

**ROLE OF RASAYANA FOR MAINTENANCE OF HEALTH IN CURRENT SCENARIO
OF PANDEMIC COVID 19****Dr. Sushma Kumari***

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ABSTRACT

The world is going through a pandemic of COVID 19. It has shown ill effect on physio-psychological state of the body. *Rasayana* can play a vital role in normalizing physio-psychological status of the body, thereby preventing the disease and promoting health. Balanced diet is the main source of nutrition but along with this, nutritional supplements are also being recommended now days. The concept of nutrient rich formulations (nutraceuticals) might be new for today's world but in *Ayurveda*, it has already been mentioned as *Rasayana*. Along with nutritious effect, *Rasayana* also have medicinal values due to its various formulations of herbs which help in boosting the immunity. Other than this, *Ayurveda* has also described *Achara Rasayana* (personal code of conduct) which shows rejuvenating effect on psychology of an individual. Therefore, its use should be propagated more and more for the benefit of mankind.

KEYWORDS: *Rasayana*, COVID 19.**INTRODUCTION**

Whole world is struggling with a COVID 19 pandemic caused by a novel Corona virus, subsequently known as SARS-CoV-2; a new Corona virus strain that has not been previously found in people. Emergence of SARS-CoV-2 (Severe Acute respiratory syndrome Corona Virus 2) was first observed in December 2019 when cases of unexplained pneumonia were noted in the city of Wuhan, China. Initial cases of COVID 19 infection were observed at Wuhan Huanan Seafood Wholesale Market, mainly among operating dealers and vendors. The available evidence for COVID 19 suggests that SARS-CoV-2 has a zoonotic source. (World Health Organization, Corona Virus 2019 Situation Report -94, April 2020).

On 11th March 2020, WHO announced that COVID 19 was officially a pandemic after barrelling through 114 countries in three months and infecting over 1,18,000 people at that time and spread wasn't anywhere about to finish. People with COVID 19 show wide range symptoms from mild to severe illness and may appear within 2-14 days after exposure to the virus. Common symptoms are; fever or chills, cough, shortness of breath or difficulty in breathing, fatigue, muscle or body ache, headache, loss of taste or smell, sore throat, congestion or running nose, nausea, vomiting, diarrhoea and increased tendency of thrombo-embolism.^[1] Type of post COVID conditions can be new or ongoing symptoms: like difficulty in breathing or shortness of breath,

tiredness or fatigue, symptoms that get worst after physical or mental activity, brain fogging i.e. difficulty in thinking or concentrating, cough, chest or stomach pain, headache, palpitations, joint or muscle pain, pins and needle feeling, diarrhoea, sleep problems, fever, light-headedness, rash, mood changes, change in smell & taste and change in menstrual cycles. Multi-organ effects of COVID are Multisystem Inflammatory Syndrome (experienced by mostly children), post traumatic stress disorder (PTSD).^[2]

Laboratory investigations and imaging techniques are used to confirm diagnosis of COVID 19 as well as to observe the effect and prognosis of the disease. Commonly advised investigations and their expected presentation is as follows.^[3]

1. NAAT (Nucleic acid amplification test) include **RTPCR** (Real time reverse transcription polymerase chain reaction) and **RAT (Rapid Antigen test)** for COVID 19.

2. Support tests

a) CBC findings; Lymphopenia, Eosinophilia, N/L ratio ≥ 3.13 are related to greater severity and worst prognosis. Thrombocytopenia related to high risk of myocardial damage and worst prognosis. Lymphopenia is from multi-factorial mechanism that includes cytopathic effect of the virus, induction of apoptosis, IL1 mediated apoptosis, and bone marrow suppression by inflammatory cytokines.

b) High value of CRP (c-reactive protein), Ferritin, D-dimer, Prolactin, Lactic dehydrogenase (LDH), Prothrombin time, Activated partial thromboplastin time, Serum Amyloid protein A, Creatine Kinase, Glutamic Pyruvic Transaminase SGPT (ALT), S. Urea, S. Creatinine are risk factors for more severe disease. Thrombo-embolic complications, myocardial damage are worst prognosis.

c) **Imaging; Plain chest X-ray** may evidence sparse bilateral consolidations accompanied by ground glass opacities, peripheral / sub pleural images, predominantly in lower lobes. **CT chest** Reveals multifocal, bilateral, peripheral/ sub pleural ground glass opacity generally affecting posterior portion of lower lobes with or without associated consolidations. **Pulmonary ultrasonography:** typical findings are B lines, consolidations and pleural thickening.

WHO has always emphasised on primary prevention from the disease by adopting COVID 19 preventive appropriate behaviour like vaccination, social distancing, hand hygiene, wearing face mask, coughing etiquettes, nutritious diet, hydration of the body and physically active life style. Separate guidelines for the management of COVID 19 are updated time to time e.g. COVID 19 Clinical Management, Living Guidance 25 January 2021.

As such pandemics or epidemics are not new to the world. Our ancient scriptures have described pandemics or epidemics as *Janpadodhwansa* i.e. when same set of symptoms leads to mass destruction of people. The factors which are common to inhabitants are; air, water, location and season. The underlying factor for vitiation of air, water, location and season is "Adharma" (intellectual blasphemy). According to *Acharya Charaka*, measures for prevention of epidemic are:

1. To leave the place where epidemic has spread.
2. *Panchkarma* therapy (five elimination therapies),
3. Use of *Rasayana*,
4. Use of medicines preserved before the onset of epidemic,
5. Adopt lifestyle including truthfulness, charity, prayers, residence in auspicious locality, observance of *Brahmacharya* (celibacy), *Sadvritta* (good personal and social code of conduct), company of *Dharmic* (religious) and *Satvik* (person with well balanced body mind co-ordination) persons etc.^[4]

Thus, this study is aimed at critical review of *Ayurvedic* texts w.r.t. *Rasayana* and objective is to enlighten the use of *Rasayana* for maintenance and promotion of health in healthy individuals, COVID 19 patients and for post COVID recovery.

MATERIAL AND METHODS

The review of literature was done with the help of *Ayurvedic* scriptures, research articles, updated Government publications related to COVID 19 and *Rasayana*. How *Rasayana* can be beneficial against COVID 19, is being discussed ahead.

RESULT AND DISCUSSION

Rasayana can be used in three forms: *Aahara* (diet), *Aushadha* (medicines), *Achara Rasayana* (behavioural therapy). Following are the benefits of *Rasayana* use:

1. To improve immunity: *Aujsrika Rasayana* are those dietary items which enhance the immunity immediately and should be included in diet on daily basis. Eg: *Dugdha* (milk), *Ghritta* (purified butter) etc. These food items immediately nourish all the seven *Dhatus* which ultimately boost up *Oja* or *Bala* (immunity) of the body.^[5] Therefore, use of *Aujsrika Rasayana* is highly recommended to increase the capability of body tissues to fight against Corona virus and thereby to prevent COVID 19.

2. Replenishing effect: *Acharya Charaka* has described that *Rasayana* leads to proper, accurate, balanced and premium production of all seven *Dhatus* (*Rasa* – Plasma, *Rakta* – Blood, *Maansa* – muscle tissue, *Meda* – fat, *Asthi* – Bone, *Majja* – Bone marrow and *Shukra* – Reproductive fluid). A system of well balanced *Dhatus* leads to proper functioning of entire body system.^[6] In case of healthy individuals, mild to moderate cases of COVID19 as well as recovered cases from severe COVID19, *Dhatus* are in a state of continuous depletion because body tissues are being damaged in combating virus. So, *Rasayana* is required for continuous replenishment of *Dhatus*, to regain strength, stamina and vigour.

3. Medicinal effect of *Rasayana*: *Rasayana* can be used along with other active management of COVID 19 as well as post COVID19 management. *Rasayana* shows effect on whole body but these can be used according to mode of action of herbs on specific organ systems of the body in particular.^[7]

- *Chyavana Prasha Rasayana* particularly shows effect on respiratory system.^[8] Research has proved it as a Bioactive Health Supplement.^[9]
- *Amlaki Rasayana*: This *Rasayana* enhances the longevity.^[10] Its effect has been proved in management of anaemia.^[11] *Amlaki* (*Phyllanthus emblica*) possess anti-microbial, anti-inflammatory, anti-oxidant and hepato-protective properties. Consumption of fresh fruit daily (1-2 numbers) increase immunity and provide rejuvenating effect. Fresh juice of *Amla* (5-10ml) mixed with sugar can be taken in bleeding disorders.^[12]
- *Trifla Rasayana*: *Trifla Rasayana* (Fruits of three plant species viz., *Phyllanthus emblica* L., *Terminalia chebula* Retz and *Terminalia bellirica* Roxb.) also increases longevity and help in fast recovery from diseased condition.^[13] *Trifla Rasayana* showed protective effect against paracetamol induced hepato-renal toxicity on mice.^[14] It also showed protective mechanism against cardio-cerebral vascular diseases.^[15]
- *Pippali* (*Piper longum*) shows mucolytic effect.^[16]
- *Ashwagandha Rasayana*: *Ashwagandha* (*Withania somnifera*) has been proved as rejuvenator.^[17]

- *Guduchi Rasayana: Guduchi (Tinospora cordifolia)* is one of the *Medhya Rasayana*.^[18] Immunomodulator action of *Guduchi* and its aqueous extract was found to enhance phagocytosis in vitro. The aqueous and ethanolic extract also induced an increase in antibody production in vivo.^[19]

4. Stress relieving effect of Rasayana

- *Acharya Rasayana* (personal code of conduct or mental attitude rejuvenating therapy) such as; to be free from anger, avoid violence, exhaustion and excessive thinking, indulge in creative activities, following religious rites, maintain hygiene, indulge in work of charity, regular practice of penance, love for spiritual knowledge, self control, balanced use of sense organs by adopting a regular routine such as *Yoga* and meditation should be adopted.^[20] Everyone is in anxious state due to pandemic. The cause of stress is the fear of getting infected, prolonged home stays, inactive life style, less social interactions, financial breakdown. Psychological stress may leads to physiological derangements like reduced immunological response which in turn make our body more prone to get COVID 19 infection. By adopting *Acharya Rasayana*, the psychological manifestation of COVID 19 can be relieved.
- *Medhya Rasayana (Mandukaparni - Centella asiatica Linn., Yashtimadhu - Glycyrrhiza glabra Linn., Guduchi - Tinospora cordifolia Wild., Shankhapushpi - Convolvulus pleuricaulis Chois):* Along with *Acharya Rasayana*, *Medhya Rasayana* have also soothing effect on mind, increases intellect, enhances metabolism and immune response of the body.^[21] *Medhya Rasayana* has shown nootropic effect (enhanced memory or other cognitive functions of brain). It acts on the basis of anti-oxidant, adaptogenic or essential trace elements present in them.^[22]

Hence, according to properties of different herbs explained in *Ayurvedic* texts and based on researches, *Rasayana* should be used effectively in practice w.r.t. COVID 19.

CONCLUSION

It is concluded that *Rasayana* can be used in three forms: *Aahara* (diet), *Aushadha* (medicines) and *Acharya Rasayana* (behavioural therapy). Its rejuvenating, immunity boosting, anti microbial, anti inflammatory, hepato-protective, anti thrombotic and anti anxiety effects have been established by various researchers. These actions are necessary for prevention of COVID 19, for fast recovery during ongoing infection and during rehabilitation after COVID19. Therefore, use of *Rasayana* should be promoted for the benefit of health.

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