



Alternative Medicine for Fight against Covid-19/Coronavirus and “Alternative” Treatments

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ABSTRACT

The most recent severe acute respiratory condition corona infection outburst has overwhelmed an ill-equipped nature among a festival season. It was first appeared on December 1, 2019, Wuhan (China) and recognized as a coronavirus and has spread worldwide. The manifestations are fever, discomfort and cough which resolve in a couple of days yet may advance to an extreme in most of the cases, but if any comorbidity exists in the form of diabetes, hypertension or any other debilitating systemic disease, then it can lead to grave prognosis. It spread mainly from one person to another through air droplet. Although no vaccines have been discovered yet but still scientists are working relentlessly to find one. Thus, the society has must think about the complementary and alternative medicinal system. India has its traditional medicine “AYUSH”, which comprises of Ayurveda, Yoga, Unani, Siddha, and Homeopathy. This review mainly aims to summarize the point’s alternative to allopathy. AYUSH helps in immune system boosting, act as an antiviral, anti-inflammatory, stress release. It has been reported in the literature that it has no side effect and is safe to use. So this current situation provides an opportunity to employ ancient traditional medicine to take part and try to deal in the best way to withstand covid-19.



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INTRODUCTION

An International public health emergency concern was declared by WHO (World Health Organization) on 30th January due to increased unidentified cases of Pneumonia prevailing in Wuhan, China since

December 2019. The WHO reported the official name for the pandemic as the Coronavirus infection 2019 (COVID-19) (Gasmi *et al.*, 2020). On February 11, 2020, the Coronavirus was named as serious, intense airway disorder Coronavirus (SARS-CoV-2) as proclaimed by the Coronavirus Study Group (CSG) of the International Committee on Taxonomy of Viruses of Infections regarding the 2015 World health organization (WHO) naming instruction (Yan *et al.*, 2020). By March eighteen, 2020, there had been in excess of two lakhs COVID positive cases, and in excess of eight thousand passing because of nCoV-19 (Ludvigsson, 2020). The huge population is commonly defenceless without any prevalence of a given sex or age. Amongst every single positive patient, the individuals who are more established (>fifty years old) represented fifty-three point six percent of the detailed patients and kids (under ten years of age) represent just

0.9%; with little male power at 51.4%. (Shi *et al.*, 2020). The disease may have transferred from creature to person as a zoonotic operator. Another person-to-person course of move affirmed climb in the event of Wuhan and all-around after the Wuhan showcase was closed and cases were migration in China (Amawi *et al.*, 2020). The infection that transmits COVID-19 spread principally from individual to individual, primarily through air beads enter into mouth or nose of individuals who are nearby in this manner contaminating the lungs (Guner *et al.*, 2020). The hatching time of Covid-19 territories from 1 to 14 days, averaging 5-6 days in all patients. Despite the fact that a hatching time as long as 24 days has been accounted for in some COVID positive cases.

CLINICAL MANIFESTATION

Over the world as per information of hospitalized quiet information, the incubation time of SARS-CoV-2 was 3 to 7 days, and around 80% of diseases were gentle, or the patients were asymptomatic, 15% are extreme cases, requiring oxygen, and 5% are basic contaminations, requiring ventilation and a few cases in any event, bringing about death. The most regularly detailed side effects are fever (83%), cough (82%), myalgia or fatigue (44%), pneumonia, and complicated dyspnea (55%), while less normal revealed side effects incorporate cerebral pain (8%), loose bowels, hemoptysis, runny nose, and mucus delivering cough. Roughly Ninety percent of the cases were seen to have multiple indications, though fifteen percent experience rises in temperature, cough, and inability to breathe appropriately.

Complementary and alternative medicine

The ancient medicinal system globally present can be used as a complementary and alternative system must be given importance by scientific community A unique called Branch of Indian Frameworks of Medication and Homeopathy (ISM&H) was made in March 1995 and rechristened as Division of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy) in November, 2003. Thus, this department is specialized in providing education and research in AYUSH (Samal and Dehury, 2016). India is known to have several medical systems, which are alternatives to Allopathy. In India, AYUSH term as alternative system (Indian traditional medicines) AYUSH system consists of five different holistic method of treatment which includes, Ayurveda, Yoga, Unani, Siddha, and Homeopathy is well known. Compared with all Ayurveda, Yoga and Homeopathy are all over the world accepted as an ancient medical system. The recent pandemic of

COVID-19 additionally gives a brilliant chance to the other option and conventional restorative framework to demonstrate its significance (Prajapati and Kumar, 2020). On April 21, India as providing the approval and mandatory compliances for any AYUSH research in human for COVID-19. The AYUSH which come with these terms of strengthening general immunity so that a larger number of proportion are able to remain asymptomatic or experience only mild disease and fewer proportions move to become severe cases (Priya and Sujatha, 2020). Instead of being quarantine, washing hand, and wearing a mask, current medication doesn't give modalities to boost the immunity and limit the danger of the disease. The prophylactic proportions of Ayurveda, for example, medicated water, washes, oil pulling and nasal oil intake should be possible as locally situated consideration, and that may offer a 'physical masks', by this implies limit the danger of getting the SARS-CoV-2 disease (Tillu *et al.*, 2020b).

Indigenous systems of medicines (Ayush)

The Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) into COVID-19 management strategy was brought by the central government in April 2020. In the past 6-7 years, the AYUSH sector has contributed to the management of dengue and chikungunya in the states of Kerala and Tamil Nadu. The COVID-19 pandemic has provided another opportunity for the creation of AYUSH regimens for the management of an epidemic and in addition for the designing of clinical and field trials adapted to the traditional health systems (Priya and Sujatha, 2020). Indigenous systems of medicine were well-known and were chosen by everyone when allopathy was not available (Samal and Dehury, 2017).

AYURVEDA

Ayurveda is one of the world's ancient "whole-body" which heals the systems. According to Ayurveda our body is made up of 5 components found in the cosmic system, i.e. earth, water, air, fire and space. Vitta (space and air), Pitta (fire and water) and Kapha (earth and water) are a combination of these 5 elements. Ayurveda medicines have been reported as safe and potentially effective, wide application, ease of availability, as a drawn-out experiential information on clinical use, ease of application, and to the extent that this would be possible, affordable (Amawi *et al.*, 2020). Ayurveda directs us to assess for a healthy way of life instead of a basic prescription of medicine. The exemplary Charaka Samhita gives insights into Ayurveda insights of managing an epidemic and helps us to re-defines

strategy to boost immunity to prevent infection and stops its further advancement to maintain equilibrium. The foundation of Ayurveda is based to reinforced brain and body to deal with many problems, as well as an infection. The steps taken to reduce respiratory infection are intake of warm water, warm food, and decoction, warm water gargling, steam inhalation, and the local application of Ayurvedic medication is helpful for symptomatic relief in mild patients (Tillu *et al.*, 2020a).

Ayurvedic Immunity Promoting Measures

An advantage with the AYUSH systems is Accessibility to most of the products, particularly in rural areas. (AYUSH)

1. Get hold of Chyavanprash 10gram (1table spoon) in the morning. People with Diabetics can have sugar free Chyavanprash.
2. Kadha: Drink natural tea/Kadha comprising of Tulsi, Dalchini, Kalimirch (Dark pepper), Dry Ginger and Munakka - more than once per day. Include jaggery (common sugar) or new lemon juice as you would prefer, whenever required. By interfering at a different stage of virus increase in the infected individual, this preparation may able to boost an individual's immunity. Tulsi leaves are full of chlorophyll which are phytonutrients, nutrients, and minerals, and eugenol, a bioactive compound and having a different restorative use. Scared tulsi is helpful in airway complexities, for example, unfavourably susceptible bronchitis, cough, asthma, and eosinophilic lung sickness it has a remarkable characteristics to melt the mucous. Cinnamons have antioxidant property. Black peppers stimulate the circulatory system, and it is generally utilized as a cold and influenza therapy. Ginger has sesquiterpenes chemical properties that target cold infections (Prajapati and Kumar, 2020).
3. Golden milk – 1/2 teaspoon Haldi (turmeric) powder in 150ml warm milk – one or two times a day.

Simple Ayurvedic Procedures

1. Nasal application – One has to apply sesame oil/coconut oil or Ghee in each of the nostrils in morning and evening. This protects the airway tract from an entry of the infectant. This method is known as Nasya. It is one of the best practices well described in Ayurveda.

2. Oil pulling therapy - Get hold of one tablespoon sesame oil in the mouth and Swish in the mouth without drinking per two or three min. Then spit it out and rinse the mouth with the help of warm water. It can be practice one or two times a day.

During dry cough/sore throat

1. Steam inhalation breath with Mint leaves or Ajwain should be possible one time each day.
2. If there should be an occurrence of cough or throat contamination you can have Lavang (Clove) powder blended in with nectar which can be taken two-three times each day.
3. Above procedure can be used to treat the dry throat. If the condition gets worst, it is best to consult the doctor (Ministry of Ayush, 2020).

Ashwagandha

Ashwagandha liquid concentrate has a wide range of dose-dependent subordinate role in immune homeostasis. Appropriate use of Ashwagandha has been more productive in enhancing the immunity of host through the transition of targets area, which is related to COVID-19. Therefore we recommend Ashwagandha extract as efficacious prophylactic. In our opinion, Ashwagandha might be an alternative to disease-modifying drugs such as hydroxychloroquine (Tillu *et al.*, 2020b). Ashwagandha is a powerful Ayurvedic herb Traditional medicine system, Ayurveda is amongst one of them and now, the top group of scientists from Indian Institute of Technology (IIT) Delhi, in collaboration with AIST, Japan, have found that one of the most potent and widely used Ayurvedic herbs, ashwagandha may hold strong potential in fighting COVID-19. Ashwagandha to target some of the main illness causing enzymes in the body and split proteins, Mpro (Main protease) which help in replication and spread. Regularly consuming Ashwagandha can also supercharge your immunity. Experts actually say that increasing the dosage of ashwagandha during a sudden spike can really work well in healing the body. Viral infection leading to fatigue and chronic stress can be relieved by its immune-boosting property. Also known as vitalizer as it maintains the cortisol level and decreases the stress and even relieves inflammation (Rastogi *et al.*, 2020).

YOGA AND NATUROPATHY

Yoga is a training that doesn't require reception of religion yet an entrenched practice subject to

an arranging structure for the body, mind, and soul to accomplish internal congruity and opportunity. Conventional yogic dependent on five standard incorporate breath control, positive reasoning and contemplation, the selection of explicit real stances (asanas), appropriate eating regimen and self-reflection. Yoga treatment needs to begin with self-assurance and self-inspiration. The act of yoga isn't as simple or as snappy as taking prescription, however mounting proof recommends it merits the exertion and speculation (clinical yoga treatment). Ayurveda boosts comprehensive wellbeing, which include eating routine, rest, mental unwinding, way of life conduct, and Yoga Pranayama (Breathing techniques) is known to enhance lung capacity (Lopes *et al.*, 2018). Yoga and meditation are simple and affective for various other illnesses also (Tillu *et al.*, 2020a). COVID-19 will bring change in economical, social and psychological well being so we should adopt yoga for mental stress, behaviour changes, and to increase the immunity power (Tillu *et al.*, 2020b). As it is said that "Actions of great people are accomplished by their inner strength". (Patwardhan, 2014). Yoga is a difficult activity practice related with explicit airway procedures which may consolidate abdominal, and clavicular breathing stages so as to augment breathing volume and accordingly increment oxygen take-up (Pinheiro *et al.*, 2010). Pranayama is a significant part of unwinding and a controller of autonomic nervous function Practicing meditation has proof it is good for mental health. The idea of yoga was established in India more than five thousand years back and is presently trending in India as well as in Western nations (Khatib *et al.*, 2017).

UNANI (PLANT-BASED MEDICINE)

The basic concept of Unani scheme is constructed upon the humour concept of Hippocrates explicitly blood, phlegm, yellow bile and black bile. Medicines of Unani are non-toxic with no side effects. The "Comprehensive Book of Medicine", expresses that southern breezes are hotter in correlation with the northern breezes which are colder and because of this difference in temperature; individuals become progressively inclined to respiratory contaminations. Physicians of Unani use medicinal herbs in making kadha, extract for spray or the similar to fumigants to make the air contaminants free. Households units ought to be showered with dilute vinegar to make the air clean. Fumigation with sandal and camphor can be done when the air smells foul. Consumption of citrus and sour fruits is also advisable. Rosewater, vinegar, and offer a relaxing fragrance and are also supposed to have a cleansing result on

microorganisms. The diverse parts of the numerous plants are well-acknowledged for their antiviral properties since a long time. The utmost significant floras are "*Glycyrrhiza glabra*, *Allium cepa*, *Allium sativum*, *Ocimum sanctum*, *Ocimum tenuiflorum*, *Piper nigrum*, *Cinnamomum verum*, *Daucus maritimus*, *Curcuma*". It has been reported that *Glycyrrhiza glabra* plant displays antiviral properties against several viruses such as SARS related coronavirus, human immunodeficiency virus -1, and airway syncytial virus. There is an occurrence of more than three hundred flavonoids and twenty triterpenoids in this plant. Consequently, a watery concentrate of Unani plant, including different plants as referenced above might be helpful to curb COVID-19 in spite of the fact that the clinical impacts of most medications are not issued at this point (Ali and Alharbi, 2020).

SIDDHA

One of the ancient system of medicine in India is the Siddha system. The code and policies of this system is identical to Ayurveda. This system is proficient of treating all kind of disease except for emergency cases. Principally it is effective in treating all kind of skin complications. Siddha medicines are effective in decreasing the high incapacitating problems among patients of HIV/AIDS.

1. "Vishasura Kudineer: decoction 60ml twice a day
2. Kaba Sura Kudineer — decoction 60ml twice a day" (Ministry of Ayush, 2020).

HOMEOPATHY

The term "Homeopathy" was first given by its inventor, Samuel Hahnemann which is derived from the Greek words for 'similar suffering' referring to the 'like cures like' principle of healing. It is based on principle namely chronic disease (miasm), vital force (vital principle), single medicine and minimal dose (Das, 2019). The latest guidelines of the ministry of AYUSH recommended to states across the country to use the traditional homeopathic drug. 'Arsenic' in a very low concentration has been reported advantageous for several diseases and viral infections (Ali and Alharbi, 2020). 'Arsenic album 30' in a form of preventive medicine against COVID-19 can be used. Its prophylactic use has been advised in states like Karnataka, Tamil Nadu, Kerala and Maharashtra and it has been used in high-risk areas. Homeopathy has been widely hailed as a "safe" and "side-effect" free form of treatment. Like

Ayurvedic medicines, they are usually natural concoctions, are safe and do not carry the side-effects which often come along with allopathic medicines. The portion of 4 pills of Arsenicum collection 30 day by day once on void stomach for three days is suggested. The portion ought to be proceeded following multi-month by following a similar schedule till the time Crown infection diseases is transcendent in the network. A portion of the investigations shows that Arsenic collection is 1 of the constituent in detailing influenced Human colon cancer cells and human macrophages. In addition it appeared j.Nuclear factor-KB hyperactivity decreased articulation of journalist quality green fluorescent protein in transfected Human colon cancer cells, J, TNF- α discharge in macrophages. Moreover, Arsenic collection is a typical cure in the instances of airway ailments in regular practice. Arsenic album has been considered to fight off any inflammation in the body. This medicine is also effective in treating throbbing frontal headache, burning chest pain, restless, and fear full. Homeopathy is suggested to battle against flu-like symptoms, still prescribed as a form of immunity-boosting, or prophylactic medicine but is not being actively encouraged. Additional aspects of precautionary measures when screening the patient, performing various procedures, and disinfecting the surgical area were discussed (Nimbalkar et al., 2020). Even for dentists also there is a need for preparedness (Singh et al., 2020).

CONCLUSION

In this era of the modern world, we are back to our ancient techniques to resolve a massive pandemic situation in India. This has thrown a unique challenge to the healthcare system. A major resource of traditional technique is AYUSH sector which comprises of medicine systems of Ayurveda, Siddha, Unani, Yoga and Homeopathy. Ayurveda, as a helpful methodology sees life as the association of the body, senses, psyche, and soul. Then again, yoga manages the order to upgrade or develop one's necessary force in a made way. It offers the way to achieve total self-acknowledgement. Naturopathy is defined as a system which identifies the presence of healing forces residing in the body. The code of Unani is that every individual is regarded as a separate entity, and each factor that makes up an individual is taken into account. The basic theory of Unani has based upon the four humour philosophy of Hippocrates that "the body has four humours (blood, phlegm, yellow and black bile)". The principles of Siddha are similar to Ayurveda in which the human body is seen as a imitation of the space and that the human body

comprises of earth, water, fire, air, and sky. On the other hand, Homeopathy is based on the concept that "likes are cured by likes," i.e. a substance that is capable of producing symptoms when taken in a large dose can be used in low doses to treat similar symptoms. With the help of the ancient technique, we have modernized with the inclusion of allopathy. Hence this technique proves a famous saying which is- "Prevention is much better than cure".

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Conflict of Interest

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

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