



**EXPLORING RASAUSHADHIES AS A POSSIBLE REMEDIES FOR CORONA VIRUS DISEASE: A REVIEW**

Dongre Sushma <sup>1</sup>,

Kelgaonkar Dinesh <sup>2</sup>

<sup>1</sup>Assistant professor, Dept.of Rasshashtra, Goverment.Ayurved collge, Osmanabad

<sup>2</sup>Associate professor, Dept. of Ras shastra , Vasant Dada Patil Ayurved Medical College, Sangli, Maharashtra, India.

**ABSTRACT**

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Today world is fighting with deadly corona virus pandemic and all medical fraternity is searching for promising solution for this ailment. So it is time to explore medicines for this pandemic situation of covid 19.. Antibiotics and Anti-viral drugs are always on front foot to tackle such acute conditions but right now there is no sure anti-viral treatment is available. According to the current observation, mostly elderly and immune compromised co morbid conditions are more prone to this disease. So there is urgent need of such drug which will increase the immunity as well as stop further progression of disease. Ayurveda has enriched with so many formulations. *Rasaushadhes* are one of them which have a strong potential to boost immunity along with therapeutic role in such conditions due to its phenomenal characteristics such as quick action, less dose and easy palatability.

According to the Ayurveda *Nidan Shastra* (Science of Diagnosis of diseases) symptoms of COVID-19 can be correlated with *Vatakaphaj Jwara* which then turn into *Swashanaka Jwara* and it is counted under *Sannipataja Jwara* (Involve all three *Dosha* and difficult to treat). There is a wide range of pharmaceuticals which could be used in COVID-19 according to Ayurveda. Present paper aimed to highlight some *Rasaauushadhes* in the form of *Bhasma*, *kupipakwa rasayana*, and *Kharaliya rasayana*. It is noticed that almost all contents of described *Rasaauushadhes* have *Ushna*, *Tikshna* properties. *Tikta* and *Katu Rasa* which mark there action on *Kapha* and *Kaphajanya Vikara*. *Bhasma* like *Abhraka* help to improve the disturbed physiology of respiratory organs. *Kajali(HgS)* and arsenic in *Kupipakwa Rasayana* has *vishaghna*, *Yogavahi* (catalytic) properties which helps to nullify toxins in mucosal secretions. Arsenic compounds in *Kharaliya rasayana* has immense potential to treat respiratory disorders by its strong antitussive and stimulant action. *Rasayana* properties claims immune boosting and protective action of body tissue. Ayurveda *Rasaushadhes* has been used for prevention as well as therapeutic purposes. It has a strong potential to cure respiratory infections and complications if use cautiously with proper adjuvants. There is need to generate clinical data in order to evidence safe use of this ancient medication in such pandemic disease.

**Keywords** COVID-19, *Rasashastra*, *Bhasma*, *Kupipakwa Rasayana*, *Kharaliya Rasayana*

**INTRODUCTION:** Today world is fighting with deadly corona virus pandemic and all medical fraternity is searching for promising solution for this ailment. Many developed countries are caught in this hurricane and trying to

escape from it. Worldwide it is a great concern over the increasing mortality day by day.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people

infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.<sup>1</sup> Common symptoms include: fever, tiredness .dry cough. Other symptoms include: shortness of breath, aches and pains, sore throat and very few people will report diarrhea, nausea or a runny nose.

According to the World Health Organization (WHO), the most effective way to protect yourself against coronavirus is by frequently cleaning of your hands with alcohol-based hand rub or washing them with soap and water. People should eat only well-cooked food, avoid spitting in public, and avoid close contact, the WHO said, adding that it is important for people to seek medical care at the earliest if they become sick.

According to the latest data compiled by India's drug regulatory authority The list contains antibiotics like Azithromycin, Amoxicillin, Ofloxacin, Metronidazole, vitamins such as B12, B1, B6, and E, female hormone progesterone and anti-cardiac arrest drug Atorvastatin, among others.<sup>2</sup> Although modern medical science is striving for specific anti-viral therapy, but it will definitely take some time. Meanwhile many researches are going on worldwide for the control of COVID - 19 so it's time to explore age old medications of Ancient Ayurveda.

Ayurved has mentioned such pandemic under *Aupasargic Roga* and people get contaminated by close contact, by droplet infections, by sharing food and use of cloth and accessories of diseased person.<sup>3</sup> Physiology of human body is solely based

on equilibrium of *Vatadi dosha* (Basic constituents) *Rasadi Saptadhatu* and *Trimala*. Most of the pathogenesis in Ayurveda is due to divergence of *Doshas* (Basic body constituents), still most of the theories support microbial infections as *Agantuj vyadhi*.

There are two distinct objectives of Ayurveda i.e. *Swasthyasya Swasthya Rakshanam* (stabilize the health of healthy being) and *Aturasya Vikara Prashaman*<sup>4</sup> (cure the diseased people) It means that Ayurveda has more focused over prevention of disease by means of following of proper *Ritucharya*(Protocol to be followed in certain season), *Dincharya*,(Protocol to be followed in daily routine) *Yogasana* and *Rasayana* (Health booster)therapy whenever necessary.

Presently Ayurveda experts have stressed that medicinal herbs such as *Amla*, *Giloy*, *Shilajit* and *Neem* are helpful in strengthening the immune system which is key to fighting the deadly virus.<sup>5</sup> also there are other plant based formulations which can be used as a prophylaxis treatment in COVID. Recently AYUSH department has come up with few immunity promoting measures such as drinking golden milk, steam inhalations, *Nasya* etc<sup>6</sup>

Since Ayurveda has also been prospered with *Rasashastra* (Science which deal with pharmaceutics of Metals-mineral formulations) other than plant based medicine, Ayurveda is having rich heritage of promising medicines called as *Rasaushadhi*s which have very potent therapeutic potential. It has very less dose, easy palatability, quick action and long shelf life<sup>7</sup> hence preferred over plant base medicines. *Rasaushadhi*s are basically potentiated with processed mercury and other metal- minerals by plant drugs. It is

claimed that diseases which do not cured by other medicines are cured by *Rasaushadhi*. So it is time to explore these medicines for this pandemic condition of COVID -19. So present paper will discuss pathophysiology of COVID-19 according to Ayurveda and expected use of these *Rasaushadhi*.

## METHODS AND MATERIALS

For present review, literature was collected from classics of *Ayurveda* and *Rasashastra* texts. Also various national and international research papers along with internet literature were reviewed related to the topic. In present study very specific and particular *Rasaushadhi* was selected in spite of its wide range to keep literature limited. So only three *Bhasma*, seven *Kupipakwa Rasayana* and seven *Khalvi Rasayana* are emphasized in present study.

## COVID-19 and Ayurveda diagnosis

As per the symptoms of COVID-19, it is confirmed that the disease affect respiratory system. It mainly affect lungs and throat. As most of the cases recovered with strong immunity, in severe condition there is strong blockage of mucosal secretions (Pneumonitis) and patient die due to terminal respiratory failure.

As *Jwara* (Fever) is predominant symptom in COVID patient, it is confirmed that main source of pathology stated with *Annavaaha Strotasa* (Gastrointestinal tract). There is vast treatment protocols for *Jwara* described in Ancient classics of Ayurveda. By the 6th -2nd century two famous scholar of Ayurveda *Charak* and *Sushrut* contributes to the field of etiology of *jwara* (pyrexia). According to *Charak* define the fever in five different categories as continuous fever, remittent fever, quotidian fever, tertian fever and quarter fever developed as an imbalance in bodily elements, or “*doshas*,” and has thereby

weakened their immune system, may be subject to a microbial infection as symptom of that imbalance of *tri doshas*.<sup>8</sup> According to Ayurveda primarily these symptoms such as fever, sore throat, dry cough resembles that of *Vatakaphaj Jwara*<sup>9</sup> which turn into *Swashanaka Jwara* which is counted in *Sannipataja Jwara* (Involve all three *Dosha* and difficult to treat). It is due to *Aamsanchit Kapha* (Abnormal metabolites) in Lungs so it is unable to resist microbial toxins and hence infected by secondary infections. Hence there is accumulation of *vikrit Kapha* (Mucosal secretions) and due to vitiated *Udana vata* in lungs there is *Kasa* (cough) and vitiated *Pitta* produce symptom of *Jwara*. So here according to Ayurveda there need to pacify all three *Doshas*.<sup>10</sup>

Basically treatment protocol for such diseases are typical in Ayurveda and more concentrated towards the breaking the chain of pathogenesis of causative factors for *Jwara* so as to balance the physiology of body. But in treatment with *Rasaushadhi* multidimensional actions on vitiated *Doshas* (Imbalanced physiological elements) is taken into consideration along with its immune system boosting potentials.

## Rasaushadhi for COVID - 19

There are numerous *Rasaushadhi* which can break the cycle of pathogenesis of this disease. But only few are quite specific over these symptoms. These are categorized in following ways.

### 1. *Bhasma*<sup>11</sup>(Incinerated metal /minerals )

*Bhasmas* are very fine incinerated inorganic preparation which are processed with plant based substances for potent therapeutic actions. *Bhasma* which act on respiratory system are tabulated with their therapeutic action.

**Table 1: Bhasmas**

Sr.no	Bhasma	Therapeutic action	Dose	Adjuvant
1.	<i>Abhrak Bhasma</i>	<i>Rasayana, Vrishya, Yogavahi</i>	120 - 240 mg	Cinnamon powder
2	<i>Shrungra Bhasma</i>	<i>Kaphayukt Kasa</i>	120- 340mg	<i>Mishri</i>
3	<i>Shubhra Bhasma</i>	<i>Parshwashool, Repeated bouts of cough</i>	120 -500mg	<i>Mishri, Honey, Vanpsha Sharker</i>

**2. Kupipakwa Rasayana<sup>12</sup>**

*Kupipakwa Rasayana* are most potent formulations in Ayurveda due to its unique pharmaceutical processing techniques. It is been prepared in *Kupi* (Bottles) with help of *Valuka Yantra* and use especially for

respiratory tracts diseases. The basic content in any *kupipakwa rasayana* is *Kajjali* (Black sulphide of Mercury) along with other metals and minerals. Following are the few *Kupipakwa Rasayana* which can be used in COVID patients

**Table 2: Kupipakwa Rasyana**

Sr. no	Kupipakwa rasayana	Content	Therapeutic Action	Dose	Adjuvant
1	<i>Purna Chandrod aya Rasa</i>	<i>Kajjali, Suvarna(Purified Gold)</i>	<i>Rasayana, Hridya Antimicrobial</i>	30mg- 120mg	Milk, Butter etc
2	<i>Rasasindoor</i>	<i>Kajjali</i>	<i>Kasa, Swasha, Rasayana</i>	120- 240mg	<i>Trikatu, Honey etc</i>
3	<i>Malla sindoor</i>	<i>Kajjali, Su,Somal(processed Arsenic)</i>	<i>Swash,Kasa, Sannipataj</i>	30mg- 60mg	<i>Honey, Pipal churna</i>
4	<i>Talsindoor</i>	<i>Kajjali, shu.Hartaal (AS<sub>2</sub>S<sub>3</sub>)</i>	<i>Kasa, Swasha, Kshaya</i>	120mg- 240mg	<i>Honey.Ginger juice</i>
5	<i>Shila sindoor</i>	<i>Kajjali, Shu.Mainshil(AS<sub>2</sub>S<sub>2</sub>)</i>	<i>Swasha ,Kasa</i>	120mg- 240mg	<i>Honey</i>
6	<i>Samirpan nag Rasa</i>	<i>Kajjali, Shu.Somal, Shu.Hartal, Shu.Manshila</i>	<i>Jwara, Pratishya,Kasa ,Swasha,</i>	60-120mg	<i>Honey, Adrak swara,Nagarpel patra swarasa</i>
7	<i>Manikya Rasa</i>	<i>Kajjali,Manshila, Shu.Naga,Manashila</i>	<i>Jwara, Kasa, Swasha,</i>	60-120mg	<i>Honey.Ginger juice</i>

**3. Kharaliya Rasayana<sup>13</sup>**

*Kharaliya Rasayana* are those medications which are prepared in *Kharala*(Mortar and pestle). It aim to prepare the medicines super fine(Nano size) in order to increase its bioavailability and decrease its dose. It is usually herbo-mineral preparations

includes combination of Metals, Minerals, Processed plant based poisons treats with organic liquid media. Many *kharaliya rasayana* is prominently use for both acute and chronic disease conditions. For the symptoms like COVID 19 Various *Kharaliya Rasayana* can be advocated.

## 3. Table 3.Kharaliya Rasayana

Sr.No .	Kharaliya Rasayana	Main Contents	Therapeutic action	Dose	Adjuvant
1	<i>Tribhuvan Kirti Rasa</i>	<i>Shu.Hingul(HgS), Shu.Vatsanabha, Trikatu Shu.Tankan,Pippali</i>	<i>Kaphgna, Jwarghna, Swedal</i>	60-120mg	Honey, Ginger Juice
2	<i>Trayalokya Chintamani Rasa</i>	<i>Rasasindoor,Hirak,Suvarna ,Tambra,Loha,Abhrak Bhasma,Muktabahsam etc. Hartal,manshla</i>	<i>Sleshmic Sannipat, Swashnak Sannipat</i>	60-120mg	Honey, Ginger Juice
3	<i>Mrityunjaya Rasa</i>	<i>Hingool,Vatsanabh,Gand hak, Marich,Tankan,pippali</i>	<i>Jwarghna, Vatakapha rprdhan sannipat</i>	15-60mg	Honey, Ginger Juice
4	<i>Kalkut rasa</i>	<i>Kajjali,Manshila,Hartal, TambraBhasma, shu.vatsnabha etc. triturated with decoction of 13 herbs</i>	<i>Sannipataj Jwara</i>	60mg	Ginger Juice
5	<i>Kaphakuthar Rasa</i>	<i>Kajjali,Trikatu,Tambra bhasma, Lohabhasma etc</i>	<i>Kaphaj kasa Jwara</i>	120-250mg	<i>Nagarwel patraswarasa</i>
6	<i>Chandramrutt Ras</i>	<i>Kajjali, Loha Bhasma, Trikatu,Triphala,etc</i>	All types of Kasa	250 500mg	<i>Vasa Swarasa, Honey etc.</i>
7.	<i>Swashkuthar Rasa</i>	<i>Kajjali,Manashila,,Trikatu marich ,Vatsanabh etc</i>	<i>Vatashleshma Jwara,Kasa</i>	120 -240 mg	Honey, Ginger Juice, Boiled water

**DISCUSSION :** Ayurveda has distinct formulations in form of varied single and combinations remedies which are used with *Yukti* [Judgment according to *Bala* (Physical and Mental strength),*Vaya* (age), *Prakriti*, (Constitution) *Kaal* (Time), *Desh* (Habitat) etc.] *Rasaushdhiies* are strength of Ayurveda pharmaceutics and hence preferred due to its quick action and less dose.

It is observed from present scenario that COVID 19 symptoms are likely to attack

in cold weather and host those who have immune compromised. *Rasaushadhiies* recommended for these symptoms are not only release symptoms but also have long lasting *Rasayana* effect which will boost immune system of patients for longer duration.

*Bhasma* are the incinerated and processed metal and minerals are used with specific adjuvants according to the predominance of *Doshas*. So the *Bhasma* like *Abharak* (Mica), *Shringa* (Deer horn) and

*Sfatica*(Alum) could be used.(Table:1) *Abharak Bhasma* is very effective *Bhasma* in *Rashastara*, as it is been used in all disease with varied adjuvants according to the disease. It has *Rasayana* properties. It rejuvenate diseased body by gradually improving *Dhatu pariposhak krama*. It improves all metabolic activities by stimulating enzymatic activities and hormonal secretions. It gives strength to respiratory organs and other systems.

*Shringa Bhsama* is used as expectorant with *Pippali churna* or Honey. It is use in Pneumonia fever, Bronchopneumonia, Pleurisy, Influenza, *Jeerna jwara* (Chronic fever) etc. It is used in combination with *Abhrak Bhasma*, *Sitopaladi Churna* or *Kaphanashak Kwatha*. It is never been use in dry cough as it bring dryness to airways. It moderate mucosal secretions with help of respective adjuvant such as *Vasa*, *Yashtimadhu* etc. *Shubhra Bhasma* (Alum) is use in painful conditions due to acute episodes of cough. It constrict the airways which help to remove Sticky mucous in airways .It is useful in second stage of pneumonia when the lungs become dense. In *Kupipakwa Rasayana*, *Kajali* (Black sulphide of Mercury) is the basic component which has antimicrobial properties and catalytic effect. (Table: 2) These mercurial compound enhance the bioavailability, bio-accessibility and potency of other component what are mixed with them by carrying the component into the targeted cell<sup>14</sup>

*Purna chandrodaya* acts mainly as *Hridya* (Heart protective) and *Rakta dhatus*(Blood) it detoxify microbial toxins in body. *Rasasindo* is having stimulating properties as it expectorate unhealthy mucous from lungs. It removes repeated irritation of nasal mucosa and mucosal

layer of larynx. Hence control upper respiratory infections. It improves function of circulatory system and gives strength to respiratory organs. *Mallasindo* is strong *Rasayana* as it contain arsenic compound.so it is given exclusively in accumulation of *Dushit kapha* (Abnormal mucosal secretions) in respiratory diseases. It is use in acute state of disease with due precautions. It is use in acute pneumonitis and influenza. A case study on the therapeutic effect of *malla sindoor* and *shring bhasma* in the elevated absolute eosinophil count showed highly significant results by symptomatic and pathological investigation with treatment period of 17 days as compared with baseline, a significant change in clinical symptoms was observed and significant reduction in AEC.<sup>15</sup> *Talsindo* contain Arsenic compound is used in obstruction of mucosal secretions in lungs hence it clears airways by its *Ushna* and *Tiksha* properties.

*Samirpannag Rasa* (SPR) contains all three arsenic compound hence more potent *Rasayana* in Acute stage of pneumonia.it reduces inflammation on bronchiole and alveoli and stimulate secretion of mucus for excretion of abnormal mucosal secretions.it give strength to respiratory organs if use judiciously with proper adjuvants. Mishru M. et al (2013) has concluded that the SPR has a significant action in cases bronchial asthma and it could suppress total leukocyte count, eosinophil count, ESR and can improve PEFR and providing symptomatic relief.<sup>16</sup> A single case study on “Effect of ayurvedic formulation on seasonal respiratory disease “(cough, dyspnea, runny nose, sneezing) with use of *Sameerpannag Rasa* along with *Sitopaladi Churna* And *Tankan Bhasma* showed

relief in Seasonal respiratory disease and reducing ESR count.<sup>17</sup>

*Manikya Ras* is mostly use in dry cough where mucosal secretions are difficult to expectorate. It stimulate mucosal secretions which helps to sooth airways. It helps to improve overall health by *Rasayana* properties.

*Kharliya Rasayana* are processed with distinct plant based liquids such as decoctions, juices etc. in such a ways so as to break pathogenesis of diseases. So particular *Kharaliya Rasayana* has been chosen for particular disease conditions. (Table: 3)

*Tribhuvan Kirti Ras* is *kaphgna*, *Jwarghna*, *Swedal* and *Vedanahar*. Hence it is useful in *Vatkaphaj Jwara* (Influenza). It is use in judicious way with proper adjuvant according to the *Prakriti* as it contains *Vatsanabha* (Aconitum Ferox). Acharya charaka while explaining line of *dosha* tackling in *jwara* advices to conquer *kapha* first, *pitta* in second order and *vata* at last, *Tribhuvana keerthi rasa* works on the same principle.<sup>18</sup>

*Trayalokya chintamani Rasa* is a blend of many important *Bhasma* and arsenic compounds like *Hartal* and *Manshila* which not only relieve the symptoms of respiratory disorders but also helps to normalize the function of respiratory system. It clears obstruction in airways and maintain oxygen supply it improves *Ojashakti*(Vital Power), brings *Dhahtusamyata*, (Equilibrium of body composition) and improves metabolic function over a period of time.

*Mrityunjaya Rasa* as the name suggest is medication which overcome death. It act mainly on influenza like symptoms such as fever, sore throat, excessive mucosal secretions. All the content in this preparation have *ushna tikshna* properties

hence use cautiously in *pitta dosha lakshana*. Jagtap GA et al (2019) in the review on *Mrityunjaya Rasa* has concluded that it can be used is an emergency drug in systemic disorders such as different type of fever conditions, Diabetes mellitus, Tuberculosis and even as rejuvenator and it has broad spectrum activity for the management of *Kapha Vaataj* disorders.<sup>19</sup> Agrawal Sachin et al (2014) in the study on “Antimicrobial study of Mrityunjaya Rasa” has evidenced the antimicrobial potential of *Mrityunjaya Rasa* more in *Adrak swarasa bhavit* (triturated with ginger juice Ref - Yogaratnakar) hence concluded the importance of Bhavna dravya in antimicrobial potential.<sup>20</sup>

*Kalkut Rasa* is very strong preparation as compare to other formulation as it contains arsenic compound as well as potent herbs such as *Vatsnabha*, *Kalihari mula*, *Dhattur mula* along with other antitussive herbs such as *Panchkola*, so it has to be use with proper dosage and appropriate disease condition along with suitable adjuvant. It is mainly use in *kaphaj sannipata*.

*Kaphakuthara Rasa* is used in *Kaphaj Kasa*. When there is excessive congestion due to *kapha* (mucous secretions) it is triturated with *kantakari kwath* and *Dhatturpatra swarasa* which helps to constrict the airways which help to expel the mucosal secretions. Satpute JS et.al (2019) has concluded on a clinical study of *Kaphakuthara Rasa* in *Jirna kaphaja kasa* that due to *Chedan* and *Bheden* properties control over vitiated *Kapha* was achieved by *Kaphakuthara Rasa* and it helped to remove *Avarodha*(Obstruction) of *Vayu*. The study did not observe any adverse effect of *Kaphakuthara Rasa* in patients.<sup>21</sup> *Chandramrit Rasa* is processed with Goat milk and other *Agnidipak* herbs

which not only relieve the symptom of *Kasa* but also complication of it by improving overall strength of patient. *Swashkuthar Rasa* contain *Manashila* and *Vatsanabh* along with *Kajjali* with gradual addition of *Krishamarich* (Black Piper) having *Kaphanashak* properties and clears airways with its *shukma* and *Ruksha guna*. It is used in *swashvega* (Repeated bouts of Asthma) when there is accumulation of *dushit Kapha*. Jadhav R et al (2018) concluded in the “A clinical study of *Shwaskuthar Rasa* in the management of *Tamaka shwasa* w.s.r. to Bronchial asthma” *Shwasakuthara Rasa* showed 58.80% good result on signs and symptoms of Tamaka *Shwasa* which have been selected as assessment criteria and better effective in *Kapha Pradhana Samprapti Shwasakuthara Rasa* in the dose of 250 mg with honey were administered three times a day after food for the period of 6 weeks on 20 patients of *Tamaka Shwasa* between the age group of 18 to 60 years.<sup>22</sup> Yadav kapil Dev et al (2012) in the study on Antimicrobial Properties of Swash Kuthar Ras by Agar Disc Diffusion has concluded that *Shwas kuthar rasas* was effective against only third strain of *Staph. aureus*. *Shwas kuthar rasa* shows different minimum inhibitory concentration on different species of bacteria like *S.typhimerum*, *Pseudomonas*, *Morganella*, *Shingella*, *Serratia*, *Staph. aureus* and *E.coli* was 4.5 mg/ml, 75 mg/ml, 150 mg/ml, 18.5 mg/ml, 300mg/ml and 9.25 mg/ml respectively.<sup>23</sup>

It is observed almost all contents of *Rasaushadhi* have *Ushna*, *Tikshna*, *Aampachak* properties. Most of the drugs have *Tikta* and *Katu rasa* which mark their action on *Kapha* and *Kaphajanya Vikara*. *Rasasindo* (Red sulphide of Mercury) and arsenic content *Kharaliya rasayana*

has immense potential to treat respiratory disorders by its strong antitussive and stimulant action. These *Rasayana* also has antimicrobial potential. The drug used in trituration and other processing are used in such a way that it enhances its action furthermore adjuvants used with these medicines have potentiate its effect. In this context mostly honey, Ginger juice, Betel leaf juice etc. is been used which are *kaphavatashamak* properties.

It is observed from the review of above *Rasaushadhi*s that it has a capacity to break the pathogenesis of *Annavaha* and *Pranavaha srtotasa vyadhi*s (Diseases). Apart from that, these drugs have proven pharmacological actions like bioavailability enhancer, anti-asthmatic, free radical scavenging activity, anti-microbial activity, anti-inflammatory, detoxification, anti-mutation activity, Broncho dilator and anti-allergic activities. These attributes increase the potency and safety of *Rasaushadhi*s prescribed in *Shwasa Roga* and help in targeted action.<sup>24</sup> In Ayurveda *Rasaushadhi*s has been used for prevention as well as therapeutic purposes. As per COVID symptoms is concern, it is definitely going to be breakthrough in this alarming situation.

**CONCLUSION:** Ayurveda treatment protocol solely depends on *Agni chikitsa* and strongly believe in equilibrium of basic elements of body. *Rasaushadhi*s in Ayurveda are phenomenal due to metal-minerals constituents. It has wide range and multidimensional therapeutic potential. In today's challenging situation of COVID - 19, when whole world is looking for promising remedies to cure the disease, it could be a key for this. *Rasaushadhi*s have strong potential to cure respiratory infections and

complications arises due to it if use cautiously with proper adjuvants. Only one need to take under guidance of scholar *Rasavaidya*. *Bhasmas*, *Kharaliya* and *Kupipakwa rasyana* mentioned in the study needs to test therapeutically in different stages of COVID cases with proper follow-up so that its preventive and curative aspects can be explored. There is need to generate clinical data by using this ancient medication in acute stage to assure its safe use

## REFERENCES

- 1.[https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1),Accessed March 25, 2020.
- 2.[https://economictimes.indiatimes.com/industry/healthcare/biotech/coronavirus-health-research-body-may-suggest-alternativemedicines/articleshow/74183473.cms? From=mdr](https://economictimes.indiatimes.com/industry/healthcare/biotech/coronavirus-health-research-body-may-suggest-alternativemedicines/articleshow/74183473.cms?From=mdr). Coronavirus: Health research body may suggest alternative medicine, Accessed March 25, 2020.
3. Madhava Nidana of Madhavkara, Chokhambha Sanskrit Sanshtan,Varanasi,31<sup>th</sup> Edition,Rajyakshma Nidana,Page 277
4. Sharma PV (2001) Susruta Samhita of Acharya Susruta, Haridas Ayurveda series-9, Chaukambha, Visvabharati publications, Varanasi.,Sutra sthana 1/17,
- 5.<https://www.dtnext.in/Lifestyle/Wellbeing/2020/03/08084719/1218960/What-Ayurveda-has-to-offer-in-fight-against-coronavirus.vpf>, What Ayurveda has to offer in fight against coronavirus? Published: Mar 08, 2020 08:47 AM by IANS
- 6.<https://mahayush.gov.in/DOA/Notifications/Immunity%20Boosting%20-%20%20AYUSH%20Advisory.pdf>. Accessed April 4, 2020.
7. Shree Vagbhatacharya, Rasa Ratna Samuchchaya edited by Kaviraja Shree Ambikadatta Shastri, chapter 28, 9th edition, Chaukhambha Amarabharati Publication, Varanasi, 1995, page no 570
8. BLOG, AIMIL pharmaceuticals. Drug Resistance Making Fever To Treat Tough), <https://www.google.com/search?ei=VLWRXsPxJZmL4-EPjLC9->, Accessed April 4, 2020.
- 9.Agnivesha Charak Samhita, Vol II , Commentary by Bramhanand Tripathi , Chikitsa Stahna, Jwara Chikitsa Adhyaya, Choukhamba Surbharati Prakashana,Varanasi, Reprint 2005,p 139
10. Dharmadatta Vaidya, Aadhunik Chikitsa Shashtra,Motilal Banarasidas ,Varanasi, Reprint 2004,page 168-169
- 11.Thakur Nathusimhsji,Rasatantrasar and Siddhayoga Sangraha published by Krishna Gopal Ayurved Bhavan, Rajasthan,Edition 27, page 75,108,114
12. Thakur Nathusimhsji, Rasatantrasar and Siddhayoga Sangraha published by Krishna Gopal Ayurved Bhavan, Rajasthan,Edition 27, page 126,130,132-135,138
13. Thakur Nathusimhsji,Rasatantrasar and Siddhayoga Sangraha published by Krishna Gopal Ayurved Bhavan, Rajasthan,Edition 27, page 163,165,170,172,217,218
14. Niladri Bhattacharjya, Pramod R Yadav, Prajapati PK., A critical review of Rasaushadhi used in Shwasa roga with special reference to its metallic content. ,Ayurpharm Int J Ayur All i Sci. 2019; 8(5):46-55.
15. Bharati P.L., Agarwal Prateek, Sharma Rashmi, Subhose V. and Jadhav A. D., A Case Study On The Therapeutic Effect Of Malla Sindoor And Shringa Bhasma In The Elevated Absolute Eosinophil Count., International Journal of Advance research, Int. J. Adv. Res. 5(10), 1872-1875

16. Mayur Mashru, R. Galib, Vinay J. Shukla, B. Ravishankar, and Pradeep Kumar Prajapati, Effect of Sameera Pannaga Rasa (arsenomericurial formulation) in the management of Tamaka Shwasa (bronchial asthma) - Randomized double blind clinical study, Ayu. 2013 Oct-Dec; 34(4): 346–351.

17. Vd. Manche Yogesh R., Vd. Prasad P. Deshpande and Vd. V. G. Patrikar, Effect of ayurvedic formulation on seasonal respiratory disease: A Single Case study, World Journal of Pharmaceutical Research, Vol 7, Issue 07, 2018, 992-995

18. Ranjith B.M., Tribhuvana Keerti Rasa- An Ayurvedic Herbo-Mineral Drug Review, International Ayurvedic Medical Journal, IAMJ: Volume 6, Issue 7, July – 2018, p 1466-1469)

19. Gayatri Ashok Jagtap, Gangaprasad Asore, Sachin Sheth, Review of Literature of Mrityunjaya Rasa – A Herbo-mineral Ayurvedic Formulation, Ayurline: International Journal of Research In Indian Medicine 2019; 3(3) : 1-9

20. Agrawal Sachin, Prasad Anjali Baijnath, Gautam Mrityunjaya, Prof. Dwivedi Laxmikant, Antimicrobial study of Mrityunjaya Rasa, International Ayurvedic Medical Journal, IAMJ: Volume 2; Issue 3; May– June 2014, p 243-247

21. Jayashri Sadashiv Satpute, - A Clinical Study to evaluate role of Kaphakuthara Ras In Jirna Kaphaja Kasa., International Journal of Research in Ayurveda and Medical sciences - Vol 2, Issue 4, Oct to Dec 2019, page 157-163

22. Rajnik Jadav, Alankruta Dave and Jitendra Varsakiya, A Clinical study of Shwaskuthar Rasa in the management of Tamaka shwasa w.s.r. to Bronchial asthma, World Journal of Pharmaceutical Research, Volume 7, Issue 13, 665-674.

23. Das Subroto Kumar, Yadav Kapil Deo, Dubey SD , Reddy KRC, Anti-Microbial Study of Shwasakuthar Rasa: In Vitro Study, International Journal of Ayurvedic Medicine, 2012, 3(2), 76-81

24. Niladri Bhattacharjya, Pramod R Yadav, Prajapati PK. A critical review of Rasaushadhiies used in Shwasa roga with special reference to its metallic content. Ayurpharm Int J Ayur Alli Sci. 2019; 8(5):46-55.

#### Corresponding Author:

Dr Sushma Dongre, Assistant professor, Dept.of Rasshashtra, Goverment.Ayurved collge, Osmanabad  
Email: sushmanagarale07@gmail.com

Source of support: Nil Conflict of interest: None Declared

Cite this Article as :[Dongre Sushma et al : Exploring Rasaushadhiies as A Possible Remedies for Corona Virus Disease: A Review ] [www.ijaar.in](http://www.ijaar.in) : IJAAR VOLUME IV ISSUE VII MARCH-APRIL 2020 Page No: 683-692