

## Role of Rasayana in Janapadodhwamsa Such As Covid 19

Dr. Priyadeep Raj<sup>1</sup> Dr. Rohitash Gurjar<sup>2</sup> Dr. B. Swapna<sup>3</sup>

1. MS Scholar PG Dept. of ShalyaTantra National Institute of Ayurveda Jaipur

2. MS Scholar PG Dept. of ShalyaTantra National Institute of Ayurveda Jaipur

3. Associate Prof. PG Dept. of ShalyaTantra National Institute of Ayurveda Jaipur

Date Of Submission: 01-04-2021

Date Of Acceptance: 14-04-2021

**ABSTRACT:** The world is mutilated due to pandemic coronavirus disease (COVID-19) which is caused by severe acute respiratory syndrome Coronavirus (SARS-CoV-2). This situation can be considered under Janapadodhwamsa (destruction of states or countries or a large human settlement) as mentioned in Ayurveda. Janapadodhwamsa condition similarly, infectious diseases have been considered under Sankramikarogas. Pollution of air, water, climate, and environment is responsible for the spread of diseases on such a large scale resulting in Janapadodhwamsa. Causes of vitiation of air, water, climate and place along with their characteristics have been enumerated in classics. Such conditions will manifest in symptoms like cough, breathlessness, fever etc. In Ayurveda, initial phases of the manifestation can be comparable to Agantuja Vata Kaphaja Jwara. Uncontrolled conditions further vitiate other Doshas and another Rasa, Rakta, Mamsadidushyasthus entering Sannipataja condition. The main aim of management principles includes correction of the Vikruta (contaminated) Vayu (air) and Desha (place/continent etc.) and improving the strength and immunity for prevention of disease as well as the management of COVID-19 patients by Rasayanas.

**KEY WORDS** – Ayurveda, Janapadodhwamsa, Rasayanas, covid -19

**MATERIAL AND METHODS** – Ayurvedic text books, Review Articles, Internet.etc

### I. INTRODUCTION

A pandemic is defined as “A pandemic is the worldwide spread of a new disease, or over a very wide area, crossing international boundaries and usually affecting a large number of people<sup>1</sup>. COVID-19 which has been declared as pandemic by WHO, has harsh impact globally. No treatment protocol has been mentioned yet; main public advice mainly focuses on frequently hand hygiene and social distancing<sup>2</sup>. This concept is mentioned

by Acharya Charaka in Janapadodhwamsa Chapter 3rd in Vimanasthana<sup>3</sup>.

**Concept of Janapadodhwamsa**–The Pandemics were described in classical Ayurvedic literature dating back centuries before the common era. Charak has quoted it as ‘Janpadodhwams’ (Janapada- Country or large human settlements, Udhvamsa- to be affected, to be destroyed) and devoted a complete chapter in VimanaSthana. There are mainly four common factors which are responsible for pandemic outbreak of diseases as well as symptoms. Many a communities are destroyed with a single disease even with the different Prakriti (Body Constitution), Aahara (Diet), Deha (Body), Bala (Immunity or Strength), Satmya (Adaptation), Mana (Mind) and Ayu (Age) of the people. So the treatment modalities are also common among the community. pandemics are treated with medicinal as well as non medicinal measures which are still practically effective and valid<sup>4</sup>. The core foundation of vitiation of Vata factors is Adharama and unrighteous deeds of the past as mentioned in classical text. Adharama affected the human being with unsustainable ways of thoughts and actions that damage the plant and animal life around us, the environment and the natural resources available on the planet. The source of all these is traced to Pragyapradha (Pragnya- memory, Apradha- crime) meaning doing wrong things in spite of knowing about their consequences that will lead to disease. So the Ayurvedic text defines Pragyapradha to be the main cause of deadly Janpadodhwams (pandemic) and other diseases<sup>5</sup>. In SushrutSamhita it is elucidated that the mode of spread of communicable diseases is through Gaatrasarsan (by physical contact), Niswasa (by inhalation), Sahbhajanata (by eating together), Sahashayasanat (by sitting and sleeping together) and Vastramalyanulepanat (by contact with clothes, garlands etc). Sushruta has told Kushtha, Jwara, Shosha and Netra Abhishayand as the transmissible diseases which can spread from one person to

another. The classical text described various illnesses demonstrating as pandemic affecting the respiratory system presenting with the symptoms of fever, cough, breathing difficulty, rhinorrhea, headache. Dalhana the commentator of this text specifies that the causative agent of such diseases enters the human body through the nasal passages<sup>6</sup>. So above mentioned mode of infection play a major role towards spreading a disease to all persons. The pandemic outbreak can be treated in two ways as medicinal and non-medicinal measures. Medicinal measures are Panchkarma (Purification therapy), the use of Rasayana (Rejuvenate therapy)<sup>8</sup>. The basic thought is to enhance the immunity to fight an pandemic with the medicinal measures. Non medicinal measures are Achararasayan. The basic concept is to encourage the humans to spread positivity around them. Even spiritual gestures like Namaste to greet each other is already mentioned in our ancient text helps in evading of the factors responsible in spread of contagious diseases as above mentioned<sup>9</sup>. Avoidance of spreading factors can be understood as social distancing in present time.

**Concept of Rasayan-** The concept of "Vyadhirodhakchamatav" i.e. capacity of the body to resist disease. Obviously, the immune system, as recognised in modern biology, which provides protection against microbes, should be a part of it. An entire section of the Materia Medica of Ayurveda termed 'Rasayanas' is devoted to enhancement of body's resistance. Rasayanainclude not only drugs ('Aushadhi') but also "Aachar" (daily routine including exercise), "Aahar" (diet and nutrition) and "Vyavhar" (mental attitude and discipline) which are equally important in achieving the desired goal<sup>10</sup>. It promotes and rejuvenate the physiology of body, produce resistance against disease both physically and mentally. Rasayanais made up of two words: Rasa and Ayana. Rasa primarily means essential seven vital tissues (Saptadhatue.g. Rasa, Rakta, Mansa, Meda, Asthi, Majja and Shukra) Ayanameans the path or channel. So Rasayanais are those that bring about proper uptake, growth, and improvement of essential Saptadhatu (seven vital tissues)<sup>11</sup>. According to Acharya Charaka, use of Rasayanais results in Dirghamaayu (disease-free long life), Smiriti (recapitulating power), Medha, Aarogyam (healthy wellbeing), Tarunvaya (youthfulness), Prabha, Varna (complexion), voice, strength etc<sup>12</sup>. According to Acharya Sarangdhara, various drugs, diet and

regimens which promote longevity by delaying aging (Jaranashanam) and preventing diseases (Vyadhinashnum) are called Rasayana<sup>13</sup>. Rasayanais a specialised treatment influencing the fundamental aspects of the organs i.e. Dhatus, Agni and Srotamsi, leading to overall improvement in the organism, which affords prevention of ageing, resistance against diseases, bodily strength and improvement in mental faculties.

**Introduction of covid -19 - CORONA virus CoV** is an enveloped, positive-sense single-stranded RNA (ss-RNA) virus belonging to the Coronaviridae family. In humans, it mainly causes common cold, but complications including pneumonia and SARS can occur<sup>14</sup>. Novel Covid-19 is a self-limiting disease and hence, the only treatment is to take preventive measures. It is known as the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)<sup>15</sup>. It is very much like the common flu and having the symptoms of fever, cough, sneezing, fatigue and shortness of breath.

Structurally, it is a positive sense single stranded RNA virus<sup>16</sup>, emerged from bat borne virus as having the genetic similarity to bat coronaviruses. This is 50-200 nanometres in diameter. Mode of transmission is Respiratory Droplet infection through cough and sneeze within 2 meter and through the Contaminated Surfaces<sup>17</sup>. SARS-Co-V-2 has four structural proteins: Spike (S), Envelop (E), Membrane (M) and Nucleocapsid (N) in which the first three are the viral envelop and (N) is RNA genome.

#### PATHOLOGY :

Spike protein facilitate the host cell



Use ACE2 (angiotensin converting enzyme) receptors of human<sup>18</sup>  
(Most abundant in Alveolar Cells of Lungs)



To enter cell



And attach to target cell and cell's protease TMPRSS2 open the spike protein of virus



Virion release RNA into the cell & Forcing cell to produce copies of the virus & Infect more cell<sup>19</sup>



Atleast three virulence factor produced & Promote shedding virion from host cells

Inhibit Immune Response

## II. DISCUSSION

According to Ayurveda, in condition of 'Janpadodhwams' disease is the resultant of imbalanced Dosha and Dushyavich happen due to Ksheena Vyadhikshamatva (Low Immunity). Due to the weather conditions, lifestyle and diet pattern the Vyadhikshamatva of the individual is decreasing day by day and hence, they are prone to get the infectious diseases very easily. So, to get rid of this disease, we should use those dravyas which are useful to improve the immune system. Rasayana (Immune modulators) are those which provide strength to the immune effector cells i.e. lymphocytes, macrophages, dendritic cells, natural killer cells, cytotoxic T lymphocyte cells etc. these cells work together and defend the body against the antigen<sup>20</sup>. Vyadhikshamatva (Line of Defence from the Antigen) is depend upon the Dhatuposhana (Nourished Dhatu) and Oja. For the healthful longevity and mindfulness, it is necessary to work upon the Rasa, Agni and Srotasalevel which is done by the Rasayanatherapy. Rasayanamay be used in two ways, first as a prophylactic medicine and second as a preventive measure in healthy people. In classical text CharakSamhita, Panchkarma (Purification therapy) and the use of Rasayana (Rejuvenate therapy) has been mentioned in the management of a pandemic. The basic thought is to enhance the immunity to fight a pandemic.

## III. CONCLUSION

Rasayana Dravyas has been used as the first line of defence for Janapadodhwamsa (Epidemic Condition). The stress, unhealthy nutrition and continuous exposure to several toxins in the present era lead to compromised immune system. Therefore, immunomodulation should be of central importance in medical field to combat several infective, chronic, autoimmune & inflammatory diseases. Immunity is vital factor for good outcome in the management of COVID-19 pandemic condition. The prevention /arrest of pandemic can be achieved by adopting proper food habits and life styles as well as regularly taking the Rasayanas.

## REFERENCES

- [1]. <https://www.who.int/csr/disease/swineflu/frequently-asked-questions/pandemic/visit> on 13-08-2020
- [2]. <https://www.health.gov.au/sites/default/files/documents/2020/03/coronavirus-covid-19->

- [3]. Charaksamhita edited by Pandit Kashinath Shastri, Dr Gorakhanath Chaturvedi, Chaukhambha Sanskrit Sansthan, Varanasi, reprint; 2012, Vimanasthan, Janpadhodhwamsiyeadhyaaya, 3, p-392.
- [4]. Charaksamhita edited by Pandit Kashinath Shastri, Dr Gorakhanath Chaturvedi, Chaukhambha Sanskrit Sansthan, Varanasi, reprint; 2012, Vimanasthan, Janpadhodhwamsiyeadhyaaya, 3/13, p-392-395.
- [5]. Charaksamhita edited by Pandit Kashinath Shastri, Dr Gorakhanath Chaturvedi, Chaukhambha Sanskrit Sansthan, Varanasi, reprint; 2012, Vimanasthan, Janpadhodhwamsiyeadhyaaya, 3/20, p-392
- [6]. Sushrutsamhita edited by Kaviraj Ambikaduttashastri, Chaukhambha Sanskrit Sansthan, Varanasi, part-1, reprint 2014; Nidanasthan, Kushthanidaniyeadhyaaya, 5/32-33, p-325
- [7]. Sushrutsamhita edited by Kaviraj Ambikaduttashastri, Chaukhambha Sanskrit Sansthan, Varanasi, part-1, reprint 2014; Nidanasthan, Kushthanidaniyeadhyaaya, 5/32-33, p-325
- [8]. Sushrutsamhita edited by Kaviraj Ambikaduttashastri, Chaukhambha Sanskrit Sansthan, Varanasi, part-1, reprint 2014; Nidanasthan, Kushthanidaniyeadhyaaya, 5/32-33, p-325
- [9]. Charaksamhita edited by Pandit Kashinath Shastri, Dr Gorakhanath Chaturvedi, Chaukhambha Sanskrit Sansthan, Varanasi, reprint; 2012, Vimanasthan, Janpadhodhwamsiyeadhyaaya, 3/6, 13-14, p-392-395
- [10]. Charaksamhita edited by Pandit Kashinath Shastri, Dr Gorakhanath Chaturvedi, Chaukhambha Sanskrit Sansthan, Varanasi, reprint; 2012, Vimanasthan, Janpadhodhwamsiyeadhyaaya, 3/6, 15-18, p-392-395
- [11]. Agnivesha Charaka Samhitachakrapani Commentary, Chikitsa Sthana 1-4/35, ed by Jaydevajitrikramji Acharya, Varanasi: Chaukhambha Sanskrit Sansthan, reprint 2009, p.no.389.

- [12]. AgniveshaCharakaSamhitachakrapani  
Commentary, ChikitsaSthana 1/8, ed by  
JaydevajitrvikramjiAcharya, Varanasi:  
Chaukhambha Sanskrit sansthan, reprint  
2009, p.no.376
- [13]. AgniveshaCharakaSamhitachakrapani  
Commentary, ChikitsaSthana 1/7, ed by  
JaydevajitrvikramjiAcharya, Varanasi:  
Chaukhambha Sanskrit sansthan, reprint  
2009, p.no.376
- [14]. Agnivesha CharakaSamhitachakrapani  
Commentary, ChikitsaSthana 1/3, ed by  
JaydevajitrvikramjiAcharya, Varanasi:  
Chaukhambha Sanskrit sansthan, reprint  
2009, p.no.376
- [15]. Van der Hoek L. Human coronaviruses:  
What do they cause? *AntivirTher.* 2007;  
12:651–658. [PubMed] [Google Scholar]
- [16]. Gobalenya AE, Baker SC et al. "The species  
Severe acute respiratory syndrome-related  
coronavirus: classifying 2019-nCoV and  
naming it SARS-CoV-2". *Nature  
Microbiology*, (March 2020). 5 (4): 536–  
544.
- [17]. "CoV2020". GISAID EpifluDB. Archived  
from the original on 12 January  
2020. Retrieved 12 January 2020.
- [18]. "How COVID-19 Spreads". U.S. Centres for  
Disease Control and Prevention (CDC). 27  
January 2020.
- [19]. Wrapp D, Wang N, et al. "Cryo-EM  
structure of the 2019-nCoV spike in the  
prefusion conformation". *Science*. (February  
2020). 367 (6483): 1260–1263.
- [20]. "Anatomy of a Killer: Understanding SARS-  
CoV-2 and the drugs that might lessen its  
power". *The Economist*. 12 March 2020.  
Archived from the original on 14 March  
2020.
- [21]. Masihi KN "Fighting infection using  
immunomodulatory agents". *Expert Opinion  
on Biological Therapy*. (July 2001), 1 (4):  
641–53.