

ROLE OF AYURVEDIC DRUGS IN THE MANAGEMENT OF PSYCHOSOMATIC ASPECT OF  
COVID-19 AND POST COVID-19 SEQUELAE<sup>1</sup>Dr. Anup Kumar, <sup>2</sup>Dr. Suman Yadav and <sup>3</sup>Dr. Ashutosh Kumar Yadav<sup>1</sup>P.G. Scholar, Dept. of Shalya Tantra, Govt. P.G. Ayurvedic College and Hospital, Varanasi 221002.<sup>2</sup>Reader and Head of Dept. of Shalya Tantra, Govt. P.G. Ayurvedic College and Hospital, Varanasi 221002.<sup>3</sup>Reader, Dept. of Rachana Sharira, Govt. P.G. Ayurvedic College and Hospital, Varanasi 221002.

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## ABSTRACT

The COVID-19 pandemic has led to high levels of psychological distress in the general public, including symptoms of anxiety and depression. Such distress is associated with alterations in immune function, including an elevated risk of viral respiratory tract infections. In this light, the possible effects of Ayurveda, a traditional system of medicine promoted by the Indian government as an “immune booster”, are examined from the point of view of psychoneuroimmune mechanisms as well as the “meaning response” described by Moerman. The panic situation created by the disease along with the unfamiliar way of conduct imposed several psychological impacts on human like fear, anxiety, future concerns, interpersonal relationships issues, behavioural issues, domestic abuses, separation anxiety are a few among the reported.. Along with response to lockdown, pandemic has created variable psychological impacts on individuals resulting in increased tendencies for suicidal attempts. Different treatment protocols through ayurvedic principle can be administered in psychological management during this COVID - 19 Pandemic. So, the Ayurveda can prove to be beneficial in this pandemic with regards to prevention and adjuvant therapeutic management with COVID-19 management protocol.

**KEYWORDS:** COVID-19, Pandemic, Psychological affections, *Satvavajaya*, *praghyaparadh*, *Acharya Rasayana*.

## INTRODUCTION

Corona Virus Disease (COVID-19) is a newly revealed infectious disease declared as pandemic by WHO. Through its fast-spreading nature it created an alarming situation throughout the globe. The only possible way to control the spread is to break the chain of transmission by keeping social distancing along with maintaining strict personal hygiene. A complete lockdown was the effective method chosen by the authorities in such a situation. The panic situation created by the disease along with the unfamiliar way of conduct imposed several psychological impacts on human life. Many can't cope up with the situation on their own and are in need of an intervention such as Psychological First Aid. Fear, anxiety, future concerns, interpersonal relationships issues, behavioural issues, domestic abuses, separation anxiety are a few among the psychological issues reported. In a short span of time, it lead to the people panic by taking the life of lakhs of humans, with a reported spread over more than 200 countries worldwide.<sup>[1]</sup> Comparing to the past outbreaks, this is highly contagious. The only way to get over the crisis is to break the transmission by avoiding strict personal contact, by means of social distancing along with maintaining personal and respiratory hygiene.<sup>[2]</sup>

Even though this is the known effective method for controlling COVID it's a very novel and an unfamiliar way of conduct to the human, being a social animal. However, this time of crisis is generating stress throughout the population. Ayurveda defines health as a state of equilibrium of *tridosha*, *trimala*, *sapatadhatu* and homoeostasis of mind as well as sense organs. And as Psychiatric illnesses are fundamentally not differing in physical illness. As *Acharyas* explains the *Manas* (Mind) is considered three dimensional in terms of three *Gunas* viz. *Satva*, *Rajas* and *Tamas*. Out of these three, *Sattva* is the state of pure mind with absolute balance when other two extreme qualities of mind viz. *Rajas* and *Tamas*. If *Satva* is in good state, it generates positive feelings but if not, then the body-mind relationship gets imbalanced leading to *praghyaparadh*.<sup>[3]</sup>

## PSYCHOLOGICAL AFFECTIONS

The lockdown restricted their freedom and is forced to stay at home without having physical contact with their loved ones and also restricted from joining colleagues and even the relatives. Many have the fear of getting infected at any moment are also worried about an uncertain future. Many have to stay at their workplace or other areas of visit and can't even join the family till the

lockdown is over, in a quite unexpected manner. All these situations definitely create several psychological issues among people. It affects throughout the community despite of the social class, age, gender or even cultures. In the middle age group, they have increased future concerns resulting from the job insecurities and almost resultant financial crisis. As they are completely locked down in their homes, many developed adjustment issues as it is quite unfamiliar in their case. Their daily routine such as food timings, daily exercises, sleeping hours etc are altered heavily. Living away from home in such situations create separation anxiety among them and also interpersonal relationship issues as such. There is also chance of withdrawal symptoms from the unavailability of psychoactive drugs leading to increased domestic abuses as well as violence against woman.

Considering the genders, all are equally affected but in case of abuse, women are more prone to get affected. As per WHO, one among the three women world-wide have experienced physical and or sexual violence by any perpetrator in their life time and these tends to enhance during such types of emergency situations, negatively affecting the psychological status in women in a significant manner.<sup>[4]</sup>

### Three basic forms of mood disorders<sup>[5]</sup>

**1. Major depressive disorder** – may be due to persistent social distancing from their close ones, which may cause changes in sleep, appetite, energy level, concentration, daily behaviour or self-esteem.

**2. Dysthymic disorder:** A type of a chronic & mild depression. It may be due to persistent social distancing and anxious-panicky surrounding situations, which may cause low mood status occurring for at least two years, along with at least two other symptoms of depression.

**3. Bipolar disorder:** It is also known as manic depression. It has episodes of mood swings ranging from depressive lows to manic highs. **Manic episodes** may include symptoms such as high energy, reduced need for sleep and loss of touch with reality. **Depressive episodes** may include symptoms such as low energy, low motivation and loss of interest in daily activities. Causative factor is continuing stressed environment like hearing about spread of COVID-19.

### AYURVEDIC APPROACH

Ayurveda is a comprehensive science which gives ultimate importance to health and longevity as well as prevention, rather than treatment and cure of any illness. These measures are to be undoubtedly followed to bring the things under control, in the case of such a pandemic. Another important element is the equal importance given by the ancient science to the somatic and psychic component in each and every disease.<sup>[6]</sup>

Satvavajaya chikitsa is to be performed in the psychologically affected subjects in a stepwise manner. This includes Jnana (knowledge of self), Vijnana (scientific reasoning), Dhairya (determination or patience), Smrithi (application of recollections or memory) and Samadhi (attaining a stable state of mind).<sup>[7]</sup>

To promote mental health and prevent illness, there is a need to create such living conditions and environment that support mental health and allow people to adopt and maintain healthy lifestyle. The intake of healthy '*Ahara*' as per the rules prescribed and adhering to the principles of '*Dinacharya*', '*Ritucharya*' '*Sadvritta*' & '*Achara Rasayana*' are the fundamental entities which play a pivotal role in attaining positive mental health. Ayurveda has description of many single drugs and formulations for Psychiatric illnesses like *Brahma Rasayanam*, *Brahmi Ghrita*, *Kalyankaghritam*, *Mahakalyanaghritam*, *Maha Panchgavya Ghrita*, *Sarasvata Churna* etc.

The concept of *Dhatusamyata*, is also relevant here. It is a state of equilibrium of *dhatu*, where the word *Dhatu* stands for *Dosha*, *Dhatu* and *Mala*. It is also the main objective of *Ayurveda*.<sup>[8]</sup>

*Achara Rasayana* emphasizes the conduct of an individual in social settings. Since, human beings are social animals; definitely their social image and social reputation have an enormous effect on their mental status.

**Medhya Rasayana** is a group of 4 medicinal plants, they are Mandukaparni (*Centella asiatica* Linn.), Yastimadhu (*Glycyrrhiza glabra* Linn.), Guduchi (*Tinospora cordifolia* (Wild) Miers) and Shankhapushpi (*Convolvulus pleuricaulis* Chois).<sup>[9]</sup> specially mentioned with wide range of applications on different systems. Yet in practice few more handful drugs used with same aim are mentioned elsewhere in the *Ayurveda* classical textbooks. They are *Aindri* (*Bacopa monniera*), *Jyothishmati* (*Celastrus panni-culata*), *Kushmanda* (*Benincasa hispida*), *Vacha* (*Acorus calamus*) and *Jatamansi* (*Nardostachys jatamansi*). *Medhya Rasayana* is used either in polyherbal preparations or alone.

### Characteristics of drugs having the *Medhya Rasayana* property

**1. Mandukaparni** (*Centella asiatica* Linn. Family – Umbelliferae):

This Plant is described in *Tikta skandh*, *Prajastapana* and *Vayasthapana mahakashaya* of *Charak Samhita* and *Tikta varga* of *Shusruta Samhita*. The Synonyms are *Manduki*, *Twastri*, *Divya*, *Mahausadhi*. *Dosha karma* – *Kapha-Pitta shamak*.<sup>[10]</sup>

**2. Yastimadhu** (*Glycyrrhiza glabra* Linn., Family – Fabaceae):

This plant is described in *Kanthya*, *Jivaniya*, *Sandhaniya*, *Varnya*, *Sonitastha-pana*, *Kandughna*,

*Chardinigrahana, Sne-hopaga, Vamanopaga, Asthapanopaga, Mutravirajaniya Mahakasaya* of *Charak Samhita* and *Kakolyadi, Sarivadi, Anjanadi, Brhatyadi, Ambasthadi, Utpaladi Gana*, of *Shusruta Samhita*. The Synonyms are *Yas-timadhuk, Klitaka*. *Dosha karma – Vata-pitta shamak.*<sup>[11]</sup>

**3. Guduchi** (*Tinospora cordifolia* Willd. Miers, Family – Menispermaceae):

This plant is described in *Vayahstha-pana, Dahaprashamana, Trishna-nigraha, Stanya, sodhana, Triptighna Mahakasaya* of *Charak Samhita* and *Guducyadi, Patoladi, Araghvadi, Kakolyadi, Valli panchamula* of *Shusruta Samhita*. The Synonyms are *Amrita, Madhuparni, Chinnamula, Cakra-lakshanika, Amrita-valli, Chinna, Chin-nodhbhava, Vatsadani, Jivanti, Tantrika, Soma, Somavalli, Kundali, Dheera, Vishalya, Rasayani, Candrasasa, Vayastha, Mandali, Deva-nirmita, Dosha karma – Tri-dosha shamak.*<sup>[12]</sup>

**4. Shankhapushpi** (*Convolvulus pleuricaulis* Chois. Family – Convolvulaceae):

The Synonyms are *Ksheerpushpi, Mangalyakusuma*. *Dosha karma – Vata-pitta shamak.*<sup>[13]</sup>

**5. Aindri** (*Bacopa monniera* Linn. Family – Scrophulariaceae): This Plant is described in *Balya, Prajasthapana mahakasaya* of *Charak Samhita*. *Dosha karma – Kapha-Vata shamak.*

**6. Jyothishmati** (*Celastrus paniculata* Willd. Family – Celastraceae):

This Plant is described in *Shirovirechana* of *Charak Samhita* and *Adhobhaghara* and *Shirovirechana* of

*Shusruta Samhita*. The Synonyms are *Katabhi, Jyotishka, Kanguni, Paravatpadi, Pinya, Lata, Kakundani, Malkangani*. *Dosha karma – Vata-kapha shamak.*<sup>[14]</sup>

**7. Kushmanda** (*Benincasa hispida* Thunb. Cogn. Family – Cucurbitaceae):

This Plant is described in *Sakavarga* of *Bhavaprakash Nighantu*. The Synonyms are *Puspaphala, Pitapushpa, Brihatphala*. *Dosha karma – Pitta shamak.*<sup>[15]</sup>

**8. Vacha** (*Acorus calamus* Linn., Family – Araceae):

This Plant is described in *Virechan, Lekhniya, Arshoghna, Triptighna, Asthapa-nopaga, Sitaprasamana, Sangya-sthapana, Tikta Skandh, Sirovirechana Charak Sam-hita* and *Pippalyadi, Vachadi, Mustadi, Urdha- bhagkar* of *Shusruta Samhita*. The Synonyms are *Vacha, Uragandha, Sadhgrantha, Golomi, Satparvika, Khudra-patri, Mangalya, Jatila, Ugra* and *Lomasha, Dosha karma – Kapha-Vata shamak.*<sup>[16]</sup>

**9. Jatamansi** (*Nardostachys jatamansi* DC., Family – Valerianaceae):

This Plant is described in *Sangya-sthapana mahakasaya* of *Charak Samhita*. The Synonyms are *Bhutjata, Jatila, Tapas-vini* and *Mansi*. *Dosha karma – TriDosha shamak.*<sup>[17]</sup>

**Table 1: Different causes of Depression in COVID-19 Pandemic Situation and its Ayurveda perspective.**<sup>[18]</sup>

S.No.	Causes of Depression	Ayurveda Perspective
1.	<b>Diet Related -</b> <ul style="list-style-type: none"> <li>Lack of availability of nutritious food</li> <li>Unable to reaching out for craving food</li> <li>Snack food</li> <li>Uncalculated diet</li> </ul>	<b>Aaharaj -</b> <ul style="list-style-type: none"> <li>TamasikAahar</li> <li>Improper dietary habits like Samashana, Adhvasana Vishamashana. These may cause Vishada because of Pragma-paradha.</li> <li>Overeating</li> </ul>
2.	<b>Lifestyle Related –</b> <ul style="list-style-type: none"> <li>Lack of physical and mental exercise.</li> <li>Disturbed routine work</li> <li>Overuse of mobiles &amp; electronic, internet etc.</li> <li>Over sleeping</li> <li>Seeking to virtual lifestyle</li> </ul>	<b>Viharaj –</b> <ul style="list-style-type: none"> <li>Avyayam, Ekasan,</li> <li>Absence of physical and mental challenges</li> </ul>
3.	<b>Psychological –</b> <ul style="list-style-type: none"> <li>livelihoods, not being Feel stressed and worried because all being afraid of falling ill and dying. <ul style="list-style-type: none"> <li>Avoiding to approach health facilities due to fear of becoming infected.</li> <li>Losing work during isolation, and of being dismissed from work.</li> <li>Being socially excluded in quarantine.</li> <li>Feelings of helplessness, boredom, loneliness and depression.</li> <li>Being treated as an outcaste or blamed for spreading the disease.</li> </ul> </li> <li>Rumours or fake news give wrong information and spreads the fear.</li> <li>More watching, reading</li> </ul>	<b>Manasik –</b> <ul style="list-style-type: none"> <li>Bhaya (Fear)</li> <li>Shoka (Grief)</li> <li>Kama</li> <li>Chinta (Stress)</li> </ul>

## YOGA FOR MENTAL HEALTH

Poor mental health conditions, including stress and depression, are known to increase the risk of acute respiratory infections.<sup>[19]</sup> Rising numbers of COVID-19 cases and deaths possibly raise stress and anxiety, while loneliness and depressive feelings are likely due to mandatory social distancing measures. Consideration of the mind is another distinction of Ayurveda and Yoga. Several measures for mental health are described, including pranayama and meditation. Pranayama is known to improve lung function.<sup>[20]</sup> Meditation is found to reduce inflammation markers and influence markers of virus-specific immune response.<sup>[21]</sup> Yoga including meditation could be a simple and useful home-based practice for the prevention and post-recovery management of COVID-19.

## ROLE OF AYURVEDIC DRUGS IN POST COVID DURATION

Union Minister of State for AYUSH Shripad Naik has said Ayurveda, Yoga and other systems will be greatly helpful for the entire world in dealing with the post-Covid-19 difficulties. The profound impact of the pandemic will lead to fundamental changes in society and healthcare system, he said after addressing through virtual mode a global web conference on 'Post Covid-19 Era - Health & Humanity Impact on Human and Societies'.

### Immunity promoting AYUSH medicine (to be prescribed only by practioners permitted under law for prescribing the medicine/therapy under specific stream)

Ayush Kwath (150 ml; 1 cup) daily, Samshamani vati twice a day 500 mg (1 gm per day) or Giloy powder 1 -3 grams with luke warm water for 15 days, Ashwagandha 500 mg twice a day (1 gm per day) or Ashwagandha powder 1-3 grams twice daily for 15 days and Amla fruit one daily/Amla powder 1-3 grams once daily.

- Mulethi powder (in case of dry cough) 1- 3 gram with luke warm water twice daily
- Warm Milk with ½ teaspoonful Haldi in (morning/evening)
- Gargling with turmeric and salt
- Chyawanprash 1 teaspoonful (5 mg) once daily in morning (as per directions from Vaidya)

It is also suggested by the Ministry of AYUSH that the use of Chyawanprash in the morning (1 teaspoonful) with luke warm water/milk is highly recommended (under the direction of Registered Ayurveda physician) as in the clinical practice Chyawanprash is believed to be effective in post-recovery period.

## DISCUSSION

The Ministry of AYUSH, Government of India, has already issued a very useful advisory in this context.<sup>[22]</sup> People are overstressed by the compulsions of social distancing and physical barrier methods. They are likely to find comfort and support in some of the deeply rooted

traditional practices that may protect them from the infection and its associated debilitating conditions. Noticeably, these interventions have the advantages of simplicity, affordability, and acceptability and appear promising as feasible measures for large-scale implementation. Ayurveda, Yoga, and meditation have a potential role to engage the community in creating a more positive health environment. Admittedly, there is need for more research. It was welcome news to learn that the United States National Institutes of Health, National Center for Complementary and Integrative Health has engaged a stress-related initiative and is reportedly considering others.<sup>[23]</sup>

## CONCLUSION

By adopting such preventive as well as curative measures mentioned in the Ayurvedic science, we may be capable of leading a life with a positive physical as well as mental health and may also be able to get rid of the ongoing psychological issues resulting from the COVID pandemic. Gaining a better understanding of the role of immune system could be paradigm changing for the psychiatry. Various other treatments are described detail in *Ayurveda* for healthy person to maintain his health and disease person to be cured, as *Rasayana* therapy specially *Achara Rasayana* (follow up all the code and conduct of living, *Sadvrita* (good conduct-based on personal cleanness of the mind and body, *Swathavrita* (follow up code of the hygiene), *Medhya Rasayana* (mental health promoting drugs).

## REFERENCES

1. World Health Organization. Coronavirus disease (COVID-19) Pandemic [Internet]. 2020 [updated 2020 may 10; cited 2020 may 10] Available from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.
2. World Health Organization. Coronavirus disease (COVID-19) Pandemic [Internet]. 2020 [accessed 26 march 2020] Available from <https://www.who.int/health-topics/coronavirus#tab=tab>
3. Illustrated Charaka Samhita, (2016) translated by Bramhanand Tripathi Published by Chaukhamba Surbharti Prakashan, Sharir Sthana Chapter 1 Sloka no.101, Page No. 795.
4. World Health Organization. COVID-19 and violence against women. Sexual and reproductive health [Internet]. 2020 [2020 April 7] <https://www.who.int/reproductive-health/publications/vaw-covid-19/en/>
5. [https://en.wikipedia.org/wiki/Mood\\_Disorder](https://en.wikipedia.org/wiki/Mood_Disorder).
6. Illustrated Charaka Samhita, (2011) translated by Vaidya bhagavandas, (eng.) 3. Published by Chaukhamba Orientalia; Varanasi: vol 1; Sutrasthana, Chapter 1 Sloka 55 Page No.40.
7. Illustrated Charaka Samhita, (2011) translated by Vaidya bhagavandas, (eng.) 3. Published by Chaukhamba Orientalia; Varanasi: vol 1; Sutrasthana, Chapter 1 Sloka 58 Page No.43.

8. Illustrated Charaka Samhita, (2006) Published by Acharya Vidyadhar Shukla & Prof. Ravidutt Tripathi, Vaidya Manorama Hindi Commentary Published by Chaukhamba Sanskrit Pratisthan, Delhi. India., Sutras Chapter 1 Slok 53, Page No.25.
9. Agnivesh, Charak Samhita, (2011) part II, Edited by Shastri SN, Chaukhamba Bharti Academy, Varanasi.2011; Chikitsa sthana, Rasayan adhyaya 1-3/30-31, Page NO. 39.
10. Bhav mishra, *Bhavaprakasha Nighantu, Guducyadivarga 279-283*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No. 461*.
11. Bhav mishra, *Bhavaprakasha Nighantu, Haritakyadivarga 145-146*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page No. 65*.
12. Bhav mishra, *Bhavaprakasha Nighantu, Guducyadivarga 6-10*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No. 269*.
13. Bhav mishra, *Bhavaprakasha Nighantu, Guducyadivarga 269-270*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No. 454*.
14. Bhav mishra, *Bhavaprakasha Nighantu, Harityakadivarga 71-72*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No.90*.
15. Bhav mishra, *Bhavaprakasha Nighantu, Sakavargavarga 53-55*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No. 679*.
16. Bhav mishra, *Bhavaprakasha Nighantu, Harityakadivarga 102-103*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No. 43*.
17. Bhav mishra, *Bhavaprakasha Nighantu, Karpuradivarga 89*, Edited by Chunekar KC, Chaukhamba Bharati Academy, Varanasi, Reprint 2010. *Page.No.240*.
18. Illustrated Charaka Samhita, (2018) translated by Pt. Kashinath Shastri and Dr. Gorakhnatha Chaturvedi, Published by Chaukhamba Bharti Academy, Nidan Sthana Chapter 7 Sloka no.4-5, Page No. 656.
19. Maxwell L, Barrett B, Chase J, et al. Self-reported mental health predicts acute respiratory infection. *WMJ*, 2015; 114: 100.
20. Abel AN, Lloyd LK, Williams JS. The effects of regular yoga practice on pulmonary function in healthy individuals: a literature review. *J Altern Complement Med*, 2013; 19: 185–190.
21. Morgan N, Irwin MR, Chung M, Wang C. The effects of mind-body therapies on the immune system: meta-analysis. *PLoS One*, 2014; 9: e100903.
22. Ministry of AYUSH, Government of India. Ayurveda's immunity boosting measures for self-care during COVID19 crisis. Online document at: <http://ayush.gov.in/event/ayurveda-immunity-boosting-measures-self-care-during-covid-19-crisis>, accessed April 10, 2020. Weeks J.
23. COVID19: NCCIH Director Helene Langevin on the NIH Integrative Center's Response. Online document at: [www.johnweeks-integrator.com/uncategorized/covid-19-nccih-director-helene-langevin-on-the-nih-integrative-centers-response](http://www.johnweeks-integrator.com/uncategorized/covid-19-nccih-director-helene-langevin-on-the-nih-integrative-centers-response), accessed April 14, 2020.
24. Sharma Ram Karan and Bhagwan Das "English translation based on Chakrapani data, Ayurveda Dipika" Chaukhamba Sanskrit series office Varanasi, Charak Sutra 7/25. (2005). Print.