

# International Research Journal of Ayurveda & Yoga

Vol. 5 (1),171-174, January, 2022

ISSN: 2581-785X;<https://irjay.com/>

DOI: <https://doi.org/10.47223/IRJAY.2022.5126>



## Prevention of Droplet and Air Born Infections w.s.r to Corona Virus Through Ayurveda – A Review

Manjunatha N.S<sup>1</sup>

1. Principal, Shri Babu Singh Jay Singh Ayurvedic Medical College & Hospital, Bhaupur, Bewar Road, Fatehgarh, Farrukhabad (UP)

### Article Info

#### Article history:

Received on: 21-12-2021

Accepted on: 20-01-2022

Available online: 31-01-2022

#### Corresponding author-

Manjunatha N.S, Shri Babu Singh Jay Singh, Principal Ayurvedic Medical College & Hospital, Bhaupur, Bewar Road, Fatehgarh, Farrukhabad (UP) - 209602

E-mail: [drmanjunathans@gmail.com](mailto:drmanjunathans@gmail.com),

### ABSTRACT:

Coronavirus disease (COVID-19) is a potentially severe acute respiratory infection caused by severe acute respiratory syndrome such as Middle East Respiratory Syndrome (MERS-CoV) and coronavirus 2 (SARS-CoV-2). The virus was identified as the cause of an outbreak of pneumonia of unknown cause in Wuhan City in China in December 2019. The clinical presentation is that of a respiratory infection with a symptom severity ranging from a mild common cold-like illness, to a severe viral pneumonia leading to acute respiratory distress syndrome that is potentially fatal. Nearly 200000 cases and approximately 9000 deaths have been reported globally (as of 20 March 2020). Global impact of Ayurveda, the Indian medical system, in field of health and medicine, carries sound background of scientific theories and applied therapies. Ayurveda explains causes and treatments of epidemiological diseases and infectious diseases in the context of *Janpadodwamsa* [the factors that destroys the health of the people living in a specific area due to pollution of Air (*Vayu*), Water (*Jala*), Place (*Bhumi*/soil) and Time (*Kala*). In modern science its called as epidemics/Pestilence.] and *Sankramikaroga* (communicable/infectious diseases). Nasal therapy is one among therapy which is very helpful in prevention of entry & exit of microbes. So present paper enlightens effect of ayurveda in current COVID pandemic.

**Keyword:** Coronavirus, *Janpadodwamsa*, *Sankaramikaroga*, *Nasya Karma*, *PratimarshaNasya*, *Nasal therapy*, *Anu Taila*

### INTRODUCTION

The World Health Organization (WHO) has confirmed COVID-19 as the name of the disease that SARS-CoV-2 infection causes. Prior to this, the virus was known by various names including novel coronavirus (2019-nCoV) or variations on this. WHO was informed of 44 cases of pneumonia of unknown microbial etiology associated with Wuhan City, China on 31 December 2019. Most of the

patients in the outbreak reported a link to a large seafood and live animal market. <sup>1</sup>

#### Terms correlated to virus/bacteria/micro-organism in Ayurveda:

*Krimi* (microbes), *Rakshas* (demons),

#### Causes:

Due to Adharma (sinful activity), pollution of environmental factors like Air, Water, Soil, place, etc.



leads to epidemiological diseases and may death can occur i.e *Janapadodwamsa*.<sup>2</sup> Communities suffer greatly by the effects of sorcery, curses, anger of demons (evil spirits) and unrighteous behaviour of man; the country becomes vitiated by the smell of poisonous plants & flowers carried by the wind; in such a country, people become afflicted by diseases like cough, dyspnea, vomiting, nasal catarrh (common cold), headache, fever etc. which are not different from the constitution of the body or suffer from bad effects of movement of planets and stars, or by the effects of malevolent qualities of the house, wife, cot, seat (furniture), vehicles, riding animals, precious stones, gems and household equipment etc.<sup>3</sup>

#### **Sankramikaroga transmission:**

*Prasangat* (Sexual Contact), *Gatrasamsparsha* (Touch), *NiShwasa* (Respire), *Sahabhajana* (Food Taking Together), *Sahashyaya* (Sleep Together), *Vastra* (Cloth/Dress), *Mala* (Garland), *Anulepana*.<sup>4</sup>

#### **Roopa (signs & symptoms):**

The diseases (droplet infections) are transmitted through nasal route and produces signs & symptoms are *Shwasa* (difficult in breath/pneumonia), *kasa* (cough), *pratishyaya* (cold, influenza), *Gandhaajnyana* (loss of olfactory sense), *Brama* (giddiness), *Shiroruja* (Head Ache).<sup>5</sup>

#### **Treatments:**

*Rasayana* therapy (Rejuvenative therapy), treat according to disease/symptoms, *sadvrittupalana* (code of good conducts), *Acharya Rasayanapalana* (follow the behavioral therapy) and *Dharma Chintana* (righteous way of living).<sup>6</sup>

#### **Dooshitavayu shodhana (purification of infected air):**

*Dhupana Karma* (fumigation action) with the herbs of *Guggulu* (commiphoramukul), *Agaru* (*Aquilaria agallocha*), *Sarjarasa* (*sargikavateria indica*), *Vacha* (*Achoraschalamus*), *Gorasa* (cow dung), *Sarshapa* (*brassica nigra*), *Bhallataka* (*semicarpus anacardia*), *Kushta* (*saussurea lappa*), *Nimbapatra* (*azardirecta indica*), *Siddhartaka* (*brassica campstris*) etc. drugs, the polluted air is purified by fumigation of above said drugs in a particular/infected area.<sup>7</sup>

Sounding the drums smeared with anti-poisonous drugs; by way, droplet infections are killed.<sup>7</sup>

The easiest way to save ourselves from catching the deadly infection is by keeping our immunity up and tight.

- There are currently no studies on Novel Corona virus, therefore we have to look to the influenza virus on the best way to deal with viral infections currently.

- The media is awash with advice about what works and what doesn't, but if we are interested in using medicated herbal oils as part nasal drop of an additional line of defence to try to avoid being infected by the virus, or to try and boost your immune system, here is what we need to know.

- In order to use medicated herbal oils to potentially help us to avoid being infected with seasonal flu or coronavirus, we need to consider that viruses have a lifecycle (please note that this is a highly simplified version of a very complex process):

- entry into the host and binds with a cell in the respiratory tract (nose/throat/lungs)
- the surface proteins of the virus bind to receptors like a lock and key
- the virus is then able to enter the cell & infect it

#### **Background:**

Influenza virus infectivity was suppressed by essential oil treatment in a dose-dependent manner; the number of nascent viral particles released from MDCK cells was reduced by 90% and by 40% when virus was treated with 1:4,000 and 1:6,000 dilutions of the oil, respectively. Oil treatment of the virus also decreased direct infection of the cells as the number of infected MDCK cells decreased by 90% and 45% when virus was treated with 1:2,000 and 1:3,000 dilutions of the oil, respectively.<sup>8</sup>

There are certain components of a variety of medicated herbal oils that have been shown to disrupt the viral lifecycle at different stages. As a result, it can be helpful to use a blend of different medicated herbal oils.

The virus must have a host to replicate. It can live on inanimate surfaces for potentially more than 24 hours (depending on the temperature & humidity), but will eventually die without a host to infect.

Viruses live longer on hard surfaces such as metal and plastic than they do on fabrics and soft surfaces. The virus may also be spread by airborne droplets, which have landed and live in the environment waiting to be picked up and transferred to a live host.

Oils/Nasal therapy with medicated herbal oils will ensure

that the oils are taken into the body via the respiratory system where they are most needed to kill the virus & prevent it from invading the body.<sup>9</sup>

For viruses to multiply, they usually need support of the cells they infect. Only in their host's nucleus can they find the machines, proteins, and building blocks with which they can copy their genetic material before infecting other cells. However, not all viruses find their way into the cell nucleus

The human body makes use of antibodies to fight disease. Antibodies bind to viruses, marking them as invaders so that white blood cells can engulf and destroy them. Until recently, antibodies were thought to protect on the outside of cells. TRIM21 binds to viruses on the inside of cells.

Infection occurs when viruses, bacteria, or other microbes enter our body and begin to multiply. Disease, which typically happens in a small proportion of infected people, occurs when the cells in your body are damaged as a result of infection, and signs and symptoms of an illness appear.<sup>10</sup>

#### **Definition of Nasya:**<sup>11</sup>

Administration of medicines through the nasal passage is known as *Nasya*. It is also called as *Navana and Nastakarma*.

### **MATERIALS AND METHODS**

- ✓ All relevant literary data were collected manually from classical textbooks of Ayurveda and published articles from journals and authentic website using key words.
- ✓ Anu Taila (is made from a combination of many herbs with multifarious benefits) is for nasal therapy.
- ✓ Anu Taila is available in all Ayurvedic Medical shops of different pharmacies. But we can choose/select best pharmacy of Anu taila.

### **AIMS & OBJECTIVES**

Effect of Anu Taila Nasal therapy in prevention of entry of virus/bacteria

#### **Methods:**

##### **Nasya karma Procedure:**<sup>12</sup>

*Pratimarsha Nasya* is a type of *Nasya karma* (nasal therapy) can be administered daily.

The patient/person who is to administered nasal therapy should be relieved of the urges of the body, his face washed both inside and outside; he should not be very hungry, he

should be made to lie on a cot comfortably; his/her legs and arms kept stretched (at two sides). The physician should stand behind the head of the patient. The medicine to be used, is taken in a small crucible made of gold, silver, copper or any other such metal, slightly warmed by placing in hot water. The nostrils of the patient are widened with the index and little fingers, his/her head slightly raised up and the medicine poured into each nostril in a continuous stream by the right hand of the physician, or by using a tube or a wad of cottonwool. The medicine is to be poured into both the nostrils one after the other, keeping one nostril closed while pouring the medicine to other.

#### **Anu Taila ingredients and preparation:**<sup>13</sup>

Equal quantities of *Chandana (Santalum Album)*, *Agaru (Aquilaria Agallocha)*, *Patra (Cinnamom umtamala)*, *Dharvitwak (Berberis Aristata)*, *Madhuka (Glycyrrhiza Glabra)*, *Bala (Sida cardifolia)*, *Atibala (Abutilon Indicum)*, *Bilva (Aegle marmelos)*, *Utpala (Nelumbo Nucifera)*, *Padmakesara*, *Prapaundarika*, *Vidanga (Embelia ribes)*, *Ushira (Vettivaria zizanoides)*, *Hribera (Pavonia Odorata)*, *Twak (Cinnamomum Zeylanicum)*, *Musta (Cyperus rotundus)*, *Sariva, the two Brihati (Solanum Indicu and Solanum Surattense)*, *the two Amsumatis (Desmodium gangeticum and Uraria picta)*, *Jeevanti (Leptadenia Reticulate)*, *Devadaru (Sedrus Deodara)*, *Surabhi (Pluchea Lanceolata)*, *Shatavari (Asparagus Recemosus)* – all these drugs are put in one hundred times of rain water, boiled and the decoction reduced to one-tenth of the quality. To this decoction, the oil (sesamum oil) equal to one-tenth of its quantity is added and then boiled. When only one-tenth of it remains, (in other words when oil only remains) goat's milk equal in quantity of the oil is added and again boiled until oil only remains, then filter it and stored in clean container jar/vessel.

#### **Time of administration of Nasya karma:**<sup>14</sup>

There is 15 times were mentioned in Ayurveda texts. For this study can administer whenever he/she leaves home/at least 2 times in a day.

#### **Dose:**<sup>15</sup>

The dose of the medicine in *pratimarsha* is either 2 drops or even one drop to each nostril

#### **Age and other limitation:**<sup>16</sup>

*Pratimarsha Nasya* is suitable for all, from birth to death; it bestows the same benefits as those from other type of *Nasya* called *Marsha Nasya*, if taken daily. It does not need any control or following of any rigid regimen nor there the fear of complications.

## CONCLUSION

Anu tail drugs – antimicrobial actions, immune booster, rejuvenate the body, prevents many diseases, promotion of health especially respiratory tract - as per classical references. Essential oil was proved to inhibit the entry & multiplication of virus into our body, based on this, we can apply ayurvedic *taila i.e Anu Taila* as nasal therapy to check the entry of droplet infection through nose. When the oil is administered through the nasal passage, it lubricates the nasal passage and calms down the nervous system; it can pass through the minute channels in the head and neck region and helps to remove toxins. Along with this Nasal therapy sesame oil mouth gargle, medicated *dhumrapana* (smoking) is also useful to kill viruses/bacteria/microbes. For prevention from such infection, people should resort to change of place of living (quarantine and isolation), pacificator rites, expiatory activities, auspicious rituals, chanting of hymns, fire sacrifices, oblations to gods, special fire sacrifices (fumigation of affected area to kill the germs), prostration to deities with folded hands, doing penances, observing vows and restraining in the company of gods, *Brahman*'s and preceptors (and carrying out their mandates). By these will be great benefits. <sup>17</sup>

**Acknowledgements:- Nil**

**Conflict of Interest – None**

**Source of Finance & Support - Nil**

## REFERENCES

1. Sharma P.V Charaka Samhita Vimana Sthana, Chakrapani commentary, 3<sup>rd</sup> chapter, 24<sup>th</sup> version Chaukambha Orientalis Varanasi 2009.
2. Shastri A.D Sushruta Samhita.Sutrasthana; 6<sup>th</sup> chapter,19<sup>th</sup> version Chaukambha Orientalis Varanasi 2015.
3. Shastri A.D SushrutaSamhita.NidanaSthana; 5<sup>th</sup> chapter, 33-34 version Chaukambha Orientalis Varanasi 2015.
4. Shastri A.D Sushruta Samhita. Sutra sthana, Dalhana commentary; 6<sup>th</sup> chapter, 19 version Chaukambha Orientalis Varanasi 2015.
5. Sharma P.V Charaka Samhita Vimana Sthana, 3<sup>rd</sup> chapter, 12-18 version Chaukambha Orientalis Varanasi 2009.
6. Tripathi B Ashtanga Sangraha Uttar Sthana, 4<sup>th</sup> chapter, 8-9 version Chaukambha Orientalis Varanasi 2012.
7. Shastri A.D Sushruta Samhita. Sutra sthana, Dalhana commentary; 6<sup>th</sup> chapter, 19 version Chaukambha Orientalis Varanasi 2015.
8. Sharma P.V Charaka Samhita Vimana Sthana, 3<sup>rd</sup> chapter, 12-18 version Chaukambha Orientalis Varanasi 2009.
9. Tripathi B, Ashtanga Sangraha Uttar Sthana, 4<sup>th</sup> chapter, 8-9 version Chaukambha Orientalis Varanasi 2012.
10. Tripathi B Ashtanga Sangraha Sutra Sthana, 25<sup>th</sup> chapter, 12<sup>th</sup> version, Chaukambha Orientalis Varanasi 2012.
11. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 2<sup>nd</sup> version Chaukambha Orientalis Varanasi 2012.
12. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 13<sup>th</sup> version Chaukambha Orientalis Varanasi 2012.
13. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 9-10 version Chaukambha Orientalis Varanasi 2012.
14. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 15<sup>th</sup> version Chaukambha Orientalis Varanasi 2012.
15. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 20<sup>th</sup> version Chaukambha Orientalis Varanasi 2012.
16. Tripathi B Ashtanga Sangraha Sutra Sthana, 29<sup>th</sup> chapter, 23<sup>rd</sup> version Chaukambha Orientalis Varanasi 2012.
17. Shastri A.D Sushruta Samhita.Sutrasthana; 6<sup>th</sup> chapter, 20<sup>th</sup> version Chaukambha Orientalis Varanasi 2015.

**How to cite this article:** Manjunatha N.S “Prevention of Droplet and Air Born Infections w.s.r to Corona Virus Through Ayurveda – A Review”  
IRJAY.[online]2022;5(1);171-174.  
Available from: <https://irjay.com>;  
Doi : <https://doi.org/10.47223/IRJAY.2022.5126>