Concept of Rasayana Therapy in Covid 19

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ABSTRACT
An Ayurveda is an ancient system of medicine. The primary purpose of Ayurveda is to maintain the health of healthy individuals and cure the disease of the diseased one. ‘Rasayanchikitsa’ plays a vital role in keeping the health of an individual. Rasayanchikitsa also plays an essential role in infectious disease which spreads directly or indirectly from man to man, animal to animal or from the environment to animal or man. Rasayana promotes physical health, improve dhatu (tissues), acts as immunomodulation and rejuvenate the system. Rasayana, by its name, means obtaining good qualities of rasa & nourishing the rasadi dhatus(tissues). The excellent quality of rasa directly governs the state of health of individuals. Rasayana therapy deals with the delaying process of ageing, prolongation of life and curing the disease. Acharya Sushruta says, "for better results, Rasayan therapy should be done after Panchakarma procedures like Vaman, Virechan and Basti depending on the individual’s Vata, pitta and Kapha predominance. Strength, improving complexion, prolongation of life, energy, enhancing memory, immunity booster, etc. is obtained from Rasayan therapy. Rasayan drugs help by modulating the neuro-endocrine-immune system and also a rich source of antioxidants. Review of the role of rasayan in the prevention of new infectious disease like Covid 19.

INTRODUCTION
An infectious disease is defined as an ailment due to particular infectious agent or its harmful or toxic products which under specific condition leads to spread among individuals in a community. The factors responsible for the spread of contagious diseases are referred to as epidemiological triad. Agent, host and environment form the epidemiological triad. Ayurvedic concept: The infectious diseases concept is explained in Ayurvedic classics under Janapadodhwamsa. Janapadodhwamsa is definedas ‘Samanya Tat Vaigunyat Samankala Samanalinghacha Vyadhhyor Abhi Nirvritta Mana Jana PadamUdwamsayati’ (Acharya, 2010a) . Due to the vitiation of the factors which are universal to every individual, it produces similar signs and symptoms which result in the manifestation of same disease-causing death to a community can be termed as ‘Janapadodhwamsa’.

Community surveys give information about one-quarter of all deaths in the country are due to diarrheal diseases, tuberculosis, respiratory infections and malaria. Many Expert Committees, dating back to the Bhore Committee in 1946, reviewed the existing health situation in the country and...
advice to control diseases including communicable, non-communicable and emerging diseases. More recently, the Expert Committee on Public Health System (1996) and the National Commission on Macroeconomics and Health (2005) examined these issues. ‘Rasayanachikitsa’ is a specialised part of Ayurveda, which mainly preserves and promotes the health of an individual by enhancing immunity and energising metabolism. (Yance and Tabachnik, 2007; Chaplin, 2010)

CoViD-19
CoViD-19 is a respiratory infection caused by the SARS-CoV-2 virus, commonly called a coronavirus. It causes various symptoms including fever, dry cough, shortness of breath, fatigue, body aches & diarrhoea that usually appears within 2-14 days after exposure. The virus spreads via droplet from infected persons coughing, sneezing, and via contact with surfaces that have a virus-containing droplet on them.

MATERIALS AND METHODS
The reviewed Ayurvedic texts reveal that all materials are allied to rasayan concept. The ayurvedic texts used in this study are Charaka Samhita, Sushruta Samhita & some information collected from various websites on the relevant topics.

RASAYAN ‘Concept of Ayurveda’

Classification of Rasayan

1. According to ‘AcharyaCharak’ (Tripath, 2007a)

Based on the aim of Treatment

1. Naimittikarasarayan: Used for a particular cause, which cause a disease
Eg: Pippalirasayanin Rajyaskshma, mandukaparnirrasayan for medhya, triphalarasayan for chakshu
2. Ajasrikarasarayan: Consumed habitually maintains better health which improves the quality of life.
Eg: Milk, ghee, honey (Aacharrasayan)
3. Kamya rasayana: Promotes the normal health, use for special purpose
Eg: Triphala Rasayana, Chavanprash, Brahma Rasayana, Amalika Rasayana, Louha Rasayana etc.

‘Kamyrasarayan’ are further divided into four types

1. Pranakamyam

2. Medhyakamyam

3. Ayushkamyam

4. Chakshukamyam

Another Two types of Rasayan:

1. Kutipraveshika (indoor) Rasayanvidhi
2. Vatatapika (outdoor) Rasayanvidhi

According to ‘Acharya Sushruta’ (Acharya, 2010b)

1. Sarvopaghatasamniya - Deals with counteract the disease process
2. Medhayushkamiya - Increase intellect and prolongation of life
3. Swavhavayadhpratisedhaniya - Deals with onset of swabhavikvyadhis like kshut, pipasa, jara etc.
4. Nivrttasanapiya (Sharma, 2018)

Biological Effects of Rasayana Drugs

Various research on rasayan drugs are done on the different aspect which acts similar to terminologies mentioned below-

1. Adaptogen - It is a metabolic regulator and non-toxic substance that is used to increase the body’s ability to resist the damaging effects of stress and promote or restore normal physiological functioning (Kunte et al., 2009), E.g. Ashwagandha, Tulsi, Haridra, Pippali, Amalaki, Guduchi, Shatavari etc. acts as adaptogenic herbs.

2. Immunomodulator - An element which modifies the immune response by decreasing the ability of the immune system to produce antibodies that recognise and reacts with the antigen that starts their production. Such immunomodulatory drugs are Guduchi, Shatavari, Tulsi etc.

3. Antioxidant - Antioxidants are molecules which fight against free radicals (molecule which highly oxidizes and damages the cells which leads disease) and prevents body damage. (Trikamji, 2009) e.g. Triphala, Guggula, Haridra etc. acts as Antioxidant which substance fight against the molecule which are highly oxidizes free radicals.
Figure 1: Mode of action of rasayana drug
Table 1: Major prevalent communicable diseases with possible Ayurvedic correlation

| Communicable Diseases          | Possible Ayurvedic Correlation                          | Srotas Involved             |
|--------------------------------|--------------------------------------------------------|-----------------------------|
| Lower Respiratory Infections   | Pranavaha Srotos Vikaras (Shwasa)                      | Pranavaha Srotas            |
| Diarrheal Diseases             | Atisara / Pravahika                                    | Udakavaha Srotas            |
| Tuberculosis                   | Rajayaksha                                             | Rasavaha Srotas             |
| Measles                        | Romantika Jwara                                        | Rasavaha Srotas             |
| Malaria                        | Vishama Jwara                                          | Rasavaha Srotas             |
| Pneumonia                      | Shwasanaka Jwara                                       | Rasavaha, Pranavaha Srotas  |
| Filariasis                     | Shleepada                                              | Rasavaha, Rakta Vaha Srotas |

4. **Nootropic** - Substances which restores intelligence and enhances functions of brain. (Anakkleelil and Pillai, 2009). These can be correlated with Medhyaarasayan. For e.g. Mandukparni, Guduchi, Yashimadhu and Shankhapushpi acts as Medhyaarasayan and Acharyacharak has described its importance.

5. Preventive measures: Administration of Panchakarma and Rasayana therapies are advised in the effective management of infectious diseases. The herbs used for medicine preparation should be collected earlier to the start on conditions in that particular area. (Kunte et al., 2009)

**Importance of Rasayana**

According to kalpadruma Rasayana means rasarak-tadidhatu (the seven basic tissues) reaches their proper destination or the process which help in appropriate nourishment of tissues by poshaka rasa. According to Sushruta, Rasayanatantra includes different steps of delaying ageing process increases longevity, and intelligence and provide disease-resistant power to the individual (Trikamji, 2009). According to CharakaRasayanaisthemethod to produce the dhatu of optimum quality.

According to Sharangadhara, Rasayanatreatment is one which results in the prevention of diseases due to old age. (Anakkleelil and Pillai, 2009)

**RESULTS**

Ayurveda is the ancient medical system that can manage any disease. In that not occurs any side effects. In Ayurveda any types of modalities to handle any kinds of disease. Ayush has started researching several areas to improve the system effectively. One of the significant Treatment in Ayurveda is Rasayanachikitsa. Rasayana plays a vital role to enhance the immunity system. The utility of RasayanaChikitsa is vast and very useful in the prevention as well as management of infectious diseases. By maintaining the optimum level of tissues, it helps to provide excellent immunity to a healthy person.

**DISCUSSION**

1. In Ayurveda, Oja and immunity are co-related with each other. ‘Oja’ is the essence of all Seven dhatus. As rasayan therapy develops or builds up immunity, it can be used for the prevention of various infectious disease. Rasayan is a specialised treatment infusing the fundamental aspect of organs, i.e. dhatu, agni and srotamsi, leading to an overall improvement in vanishing the virus or bacteria which are harmful to the human body. E.g. rasayan drug-like Haritakichurna which involves all rasa except lavana and is ushna veerya which helps in alleviating all tridosha, i.e. Vata, Pitta and Kapha. It has an Anuloman, pachan, deepana and also vayasthapan property. According to Ayurveda, Agni (digestive fire) plays an essential role in various diseases. It says that if there is low digestive fire, then the formation and nourishment of rasadidhatu is hampered, which is directly related to Oja/immunity. So the rasayan drugs like haritaki, pippli, chitrak etc. which acts as deepan and pachan increases the agni which breaks down the aam formation and clears every minute strotas ultimately nourishing rasadidhatu and forming Oja (Figure 1)

2. The concept of virulence, i.e. increase in the potential of the virus to survive and multiply in body surfaces was immunity is low, which may lead to death or damage the particular organ or part of the body. High risk of infectious disease is mainly for older people, Diabetic, Hypertensive, Heart disease etc. as well as all newborn babies or below 8-10 yrs child. (Shukla et al., 2019). Some of the Major prevalent communicable diseases with possible Ayurvedic correlation are given in Table 1
Scattered reference of various Rasayana Aushadhi in different disorders is available in many classics with personal interactions with the Srotas involved are available. (Tripath, 2007b)

1. Agastya Haritaki Rasayana - Pranavaha Srotas
2. Amrutha Bhallataka Rasayana - Rasavaha Srotas
3. Chyavanaprasha Rasayana - Rasavaha Srotas, Pranavahastrotas, Annavahastrotas
4. Madhu Snuhi Rasayana - RaktaVaha Srotas
5. Pippali Rasayan - Pranavaha Srotas, Rasavaha Srotas
6. Shilajatu Rasayana - Medovaha Srotas (Kumari and Devi, 2015) (Kumari and Devi, 2015)

CONCLUSION

The utility of RasayanaChikitsa is vast and very useful in the prevention as well as management of infectious diseases. By maintaining the optimum level of tissues, it helps to provide excellent immunity to a healthy person. In diseased person, Rasayanadravyas acts at the level of Srotasas thus helps in breaking the pathogenesis of the disease. Thus administration of Rasayana in day to day clinical practice provide a useful tool for the management of infectious diseases. Administration of RasayanaAushadhi along with Vyadhi Hara (disease curing) medication proves to be very useful in curing as well as preventing the recurrence of the disease to the same individual.

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Conflict of Interest

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