



A Review on: Ayurvedic medicine an Traditional Herbs prevent diseases.

Mahadik Vidya Gopinath ^{1*}, Supriya Balasaheb Pawar², Prajkta Sitaram Raykar³ Mayur K. Kolhatkar ⁴, Prof. Gaurav Wadurkar ⁵

¹ HSBPVT'S GOI, College of Pharmacy, Kashti, Ahmednagar, MH,India.

² HSBPVT'S GOI, College of Pharmacy, Kashti, Ahmednagar, MH,India.

³ HSBPVT'S GOI, College of Pharmacy, Kashti, Ahmednagar, MH,India.

⁴ HSBPVT'S GOI, College of Pharmacy, Kashti, Ahmednagar, MH,India.

⁵ HSBPVT'S GOI, College of Pharmacy, Kashti, Ahmednagar, MH,India.

ABSTRACT:

Ayurveda is a term which is derived from the Sanskrit words ayur (life) and veda (science or knowledge). Ayurveda emphasizes good health and prevention and treatment of illness through lifestyle practices (such as massage, meditation, yoga and dietary changes) and the use of herbal remedies. Ayurvedic medicine is holistic, which means viewing the body and as a whole. Ayurvedic medicine is an example of a well-organized system of traditional health care, both preventive and curative, that is widely practiced in parts of Asia. The cardinal aim of Ayurveda is to restore the individual balance between mind, body and spirit. Ayurvedic treatment is although highly effective; proper mode of action, Pharmacology, pharmacokinetics and pharmacovigilance of many important Ayurvedic drugs are still not fully explored. Recently the new type of virus i.e. coronavirus (COVID-19) diseases causing respiratory infection have significantly hampered the public health. A variety of phytoconstituents derived from medicinal herbs have been extensively studied for antiviral activity. Among infectious diseases, viral diseases in particular, remain the leading cause of death in humans globally. A novel coronavirus (2019-nCoV) was announced by WHO (World Health Organization). The present review is trying to explain by these plants and phytochemicals will show the result for controlling the diseases specially COVID-19 by maintaining the immune system.

INTRODUCTION:

According to WHO (World Health Organization) report most of the people's in developing countries depends upon the traditional plants for health requirements. Herbal medicines and purified natural products provide a rich resource for novel antiviral drug development. Natural products have always played a crucial role in drug development process against various diseases, which resulted in screening of such agents to combat emergent mutants of corona virus. Nature provides a vast library of chemical to explore and develop drugs of treatment of various ailments including viral diseases. Herbal medicines continue to play an important

role in preventing and treating viral respiratory infections (VRI). Here, herbs for treating such infectious will be considered first, including both traditional treatment and those that have been scientifically researched. Currently coronavirus disease 2019 (COVID-19) is the third most important disease of animal origin; which prevails in all corners of world. Viral diseases are responsible for the global morbidity and mortality of human beings. Coronavirus (CoV) and enveloped, positive sense, single stranded RNA viruses that belongs to the subfamily *coronavirinae*, family *coronaviridae*, order *Nidovirales*. THE CoV family consists of several species and causes upper respiratory tract and gastrointestinal infections in mammals. In humans, it mainly causes common cold, but complications including pneumonia and SARs can occur and more widely known severe acute respiratory syndrome coronavirus (SARs-CoV). SARs-CoV is a positive-strand RNA virus whose genome sequence exhibits only moderate homology to other known coronaviruses. Ayurveda is an ancient science and so, many measure mentioned in Ayurveda for treating and controlling such type of worldwide spreading virus. These measures for improving the good immune system and curative diseases.

1. Ashwagandha:

Ashwagandha is also known as *Withania somnifera* (Ws), Indian ginseng and winter cheery, it has been an important herb in the Ayurvedic and indigenous medical systems for over 3000 years. Ashwagandha is one of the most herbs in Ayurveda, a form of alternative medicine based on Indian principles of natural healing. Ashwagandha contains chemicals that might help calm the brain, reduce swelling, lower blood pressure and alter the immune system. In Ayurvedic medicine, Ashwagandha is considered a Rasayana. This means that helps to maintain youth both mentally and physically. Research also has been shown that Ashwagandha may improve body composition and increase strength. Ashwagandha improves the body's defense against diseases by improving the cell-mediated immunity. It also has potent antioxidant properties that help protect against cellular damage caused by free radicals. The root of Ashwagandha is regarded as tonic, aphrodisiac, narcotic, diuretic, anthelmintic, astringent, thermogenic and stimulant. Ashwagandha root was useful in Alzheimer's disease (AD) by inhibiting nuclear factor- κ B activation, blocking the production of amyloid beta, restoring synaptic function and improving antioxidant effect. Ashwagandha might help lower blood sugar in people's with type 2 diabetes and lower high cholesterol. Also Ashwagandha help in anemia in which the iron is high and has been shown to help increase hemoglobin levels some people's use between 1 to 6 grams of the whole herb daily. Others mix 3 grams of Ashwagandha powder in warm milk.

Although thought to be useful as a medicinal herb in Ayurveda and sold in many countries as a dietary supplement there is insufficient scientific evidence that it is safe or effective for treating any diseases.

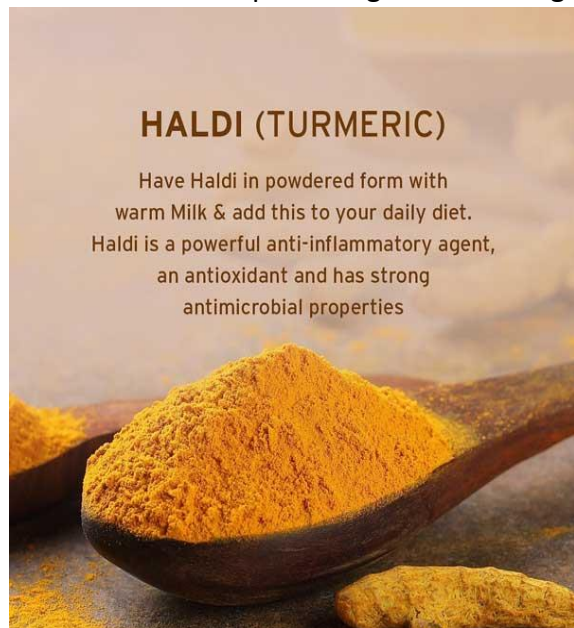


2.Turmeric:



Haridra in sanskrit means 'an efficacious drug for jaundice. It is known to be one of the oldest spices that have been used in Western and Southern parts of India for thousands of years and it is a major part of Ayurvedic medicine. Turmeric plant has been used in traditional medicine as a remedy for various diseases including cough, diabetes and hepatic disorders. Turmeric with its potent anti-microbial and anti-oxidant activities interferes with the ability of microbes and viruses to replicate them and it increases body's immune system

ability to fight the infection and ultimately helps in enhancing the immunity of body. Turmeric powder mixed with black pepper is boiled half cup water and taking with honey is beneficial in flue and cough. The potential of curcumin as a promising treatment against IAV infection, whose effect may be mediated by regulating



HALDI (TURMERIC)

Have Haldi in powdered form with warm Milk & add this to your daily diet. Haldi is a powerful anti-inflammatory agent, an antioxidant and has strong antimicrobial properties

immune response to prevent injury to the lung. Curcumin is a member of the ginger family isolated from rhizomes of the perennial herb *curcuma longa* and has a wide range of biological activities like antioxidant, antifungal, antibacterial and anti-inflammatory effects and acts as reducing and capping agents in this synthetic route. In Ayurvedic practices, turmeric is thought to have many medicinal properties including strengthening the overall energy of the body relieving gas, dispelling worms, improving digestion, regulating menstruation, dissolving gallstones and relieving arthritis.

AMAZING HEALTH BENEFITS OF TURMERIC

Supports Cognitive Function -

By taking turmeric, you can improve the oxygen intake of the brain, which helps in all of the brain's functions and processes.

Arthritis management -

Curcumin is known for its powerful anti-inflammatory and pain reducing characteristics.

Blood Sugar Support -

Turmeric is shown to lower blood glucose levels and reverse insulin resistance.

Fight Aging & Increase Skin Health -

Turmeric is wonderful at improving the texture of the skin because it is an exfoliant but also rich in antioxidants.

Support Cholesterol Levels -

Research has shown that simply using turmeric as a food seasoning can reduce serum cholesterol levels.

Support Your Immunity -

Turmeric's antibacterial, antiviral and antifungal properties help strengthen the immune system.

Heals Wounds -

Turmeric is a natural antiseptic and antibacterial agent and can be used as an effective disinfectant.

Black Pepper Increases the Bioavailability of Turmeric

Research suggest that black pepper extract called piperine can help boost the absorption of the helpful compounds within turmeric.

Turmeric has beneficial effect in several diseases such as neurological disorders, inflammatory bowel diseases, cardiovascular diseases, metabolic disorders, autoimmune diseases and different type of cancer. Turmeric is used for boost the immune system. Peoples commonly use turmeric for osteoarthritis. It is also used for hay fever, depression, high cholesterol a type of liver disease and itching. Turmeric may also improve quality of life for people with chronic kidney disease. Typically use doses of 500-2000 mg of turmeric per day, often in the form of an extract with higher than the amount naturally occurring in foods. A review shows that the turmeric is multifunction compound against different diseases.

3.Basil:

Holy basil (*Ocimum tenuiflorum*) is a plant that is native to India. It is commonly used in the traditional Indian medicine system Ayurveda. Traditional uses include the treatment of colds and inflammation within nasal passages a common effect of cold e.g. basil provides some micronutrients, such as calcium and vitamin k, as well as a range of antioxidant. Tulsi (*Ocimum Sanctum*) is a medicinal plant of genus *Ocimum*. Tulsi is a medicinal plant present in India recognized and prized for its medicinal and therapeutic use. Several medicinal properties of tulsi are present in the roots, leaves and seeds.



Tulsi having multiple therapeutic actions including adaptogenic, antimicrobial, anti-inflammatory cardioprotective and immunomodulatory effects. Tulsi plant is anti-viral and anti bacterial against many pathogens responsible for human infections. Tulsi is particularly known for its use with fevers, respiratory viruses and infections. Tulsi has been shown to boost the immune response against infective threats. Tulsi also clears the mucous from the lungs and upper respiratory tract. Its pungency clears the dampness and toxins that can cause chest infections and fevers. Tulsi is considered as a sacred herb and traditionally it is believed that consumption of tulsi leaf an empty stomach increases immunity.



The juice of the leaves has been applied as a drop for earache, while the tea infusion has been used for treatment of gastric and hepatic disorders. The roots and stems were also traditionally used to treat mosquito and snake bites and for malaria. *Ocimum basilicum* (OB) also known as sweet basil is a well known medicinal

herb in traditional Chinese medicine preparation. Purified components of OB were used to identify possible antiviral activities against DNA viruses and RNA viruses. The aqueous and menthol extract of leaf and seed oil of basil enhances immune response by increasing T-helper and natural killer cells, lymphocyte count, antibody titer. This medicinal herb studied the aqueous extract of at the oral doses per day in rat enhance the production of RBC, WBC, hemoglobin and also enhanced the production of antibodies to fight against flue and viruses.



REFERENCE:

1. Gyawali R, Paudel PN, Basyal D, Setzer WN, Lamichhane S, Paudel M, Gyawali S, Khanal P. A review on Ayurvedic Medicinal Herbs as Remedial Perspective for COVID-19.,2020.
2. Lin LT, Hai WC, Lin CC, Antiviral natural products and herbal medicines , J Tradit complement Med.2014;4(1):24-35.
3. Ganjhu RK, Mudgal PP, Maity H, Dowarha D, Devadiga S, Nag S, Arunkumar G, Herbal plants and plant preparations as Remedial approach for viral diseases. Virus disease. 2015;26(4):225-236.
4. Chan JF, Kok KH, Zhu Z, Chu H, To KK, Yuen S, Yuen KY, Genomic characterization of the 2019 novel human pathogenic coronavirus isolated from a patient with a typical pneumonia after visiting Wuhan Emerg Microbes Infect . 2020;9:221-236.
5. Jalal Z, Bakour M, Lyoussi B. Medicinal Plants and Zinc Impact on COVID-19 Pandemic. 2021
6. Liang-Tzung Lin (Dr), Chun-Ching Lin (Dr). Antiviral Natural Products and Herbal Medicins. 204;24-35.
7. Islam MT, Sarkar C, Dina M, El-Kersh, Jamaddar S, Uddin SJ. Natural products and their derivatives against coronavirus : A review of the non-clinical and pre-clinical data.,2010,2471-2492,.

8. Eric Yarnell. Herbs for viral respiratory infections. 24(1),35-43,2018
9. Jalal Z, Bakour M, Lyoussi B. Medicinal Plants and Zinc Impact on COVID-19 Pandemic,2021.
10. Rajbhandari M, Mentel R, Jha PK, Chaudhary RP, Bhattarai S, Gewali MB, Karmacharya N, Hipper M, and Lindequist U. Antiviral Activity of some plants used in Nepalese Traditional Medicines. Evid-based Complement.Med.2009;6(4),517-522.
11. Chan JF, Kok KH, Zhu Z, Chu H, To KK, Yuon S, Yuen KY. Genomic characterization of the 2019 novel human-pathogenic coronavirus isolated from a patient with a typical pneumonia after visiting Wuhan. Emerg Microbes Infect. 2020;9:221-236.
12. Ryu YB, Jeong HJ, Kim JH, Kim YM, Doman JP. Biflavonoids from *Torreya nucifera* displaying SARS-COV 3 clpro inhibition 7940-7947,2010.
13. Parwe SD, Nisargandha MA, Morey DT. A role of *Somnifera* as Immuno modulator in coronavirus in a pandemic.,1649-1654,2020.
14. Gupta GL, Rana AC. Plant review *Withania somnifera* (Ashwagandha), 129-136.2007.
15. Singh N, Bhalla M and Gilca M. An overview on Ashwagandha : A Rasayana (Rejuvenate) of Ayurveda. An article.2011.
16. Vasavda K, Hedge P and Harini A. Pharmacological activities of Turmeric (*Curcuma longa* Linn).125.2012.
17. Rathour P, Raja W, Ramteke PW, John SA. Turmeric : The Golden Spice of Life :1987-1994.
18. Dai J, Gu L, Su Y, Wang Q, Zhao Y, Chen X, Deng H, Li W, Wang G, Li W. Inhibition of Curcumin on influenza. A virus infection and influenzas pneumonia via oxidative stress , TLR 2/4, p38/JNK MAPK and NF-kB pathways. Int. Immunopharmacol. 2018;177-187.
19. Yang XX, Licm, Huang CZ, Curcumin modified silver nanoparticles for highly efficient inhibition of respiratory syncytial virus infection. Nanoscale ,2016;3040-3048.
20. Kulkarni KV and Adavirao BV. A review on Indian traditional shrub *Tulsi (Ocimum Sanctum)*. The unique medicinal plant Journal of Medicinal Plants studies , 2018;6106-110.
21. Jamshidi N, Cohen MM. The clinical efficacy and safety of *Tulsi* in Humans: A systematic Review of the Literature. Evid Based Complement Alternat Med. 2017;2017:9217567.
22. Mondal S, Varma S, Banola VD, Naik SN. Double-binded randomized controlled trial for immunomodulatory effects of *Tulsi (Ocimum Sanctum Linn)* leaf on healthy volunteer. Journal of Ethnopharmacology . 2011;452-456.
23. Chiang LC, Ng LT, Cheng PW, Chiang W and Linn CC, Antiviral activities of *Ocimum basilicum*, Clin. Exp. Pharmacol. Physical.,2005:811-816.