays. Daiva-Vyapashraya chikitsa includes Mahamrutunjaya mantra, Vishnu - sahasranama, Omkaar and Shiva-prarthana.

***Avoid**

1. Excessive cold foods/drinks.
2. Excessive cold air conditioning.
3. High fibre diet/fat free diet.
4. Fasting/weight loss regimen.
5. Excessive spicy, bitter, astringent food.
6. Inter meal snacks.
7. Excessive tea/coffee/nicotine/alcohol.
8. Irregular meal timings.
9. Excessive exercise (particularly when hungry/after food/before evacuating bowel).
10. Excessive sex.
11. Exposure to unseasonal weather.
12. Excessive anxiety/depression.

Discussion-

The epidemic diseases are well explained in Ayurveda. Epidemic diseases along with causes and their treatment is explained very well by Sushruta. It had been done since ‘Vedic Era’. By following the ‘Sadvrutta Palan’, we can prevent the epidemic diseases. Swasthavrutta recommends the daily regimen (dincharya), night regimen (Ratricharya), seasonal regimen (Rutucharya). Adharma is a major cause of the epidemic diseases and it is ‘Maraka’ i.e., deadly disease. Seasonal i.e., rutu variations and non-seasonal variations in climate i.e., Rutuviparyaya occur due to human selfishness and careless about Mother Nature. To increase the Vyadhi-Kshamatva, dincharya, abhyanga, nasya, steam inhalation, neti, vyayama (exercise), good food habits, good behaviour habits, panchakarma, rasayana etc. plays an important role. We have to prevent Covid - 19 infection with intimate hygiene, sanitization, and cleanliness and by avoiding person to person contact. We have to pay attention to increase our ‘Bala’ or

strength with the help of Rasayana therapy, good food and behaviour habits and mental health. Home and air sanitization can be done with Dhupan of Nimb, Tulsi, Nilgiri, black pepper, Guggul. The treatment should be done carefully as Covid- 19 is 'Sannipataj Jwara' i.e., all doshas are vitiated.

Conclusion-

Covid-19 is a pandemic disease. In Ayurveda, epidemic diseases are explained as 'Sankramaka Vyadhi'. It is also described as 'Maraka' or fetal i.e., deadly disease. Etiology, causes, pathophysiology, symptoms and treatment of common epidemic disease explained in Ayurveda. Swasthavrutta explains the way to remain healthy i.e., 'Swastha'. As the aim of Swasthavrutta is,

"Swasthasya swasthya rakshanam]"

it advice to follow Dincharya, Ratricharya, Seasonal i.e., Rutucharya, Vyayama (exercise), food (Yogya ahara), behaviour habits, yoga, pranayama, purification methods like Neti described in yoga, good morals (Sadvrutta), seasonal panchakarma, rasayana chikitsa which play an important role in prevention of epidemic diseases along with personal and community hygiene and sanitation, dhupan, dhumapana.

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