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Review on: Ayurveda Post Covid19- Investigating the Impact and Enhancing Knowledgeable Choices Via Awareness of Health

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Abstract

In the post-COVID era, Ayurveda plays a significant role in healthcare systems and in empowering individuals to make informed decisions by promoting health literacy. This study examines this concept. An age-old holistic medicinal system is called as ayurveda, which has origins in the India and goes back over five millennia, provides a distinctive method of managing illness and promoting health through individualised therapies, herbal remedies, lifestyle changes, and preventive care.

This essay explores the theoretical underpinnings, practical applications, and historical context of Ayurveda. It also explores how the practice may help with COVID-19 symptoms and immunity enhancement. Along with offering regulatory proposals, educational changes, and industry activities, it also looks at the opportunities and problems of incorporating Ayurveda into post-pandemic treatment. In the post-COVID era, incorporating Ayurveda into contemporary healthcare systems has the potential to improve patient outcomes, healthcare delivery, and health literacy.

Keywords - Ayurveda, Health Literacy, Holistic, healthcare delivery, Immunity enhancement

INTRODUCTION

Ayurveda's significance and necessity are still relevant today. The ayurvedic medical system was praised globally throughout the Corona Period, but it hasn't been able to gain the recognition it deserves on the global scene. Understanding the history of a subject is crucial for understanding its progressive evolution.History itself is the only source of information regarding the rise and fall of any topic over time. The history of Ayurveda itself provides insight into the country, people, and times through its evolution and fall across time, as well as the individuals who have contributed to its advancement or decline. When it comes to safeguarding the wellbeing of those in good health, history is crucial.

Origin and lineage of Ayurveda (Ayurveda Avatarana)

Daksha Prajapati learned the fundamentals of Ayurveda from Lord Brahma afterwards he acquired it. Prajapati guided Ashwini Kumaras (the Ashwini twins, who are perceived as Devatas' doctors) the ancient art of Ayurveda. They searched Indra after knowing about him and gained information about Ayurveda from him. Acharya has determined to convey Maharshi Bharadwaja to the Lord Indra to acquire knowledge about devine Science of life Ayurveda from him, Then, Lord Indra, provide the knowledge of Ayurveda to Bharadwaja in brief considering the depth of his intellect.

***Figure 1*:** *Ayurveda Avatarana*

For the benefit of Swastha (the healthy) and Atura (the patient), Indra expounded the shashwata (the eternal or immortal) and Punya (the the holy science of existence), which was composed of three guiding ideas known as Trisutra (cause of illness or aetiology), Aushadha Jnana (skills of medications, cures, and therapies) and Linga (disease symptoms). Pitamaha (Lord Brahma) had previously comprehended these Tri Sutras, and he imparted this eternal science to other disciples [1]

Introduction of references of Ayurveda

Ayurveda in Veda

The Vedas are the world's oldest scripture and the fount of all knowledge; like with other sciences, Ayurveda derives from the Vedas as well. Ayurveda, the science of life, has permeated the world through vedic mingling.Many references to Ayurveda can be found throughout the Samaveda. Numerous mantras originate from the Rigveda, a text rich in Ayurvedic wisdom. Since Sam signifies "music," the Samaveda goes into great detail about the complete phonology.

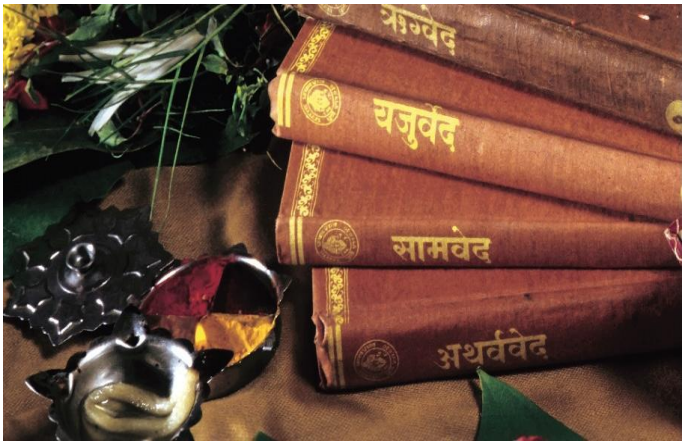

***Figure 2*:** *Veda*

The Ayurvedic concepts are expounded upon in great length in the Atharva Veda. Ayurveda is sometimes referred to as the Upaveda of Atharva Veda because of this. It includes hundreds of Ayurvedic sutras that include descriptions of numerous diseases, their symptoms, diagnosis, and how different medications are used to treat them. The Yajurveda contains thorough explanations of leprosy, heart disease, fever, slippage, and prevention. Furthermore, discussed are the mantras for preventing insanity, eyesight, and Rajayakshna.

Ayurveda in Upanishads

The Late Vedic Sanskrit texts known as the Upanishads contain religious teachings and concepts that are still highly esteemed in Hinduism.

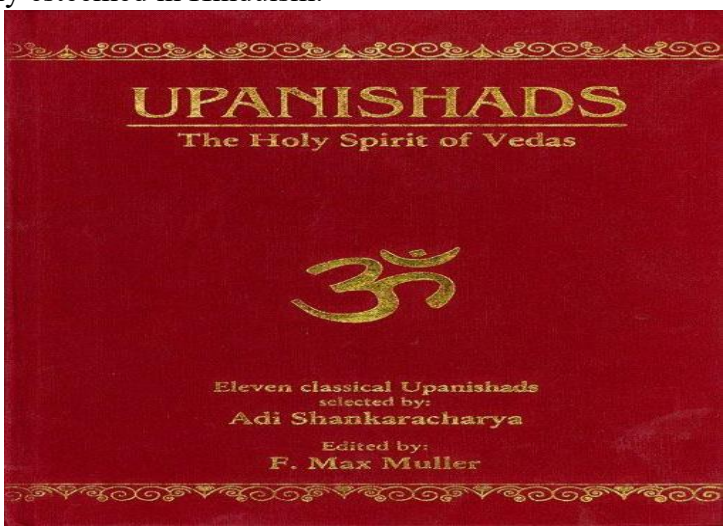

Figure 3*: *Upanishads

One may argue that the texts known as Upanishads are the core of the devine vedas. Primarily, the upanishads describe the principles of the Isa, Kena and Katha, Prasna, undaka, Mandukya, Aitareya, Taittiriya and Chandogya, Brihad Aranyaka, and the Svetasvatara. pharmaceuticals like Agaru, Anu, Atasi, Arka, Arjuna, Airavata, Amra, Udumbara, Kola, Khalva, Godhuma, Tila, Nyagrodha, Palatka, Pundarika, Yava, Shymara, and so up.

Ayurveda in Puranas

The literature which gives the understanding of the origin and development order of the world is called Purana. Puranas are said to be the storehouse of knowledge of Ayurveda.

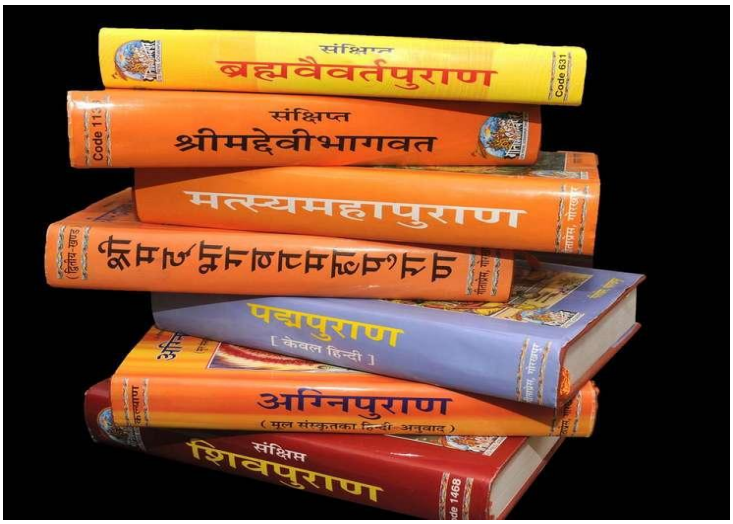

Figure 4*: *Puranas

The Brahma Vaivarta Purana contains the description of the Ayurveda Avatarana. The Agni Purana describes the symptoms of numerous diseases, their treatment methods, and the use of medicines. The Garuda Purana also discusses various yogas related to gynaecology, the Anupana method, diagnosis and treatment of numerous diseases, and Vajikarana chemical medicine. The Skanda Purana places a strong focus on building a health shelter and all the necessary tools and materials in an appropriate manner. The Vishnu Purana discusses Ayurvedic philosophy, theory, anatomy, medicine, diagnosis, treatment of ailments, cures for healthy living, toxicology, and descriptions of body parts.Garbha Kranti, Triguna siddhanta, the makeup and state of the body's parts, food, digestion, and physical diseases are all mentioned in the Padma Purana [1,2] .

The History and Importance of Ayurveda in Medical Practice

The ancient Indian system of medicine termed Ayurveda has been around for centuries. Ayurveda, also referred to as "The discipline of Science of Life," belongs to one of the world's most historic comprehensive health systems. It began in India literally 5,000 years ago.The primary Ayurvedic writings, such as the Sushruta Samhita and Charaka Samhita, were written across 2,000 and 2,500 years ago. Its foundations can be linked back to the ancient Vedic written works Rigveda and Atharvaveda, containing descriptions of medicinal herbs and healing practices [3].

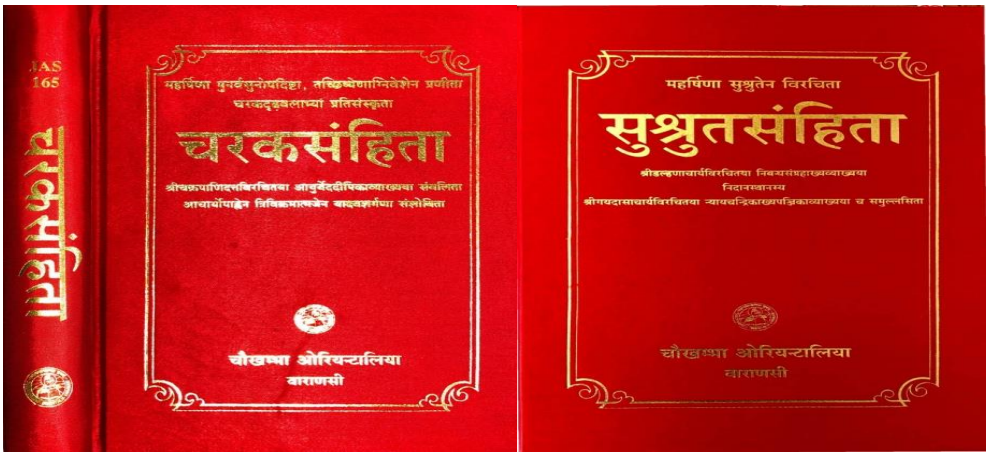

***Figure 5**: Charaka Samhita and Sushruta Samhita*

The medical system known as Ayurveda developed over millennia into a highly developed field that includes incider health, surgical, paediatrics and the mental health. The fundamental idea of the Ayurveda is harmony and balance between the body, mind, and spirit. The ageless treasure of ancient India, Ayurveda, has thousands of years of history. It originates from the Vedas, which are revered writings that sages used to gain deep understanding of life's mysteries. The word "Ayurveda" refers to life knowledge (Ayur) or "Veda" [4].

The Charaka Samhita, the founding text of Ayurveda, was written by the renowned sage Charaka, who is frequently referred to as the "Father of Ayurvedic." These old books established the foundation of Ayurveda, focusing on individualised treatment, balancing body components, and using plants for therapeutic purposes. Other classics that contributed to this tradition include the Sushruta Samhita. Ayurveda offers a wide range of therapeutic approaches, including herbal remedies, nutritional advice, lifestyle changes, detoxification treatments (Panchakarma), yoga, meditation, and massage (Abhyanga).

Ayurvedic philosophy holds that a person's health is achieved by a balanced dynamics of their three types of doshas, or forces of bioenergy: Vata (the atmosphere and space), Pitta (Agni and aqua), and Kapha (both earth and aqua). Ayurvedic therapies try to restore harmony by means of

customised therapies supplied to the particular makeup of each person (Prakriti as well). It is thought that imbalances in doshas cause sickness [5].

Figure 6*: *The Ayurvedic Clock

To treat the underlying causes of illnesses and strengthen the body's own healing processes, these treatments are frequently combined. Over the past few years, Ayurveda has become more well-known outside of its own region as more individuals look for a more all-encompassing approach to health and wellness. Worldwide, there are a growing number of Ayurvedic clinics, wellness centres, and educational establishments providing Ayurvedic treatments, training courses, and research possibilities.

Ayurvedic medicine has a long history and is widely used, but it still confronts many obstacles, such as regulatory concerns, distrust from conventional medical institutes, and the need to standardise methods and ensure the quality of herbal remedies. However, by taking a comprehensive and individualised approach to disease management and health promotion, Ayurveda may also help address modern health issues like mental health disorders, lifestyle-related conditions, and chronic diseases [6].

With its deep understanding of the nature of health and illness, Ayurveda embodies a rich and old medical heritage. It continues to inspire people and healthcare professionals worldwide with its holistic philosophy, individualised approach, and variety of therapy modalities, providing fresh insights on health and healing in the contemporary period. Chronic disorders are something that Western medicine has not been able to effectively treat, but Ayurveda does. Ayurveda's all-encompassing strategy, focus on prevention, and capacity to treat chronic illnesses suggest that its wider application might enhance global population health [7].

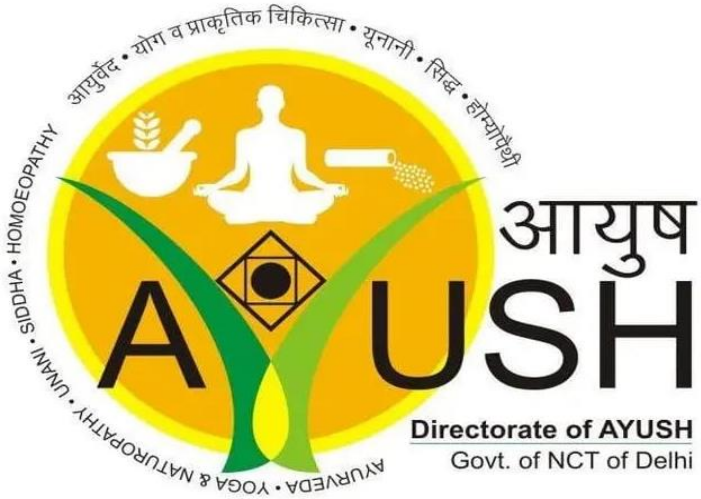

Figure 7*: *Logo of Ministry of AYUSH

Establishing the Ministry of AYUSH on November 9, 2014, was a major step forward for the government in promoting traditional Ayurveda. This bold step was taken with the intention of reviving the rich wisdom ingrained in antiquated medical systems, guaranteeing the best possible development and broad dissemination of AYUSH healthcare systems [8].

The "Indian System of Medicine and Homoeopathy (ISM&H)" Department, which was established in the year 1995, was in charge of their advancement prior to this. It changed again later in November 2003, and now it is known as the Department of "Ayurveda, Yoga, Naturopathy, Unani, Siddha, and homoeopathy (AYUSH)". The government's dedication to promoting ancient Ayurvedic methods and the "Made in India" brand is in line with this rebranding, which highlighted a focused focus on improving knowledge and research in the Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homoeopathy system of medicine [8].

Purpose for Examining the Ayurveda in the Post-pandemic Era

Ayurvedic medicine is one of the complementary and alternative therapeutic modalities that should be researched in order to solve modern health issues, as shown by the global COVID-19 epidemic [9]. The research into Ayurveda's applicability in the post-COVID period is encouraged by the following arguments:

An essential part of India's cultural heritage, ayurveda has been practised for hundreds of years. Examining the Ayurveda in the post-Corona era is an opportunity to preserve and to promote an outmoded medical system while adapting it to fit contemporary medicinal standards and the scientific principles.

Holistic medical treatment.

Preventative medical care.

Support for mental health.

India's cultural history would not be the same without Ayurveda, which has been practised for centuries. Examining Ayurveda in the aftermath of the COVID-19 pandemic is an opportunity to defend and promote this traditional medicine while adapting it to fit contemporary medical needs and scientific principles.

Since stress has a negative effect on health, Ayurveda offers a number of techniques to reduce stress and enhance mental health, including breathing exercises, meditation, and herbal medicines. Ecological Balance and Sustainability.

Prevention above Treatment.

Collaborating Ayurvedic practitioners with conventional medical specialists may result in a more comprehensive and personalised treatment plan for patients [10].

Overview of Covid-19 and Its Effect on system of healthcare

The corona virus illness (COVID-19) global health crises, which were occurred due to the extreme Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2) viruses, had a major global effect. By late October 2021, it has resulted in millions of sicknesses and nearly five million fatalities worldwide. The corona health crises have affected each and every industry, either direct or indirect way, but it has also made the already overworked health systems in many countries across the world even worse [11].

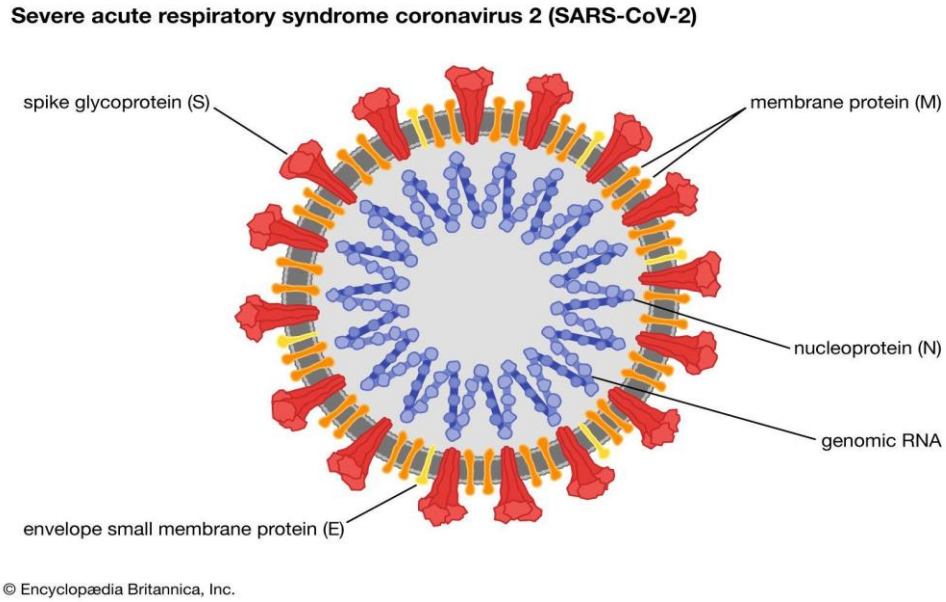

Figure 8*: *SARS-CoV-2 Virus

The provision of healthcare services is strongly impacted by the virus's persistent spread across diverse contexts, particularly in the early stages. This creates difficulties for supervising the distribution of healthcare workers, maintaining medical supplies, and maximising facility utilisation. Proofs suggests that the corona pandemic has notably altered the supply of healthcare provided services, especially in the underdeveloped countries [12,13] .

Facilities had to be modified and healthcare staff had to be reorganised due to the increasing number of corona cases. On the other hand, those who suffer from different illnesses are reluctant to go to the hospitals. When service utilisation from the pre-corona era was compared to the corona time, notable differences in healthcare delivery approaches were found [14].

Ayurvedic Remedies and Immune Function

The Enhanced Immunity-Boosting Properties of Ayurvedic Herbs

Curcuma Longa L. (Turmeric)

Originated from India and the Southeast Asia, turmeric (Curcuma longa L.) is a part of the ginger family Zingiberaceae. Rhizomes of this species include a number of different types of biologically active substances, the most important of which are sesquiterpenes, steroids, polyphenols, and curcuminoids.Asian countries have long employed turmeric (Curcuma longa) and its naturally occurring polyphenol, curcumin, as traditional medicine to cure a variety of ailments. Experiments

suggest that curcumin illustrates pharmacological qualities that are desirable without being risky these features include antispasmodic, anti-angiogenic, and anti-neoplastic effects [15, 16].

Figure 9*: *Turmeric

According to the "Food and Drug Administration" (FDA), turmeric is "generally recognized as safe." According to clinical research, taking as much as twelve gram of turmeric daily is safe and has no harmful effects on people. Due to its capacity to target several cellular pathways and consequently impede viral growth and replication, curcumin has become a top antiviral medicine. Turmeric attaches itself to target receptors essential to influenza viruses and avoids them, according to research using molecular docking techniques [17].

Cinnamomum Cassia (Cinnamon)

The evergreen tree Cinnamomum cassia, often known as Chinese cassia or Chinese cinnamon, is native to southern China and is extensively grown across South and Southeast Asia. It is one of several Cinnamomum species that are mainly valued for their spicy, aromatic bark. Romans used the buds as a spice and they are still used today, particularly in India. It is highly valuable economically and has therapeutic applications. Numerous ailments, including headache, fever, diarrhoea, amenorrhea, leukorrhea, and flatulence, can be treated with it. Cinnamon has also been found to help prevent throat infections when taken regularly [18].

Figure 10*: *Cinnamon

Cinnamon's many therapeutic benefits have been documented in numerous researches. Immune-boosting, hypertension-lowering, hypoglycemic, antiviral, antifungal, antioxidant, and gastro protective properties are some of these advantages. One study examined the effects of a hydro alcoholic extract of cinnamon sticks on the HSV-1 herpes simplex virus. These results showed that by preventing the virus from binding to cells, the extract of hydro alcohol substantially lowered the HSV-1 viral titer [19].

Zingiber Officinale (Ginger)

The flowering plant ginger (Zingiber officinale) is used extensively as a spice and in ancient medicine for its rhizome, sometimes known as ginger root. consists of the Zingiberaceae family [37], which contains the well-known plants cardamom, the galangal, and curcumin.Steroids, alkaloids, and phenolic compounds are just a few of the many bioactive components found in ginger that have been shown to have therapeutic benefits. The primary aromatic component of the rhizome, zingiberol, has substituent in the forms of paradol, zingerone, and the shogaols [20, 21].

Figure 11*: *Ginger

Ginger also includes a range of sub-chemicals, along with the main bioactive compounds, such as 4-, 6-, and 8-gingerols, 10-gingerols, 6- and 14-shogaols. Earlier studies have demonstrated its an antipyretic, pain reliever anti-arthritic, antiemetic, and anti-inflammatory properties [22,23,24].

Syzygium Aromaticum (Clove)

Clove is a common antiseptic used to prevent infectious infections. It is a part of the family Myrtaceae of plants and is recognized for its antibacterial abilities against oral germs. Cloves have antibacterial qualities that are used in the food business to extend shelf life in addition to their medical use [25].

Figure 12*: *Clove

According to the WHO, individual could consume up to 2.5 milligrams of cloves per kilogram of body weight per day.Eugenol is the primary bioactive ingredient in cloves. Eugenol has extensive antibacterial effects towards bacteria, fungi, and acid-fact bacteria (grade 1-negative). The antiemetic (reduces vomiting and nausea) and carminative actions of cloves are widely known [26, 27].

Allium Sativum L. (Garlic)

The Liliaceae family includes the garlic plant Allium sativum L., which is native to Asia but is also widely cultivated in China, the region (Egypt), the EU, and Mexico as well. Garlic has a high nutritional value, helps with dyspepsia, and enhances the flavour of meals. Various low-toxicity pharmacological effects of garlic exist, such as fungicide, anthelmintic, and anti-inflammatory properties.

Figure 13*: *Garlic

Garlic contained chemicals called ajoene, allicin, allyl methyl thiosulfinate, and methyl allyl thiosulfinate that were effective in eliminating the viruses. Garlic extract has been investigated for its antiviral action against the viral strain A/H1N1 in cell culture. The findings indicate that the extract prevents the virus from infecting and spreading in the culture. Garlic extract showed a blocking effect on the infectious bronchitis virus (IBV-a coronavirus) in chicken embryos [28].

Ocimum Basilicum L. (Basil)

Sweet basil is a well-liked medicinal herb in the Labiatae family. For many years, this plant's essential oils were utilised extensively in food, cosmetics, and oral health goods. The antibacterial qualities of basil have been demonstrated in numerous studies, which make it an obvious option for a spice [29].

Figure 14*: *Basil

The mixture of methanol and water extracts of basil leaf and the seed oil have been shown in many research investigations to strengthen the immune system's ability to fight off various infections. Phagocytic activity, antibody titers, T-helper and natural killer cells, neutrophils, lymphocytes, and other components are increased in order to achieve this [30].

Azadirachta Indica (Neem)

Neem trees, or Azadirachta indica as they are botanically known, are fast-growing evergreen herbs in the Meliaceae family. Native to India, neem is an ancient medicinal plant used for treating a broad range of acute and chronic conditions throughout the Asia and Africa. The whole tree seeds, roots, leaves, flowers, and the barkis used in an ancient medicine as a do-it-yourself remedy for a variety of ailments affecting people [31, 32].

Figure 15*: *Neem

Due of neem's well-established and powerful antiviral qualities, researchers have begun looking at how it might be used to treat SARS-CoV-2It has been demonstrated that naturally occurring bioactive components from tulsi and neem, such as methyl eugenol, oleanolic acid, and ursolic acid, minimize SARS-CoV-2. These compounds prevent viruses from attaching themselves to

surfaces and replicating by targeting crucial viral elements such spike glycoprotein, RNA polymerase, and proteases [33, 34].

Difficulties and Prospects of Ayurvedic Integration in the Post-COVID-19 Healthcare System

Since it was declared to be a worldwide pandemic, corona has wreaked havoc on many nations and overwhelmed several healthcare systems. When someone has COVID-19, it requires time for them to get back on track with their routine. The average recovery time for COVID-19 patients is two to three weeks. Following a general health routine consisting of yoga, stress-relieving exercises, exercise, and an appropriate diet. is often beneficial for early healing. Clinical results and post-acute symptoms continue to be studied by healthcare and research communities. Both physical and emotional wellness can be impacted by health conditions.

During an acute COVID-19 episode, patients may experience a range of symptoms; mild fever, coughing, and dizziness being the most prevalent ones. All of these symptoms are recurrent and resolvable. Irritation, gastrointestinal distress, migraines dysphasia, dyspnoea, metabolic changes (such as poorly managed diabetes), thromboembolic disease, depressive disorders, and other mental health issues are some other symptoms that have been reported. Risk factors for a prolonged recovery include reconditioning, immunological reactions, including bipolar disorder, recurrence or relapse, and irritation and other immune-related reactions [35].

From the early stages of corona to its longer-term consequences and concerns, the Centres for the Prevention and Management of Diseases are still actively investigating every aspect of the virus. This project will assist provide a more comprehensive understanding of the post-COVID sequelae and natural trajectory of SARS-CoV-2 infection, which will enhance medical analysis, public health responses to the virus, and healthcare practices.

Ojas and Bala are significant elements of Ayurveda's Vyadhikshamatva, a theory that emphasizes immunity. Oja is considered the biological muscular development, or Bala, of an individual. Therefore, age-appropriate guidelines are needed to boost immunity in children in addition to diet-centered and medication-complemented strategies in adults. The examples of these attributes can be found in conventional podiatric literature, both common (Ārogyakalpadruma) and traditional (Kāūyapa Samhitā and Hārīta Samhitā). Yūṣanirdeśīya adhyāya and Bhojyopakramanīya adhyāya by Kāśyapa Samhitā offer the theoretical foundation and practical application of food modification [36].

Health literacy and well-informed decision-making

The Worldwide Center for Standard Medicine was established by the “World Health Organization (WHO)” in India with the goal of maximizing the contribution of traditional medicine to global health and sustainable development.Promoting health literacy in the industry includes teaching people about the principles, uses, and benefits of Ayurvedic medicine. Here are a few strategies for raising awareness of Ayurvedic medicine.

Programs for Education.

Instruction for Patients.

Public Health Initiatives.

Online Courses.

Cultural Events.

Online Resources.

Community Workshops.

By using these strategies, people can become more knowledgeable about Ayurvedic health and be able to apply Ayurvedic principles to their everyday interactions for better health and vitality.Ayurveda has been studied using methods of investigation from western medical research and science, and one of most significantly often used approaches at the moment is tribal medicine [37].

CONCLUSION

Ayurveda has gained significance as a substitute medical system and the COVID-19 epidemic has brought attention to the importance of integrated healthcare solutions. Through its emphasis on wellbeing, preventive, and individualized health care, Ayurveda provides insightful guidance for overcoming post-pandemic obstacles. It is essential to empower people with health literacy so they may make educated decisions that combine modern medicine with Ayurvedic principles. Growing awareness of Ayurveda can help communities become more resilient, improve people's general well-being, and provide a more all-encompassing perspective on health that can be adjusted to future worldwide health emergencies.

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