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SIDDHA DRUGS-THE FOREFRONT BATTLE AGAINST COVID-19 OXYGEN DEMAND

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ABSTRACT

SARS (Severe Acute Respiratory Syndrome) is a type of acute respiratory syndrome. The present COVID-19 pandemic is caused by Coronavirus 2. (SARS-CoV-2). This virus is rapidly spreading across the globe, particularly in India. Supportive therapy, eating, and preventing further development are the pillars of disease therapy inside the event of non-compliance drug treatments. Traditional medicines have been found to be both safe and effective, as well as popular. Traditional Ayurvedic treatments that have now been evaluated in clinical trials versus COVID-19 are also mentioned, as well as the progress of also before the and clinical testing of potent herbal remedies against COVID-19 and SARS-CoV-2. The findings of clinical trials on Siddha pharmaceuticals will help policymakers in the AYUSH medical systems navigate public health policies, give information to the worldwide scientific community, and perhaps serve as a platform for collaborative research at the national and global levels. To address the present problem, it is advised that potential Siddha formulations and Indian medicinal herbs be explored as soon as possible.

Keywords: Siddha, Traditional formulations, COVID-19, SARS, Respiratory illness

INTRODUCTION

Covid-19 has turned into a pandemic that shook and stopped entire world for few months together without proper cure. Isolation is the best measure for the containment of COVID-19. No particular antiviral treatment or vaccine is currently available [2]. Hence, the treatment of COVID-19 combines with symptomatic care and oxygen therapy. Patients with mild infections lack early supportive management and symptomatic relief by using analgesics and steroids. The efficacy of corticosteroids, a common anti-inflammatory medicine, in treating COVID-19 is, however, questionable. Novel COVID-19-induced symptom-relieving therapies are critically required. Concerns that non-steroidal anti-inflammatory medicines (NSAIDs) may increase symptoms of the novel coronavirus illness COVID-19 have been addressed by the British Pharmacological Society. On March 18, 2020, the World Health Organization (WHO) issued a statement expressing worry over the use of ibuprofen to reduce fever among COVID19 sufferers [3].

Novel COVID-19-induced symptom relief treatments are urgently needed. The British Pharmacological Association has expressed concern whether semi pro government drugs (NSAIDs) may exacerbate signs of such new coronavirus infection COVID-19.

The World Health Organization (WHO) published a statement on March 18, 2020, expressing concern over the use of ibuprofen to treat fever in COVID19 patients [3].

Traditional medicine contributes significantly to meeting global healthcare demands. Siddha is a type of yoga that originated in Tamil Nadu and takes its name from Tamil. "Siddha" literally translates to "established reality". By preserving the equilibrium amongst vatham, pitham, and kapam, Siddha treatment is thought to cure the disease's root cause. [1]. Siddha prescriptions include kudineer, chooranam mattirai, parpam, chendurum, karuppu, and mezhugu. Though Siddha treatment does not expressly handle coronavirus, the Siddha classic Guru naadi does discuss pathogenic disorders, which clearly excludes disease genesis. COVID-19 symptoms are comparable to those described as Kaphasuram/Iya suram by the guru Yugi in his book Yugi Vaidhya Chindhamani [4].

This ailment, on the other hand, is adequately treated in Siddha by a regimen, which is a specified course of treatment. During the early stages of disease, one or more formulations, including such kabasurakudineer, adathodaimanapagu, vajr akandichenduram and thontha sura

kudineer, are utilised in the therapeutic regimen. The dynamic active biomolecules in the above-mentioned formulations, out of the six, operate effectively against a broad range of viruses. Because AV comes in four distinct formulations, a combination of adathodaimanapagu should be used in the treatment. As a consequence, using Siddha anti-inflammatory, antipyretic, and immune-modulating medications to treat covid symptoms during this period might be quite effective. Because Vajra kandichendooram has all of these properties, it may be used instead of corticosteroids. As a result, Siddha medicines may be useful in preventing stage-I coronavirus development and lowering morbidity and death in COVID-19 patients. As a result, under the supervision of a Siddha doctor, these medicines are safe to use in prescribed doses. Moreover, all of the chemicals have been tested for toxicity and have been determined to be safe in humans. The purpose of this research is to examine several herbal and herbomineral combinations that have been used to cure COVID-19.

Siddha formulations with potential against COVID-19

In this recipe Adhatodavasica (AV) leaf extract is used in this recipe. The Acanthaceae family includes Adhatodavasica. *Justicia adhatoda* crude

extracts reduces by reducing hemagglutination, the influenza virus has been rendered inactive (HA). In two different contemporaneous and posttreatment configurations, the test revealed antibacterial activity at a non-cytotoxic level. In both contemporaneous and post intervention trials, a methanol extracts of AV exhibited a 100 percent decrease in HA at a dose of 10 mg/mL. In a parallel experiment, the extracts of *J. adhatoda* with 10 and 5 mg/mL doses decreased HA by 33% and 16.67%, correspondingly. *J. adhatoda* preparations, all aqueous and methanolic, were found to be effective. have significant antiviral activity, reducing viral attachments and/or replication, and hence could be used to avoid viral infection. The chemical vasicine shows strong antiviral activity in the Dock experiment [5, 6].

Kudineer Kabasura

Preparation in the Siddha tradition kabasurakudineerchooranam is made up of 15 herbal components (*Zingiber officinale*, *Syzygium aromaticum*, *Piper longum*, *Tragia involucrata*, *Anacyclus pyrethrum*, *Hygrophila auriculata*, *Terminalia chebula*, *AV*, *Saussurea lappa*, *Coleus amboinicus*, *Clerodendrum serratum*, *Tinospora cordifolia*, *Andrographis paniculata*, *Sida acuta*, and *Cyperus rotundus*).

This demonstrated that phytochemicals had synergistic effect not only against viral proteins as well as against viral multiplication through activate the immune system. It was discovered that the function of specific formulations against corona virus protein inhibited viral replication most effectively [7].

Another investigation was carried out at a COVID Treatment Centre in Chennai. COVID Care Centre in Chennai, India, and comprised a prospectively, single-center, open-labeled, randomised, clinical experiment. Kabasura Kudineer dramatically KSK reduced SARS-CoV-2 infection rate in quiet COVID-19 individuals with few adverse effects, proposing this it will be used to avoid COVID-19 [8]. The goal of this medical study has been to determine the safety of Siddha treatment and use Siddha concepts to document the duty of care” of asymptomatic COVID-19 patients. The trial will begin recruiting on May 25, 2020. They predicted that the data analysis portion of the research will provide good findings in favour of siddha medicine [9].

Vajra kandimaathirai

Vajra kandimaathirai (VKM), a mercury-based traditional Siddha medication, is being used to cure a broad range of fevers and inflammatory disorders. Researchers reported using VKM effectively in the treatment of 5 SARS-CoV-2 infected

patients, as well as its chemical composition. In the mild and moderate group, VKM and nutritional changes were employed to treat a family of five people ranging in age from 13 to 77, both men and women, including one well before renal disease, and SARS-CoV-2 positive. The first dose caused a considerable rise in oxygen saturation. Within three days of starting the drug, all indications (temperature, body pain, coughing, and loss of taste) completely gone, and the Real-Time RT-PCR for COVID-19 was negative. No side effects were recorded, and no damage to the kidneys or liver was discovered [10].

Chenduram Vajra Kandi

It's a herbomineral combination that Siddha practitioners use to treat a variety of acute and chronic problems, including fever, chronic inflammatory diseases, and immune-mediated illness. Veeram, cleansed lingam, rasa, and pooramsindhuram make up this dish. Antipyretic, anti-inflammatory, and antioxidant properties have been discovered in this substance. The antipyretic and anti-inflammatory properties of Vajra kandichenduram may be able to suppress the production of inflammatory mediators and cytokine storm in COVID-19, which is a primary cause of severe pulmonary complications [11].

Nilavembu Kudineer

A. paniculata, *Vetiveriazizanioides*, *V. zizanioides*, *Santalum album*, *C. rotundus*, *Zingiber officinale*, *T. cucumerina*, *Piper nigrum*, and *M. cerviana* are among plants found in it. Nilavembukudineer efficiently controls fever by regulating temperature, lowering physical pain, and boosting immunity. [12] All of the substances in this formulation contain bioactive compounds that have been shown to be effective against mosquito, herpes simplex (HSV), chikangunya, and influenza virus.

Visha Sura Kudineer

VSK is a multi-herbal formula based on a Siddha textbook. "Kaaviya Sura Nool." *Azadirachta indica*, *Zingiber officinale*, *Indigofera tinctoria*, *Hemidesmusindicus*, *Aristolochiabracteata*, *V. zizanioides*, *Glycyrrhiza glabra*, *Echinacea indica*, *Echinacea indica*, *Echinacea Cardamom* and *Santalum album* were among the ingredients. Each component possesses antiviral properties, making it useful against with a variety of ailments. It possesses antiviral capabilities against dengue disease, Japanese encephalitis, mammalian tick-borne encephalitis, Yellow fever, influenza, and hepatitis A, B, and C. Sandalwood oil, derived from the *Santalum album* L. tree, has antiviral properties towards HSV-1 and HSV-2 viruses.

Thontha Sura Kudineer

The antiviral activity of Thontha sura kudineerchooranam, which contains 10 herbs (*Z. officinale*, *AV*, *A. paniculata*, *T. cordifolia*, *Elettaria cardamomum*, *Solanum xanthocarpum*, *T. cucumerina*, *Tephrosia purpurea*, *Mollugocerviana*, and *Vitis vinifera*), was investigated using in silico docking [14].

Other formulations

The investigation had been an open labeled 2 controlled randomized experimental medical investigation. Participants in Unit I received Siddha as addition to the basic meds, while sufferers in 2 Groups received only their response. As compared to the controls, the Siddha contribute group recovered from COVID 19 patients faster. In the most recent COVID -19 experiment [15], the synergism combining Siddha supplemented with conventional treatment yielded more promising results.

CONCLUSION

The Siddha medical system has a wealth of expertise dealing with endemic and epidemic illnesses. The Siddha system provides numerous treatment choices for this unusual coronavirus infection. At this time, accepting Siddha therapies is necessary for COVID-19 sickness control. The government's full assistance is required to demonstrate the efficiency of the Siddha system of treatment in combating this fatal disease. As part of the evaluation procedure, all of the ingredients in the Siddha

compositions were thoroughly studied for their pharmacological activity, toxicity assessment, and human safety. Preclinical investigations on the antiviral activities of the Siddha formulation may be required to fully test our hypothesis, and these are now in the works.

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