



Possible effects of Ayurvedic herbs on management of COVID-19

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Article History:

Received on: 29 Apr 2020

Revised on: 30 May 2020

Accepted on: 15 Oct 2020

Keywords:

Corona virus disease, Tulasi, antiviral, multi modal, Ayurvedic remedies

ABSTRACT

Corona virus disease COVID-19 is caused by coronavirus that can spread between animals and humans. The most common symptoms are fever, tiredness, and dry cough. Some individuals also develop aches and pains, nasal congestion, runny nose, sore throat, or diarrhoea. It was reported that traditional remedies may alleviate the symptoms of COVID-19. However, a major drawback is a lack of adequate scientific basis. *Tulsi* has multi-modal therapeutic effects, we hypothesize that *Tulsi* may be effective in the prevention and management of COVID-19. Though the existing literature supports the management of symptoms of COVID-19 using *Tulsi*, a lack of standard formulation limits its use. This is the need of time to start with translational research to provide scientific evidence for the efficacy and to establish the standard formulation of *Tulsi* in the management of COVID-19. Taking these things in to consideration efforts have been made to treat the patients of COVID-19 with *Shaman Therapy* Herbal Formulations. On the basis of findings and observations obtained after completion of current project it can be concluded that covid19 are progressive degenerative conditions in which *Tridosha* at its own *Ashaya* gets provoked and as it belongs to *Madhyam Rogamarga* treatment becomes challenging. This attempt possibly finds solutions which can prevent. Ayurveda the features like cough, running of nose & sore throat are caused due to *Dushti* (vitiation) of *Pranavaha Srotas* & also having *Annavaaha Srotas Dushti* & *Rasavaha Srotas Dushti*. *Ayurveda* is the world's oldest medical system that can manage any disease without side effects.



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ISSN: 0975-7538

DOI: <https://doi.org/10.26452/ijrps.v11iSPL1.3599>

Production and Hosted by

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INTRODUCTION

Corona virus disease COVID-19 is caused by the recently discovered corona virus that can spread between animals and humans. An outbreak of pneumonia in December, 2019 in Wuhan, China, has now been determined to be caused by a novel corona virus. It is named as Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2) (Nisargandha and DadaraoParwe, 2020). The most common symptoms found in covid-19 are fever, tiredness, and dry cough (Deshpande and Parwe, 2020). Some individuals also develop aches and pains, nasal congestion, runny nose, sore throat or diarrhoea. As of July 6, 2020, COVID-19 has been confirmed

in over 11,301,850 individuals worldwide and has resulted in more than 531,806 deaths (WHO, 2019; Parwe et al., 2020). More than 180 countries have reported laboratory-confirmed cases of COVID-19. In Ayurveda the features like cough, running of nose & sore throat are caused due to *Dushti* (vitiation) of *Pranavaha Srotas* & also having a *Annavaha Srotas Dushti* & *Rasavaha Srotas Dushti*. Ayurveda is the world's oldest medical system that can manage any disease without side effects. Ayurveda is equipped with varieties of treatment modalities to handle with any type of deadly diseases. *Tulsi* is the one of choice of drug for the management & prevent the mortality rate of covid-19. Because *Tulsi* have *Katu Tikta Rasa* & *Usna Virya* & have a property of *Kapha-vatashamak*. And *Rogaghnata* of *Tulsi* is *Shwas, Kasa, Hikka, Parshwashula, Jwara, Agnimandhya, Aruchi, Chhardi, Kushtam, Vishavikara* etc. *Tulsi* has multi-modal therapeutic effects; we hypothesize that maybe effective in the prevention and management of COVID-19. Though the existing literature supports the management of symptoms of COVID-19.

METHODS

In order to locate research studies and interventions that examined the therapeutic effect of ayurvedic herbs from *Dravya guna*, databases were book of *dravya guna* (Hegde, 2015) searched through google scholar via universities web browser.

RESULTS

Ayurveda is the world's oldest medical system that can manage any disease without side effects. *Ayurveda* is equipped with varieties of treatment modalities to handle with any type of deadly diseases. However, a major drawback is a lack of an adequate scientific basis. To overcome this problem, AYUSH has started encouraging research in several areas to improve the system effectively. One such valuable plant in Ayurveda and Siddha systems is *Tulsi*. In Indian tradition, *Tulsi* has a sacred role as it is considered as an avatar of *Shri Mahalakshmi*. The Sanskrit meaning of *Tulsi* is "the incomparable one." Off course, this is acceptable in reality, as *Tulsi* has multiple beneficial effects on the human body. It can balance various mechanisms and increases the life span, according to Charaka Samhita (Claus, 2003). Offering prayer to *Tulsi* is the first act to traditional Indian women and men. In fact, *Tulsi* plant was present in almost every home even today and the leaves of *Tulsi* are mandatory included in any prayer of Hinduism (Simoons, 1998).

DISCUSSION

The leaves of *Tulsi* are consumable and are being used to normalize the *Kapha* and *Vata* (Das et al., 1983). *Tulsi* is being used in the management of pain, diarrhoea, cough and fever which are the common symptoms of COVID-19 (Mohan et al., 2011). *Tulsi* have been used in the management of fever ranging from normal fever to malaria fever (Mondal et al., 2011). The leaves of *Tulsi*, in addition with cow ghee, were described as the best medicine for pneumonia. There exists a strong scientific evidence for the antiviral effects of *Tulsi* (Das et al., 1983). *Tulsi* has been proven to be effective in inhibiting several deadly viruses like Newcastle Disease virus, Vaccine virus and Infectious Bursal Disease virus (Prakash and Gupta, 2005). Clinical trials conducted earlier in India, where the extract of *Tulsi* leaves was administered for patients with viral hepatitis and encephalitis. Interestingly there was an increase in the survival and symptomatic improvement in the *Tulsi* group when compared with controls (Rajalakshmi et al., 1986). Another study proved improvement in respiratory parameters and relief from symptoms of asthma with three days of consumption of *Tulsi* (Sharma, 1983). The striking feature in using *Tulsi* is that it not only restores physiological functions but also restores the psychological functions. Phenolic compounds and antioxidant properties of *Tulsi* were reported to contribute its therapeutic effects (Pattanayak et al., 2010). *Tulsi* consumption increases the anti-oxidant molecules and enzymes in the body and protects the cells and its membrane from being damaged by the toxic substances (Shivananjappa and Joshi, 2012). *Tulsi* boosts the immunity of the body and helps to defence the threatening virus and bacteria (Mondal et al., 2009). Improvement in humoral and cellular immunity was observed in animal studies after treatment with *Tulsi* oil (Vaghasiya et al., 2010). The possible mechanism for improving immunity is a modulation of the GABA pathway (Das et al., 1983). Due to its multi-modal therapeutic effects, we hypothesize that *Tulsi* may be effective in the preventions and management of COVID-19. Though the existing literature supports the management of symptoms of COVID-19 using *Tulsi*, a lack of standard formulation limits its use. This is the need of time to start with translational research to provide scientific evidence for the efficacy and to establish the standard formulation of *Tulsi* in the management of COVID-19.

CONCLUSION

Tulsi has multi-modal therapeutic effects. It not only restores physiological functions but also restores

the psychological functions. Which can be helpful in covid19 pandemic. *Tulsi* is being used in the management of pain, diarrhoea, cough and fever which are the common symptoms of COVID-19. *Tulsi* have been used in the management of fever ranging from normal fever to malaria fever. The leaves of *Tulsi*, in addition with cow ghee, were described as the best medicine for pneumonia. So from above discussion *Tulsi* can be used as prophylactic medicine in prevention of spreading COVID-19 disease.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

Funding Support

Supported by DMIMS (DU).

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