INTRODUCTION

Human coronaviruses belong to the order Nidovirales, family Coronaviridae, and genus Alphacoronavirus or Betacoronavirus. The emerging SARS-CoV-2, a beta coronavirus, can cause COVID-19, is highly contagious; respiratory droplets and contact are the main routes of transmission. The SARS-CoV-2 infection, exhibited by clustering onset, is more likely to affect elderly people with comorbidities and pregnant women. It is common that for people who are in contact with a large number of viruses or whose immune functions are compromised, they have a greater chance to be infected than others. The estimated mean incubation period of SARS-CoV-2 is 1-14 days. Fever is generally the major and basic symptom of COVID-19, which can be followed by no symptom or other symptoms such as dry cough, shortness of breath, muscle ache, dizziness, headache, sore throat, rhinorrhea, chest pain, diarrhea, nausea, and vomiting. In severe cases, patients rapidly continued to develop the acute respiratory syndrome, septic shock, metabolic acidosis, and coagulopathy.

The Siddha system of medicine is one of the oldest traditional systems of medicine, which has originated from India and is practiced mainly in the southern part of this country for curing different types of diseases including even chronic conditions. Siddha based approaches have been proved to cure various respiratory diseases.
al medical system. Several indigenous drugs have been illustrated in Siddha and Ayurveda for controlling inflammation, fever, and other diseases. In the long term curing chronic disorders, like rheumatic diseases, combinations of different plant families, and species active principles usually exhibit remarkable potency and tolerance. Siddha based medicine may also aid in preserving the bone framework. Traditional herbs can also promote proper internal regulation of the body.

It is well recorded that the plant possessing anti-inflammatory properties also contain antipyretic and analgesic activities or vice versa. The nilavembu kudineer choornam (NK) is a conventional preparation used in the treatment of chikungunya fever as Siddha medicine in Tamil Nadu, India. It is a mixture of commonly used food ingredients as well as medicinal plants. Kabasura Kudineer is a compound concoction consisting of fifteen herbal ingredients. It is often used as a remedy for fever with or without respiratory infection. It was prescribed extensively during the epidemic of Swine flu as a prophylactic and media reports gave a renaissance to this official Siddha formulation. Siddha medicinal preparations have been classified as 32 internal and 32 external medicinal forms and choornam is one among the internal medicinal form.

The aim of the present study is to analyze Siddha-based remedy as a better approach to combat novel Coronavirus disease.

MATERIALS AND METHODS

The present study has collected various articles related to the current topic from various internet sources such as PubMed, ScienceDirect, Google Scholar.

SIDDHA AND COVID-19

Siddha Medicine

Siddha medicine is the ancient medical system that is broadly practiced in South India. It was enriched with ethnic medical knowledge of Tamil people, a native of the rich biodiversity zone of Western Ghats. A single herb may contain many phytochemical constituents that function alone or in combination with other compounds to produce the desired pharmacological effect. The antiviral effects of medicinal plants have played a tremendous role at different stages of viral growth. Plant-derived pharmacological formulations marked a major contribution to viral infections. Based on the availability of suitable, efficient, and rapid bioassay systems, the antiviral compounds have been used for rapid screening from plant extracts and fractions. Instead of synthetic antiviral drugs, medicinal plants deliver basic raw materials for important antiviral drugs. Synthetic drugs have been replaced by medicinal plants, as life-saving drugs in various viral diseases.

Contribution of Siddha medicine in the treatment of diseases

Brahmananda bhairavam mathirai and Vishnu chakram are used for the treatment of the pyrexic phase of chikungunya and may perform as antivirals. Nilavembu Kudineer is recognized for its antipyretic, anti-inflammatory, and analgesic properties and hence has a role in immune modulation. Arumuga chenduram is a herb-metallic formulation acknowledged for its role in the recovery of fever and arthritis. Linga Chenduram No. is one of the medicines used in Siddha for treating ‘Azhal Keel Vadu’ which may be associated with osteoarthritis having the symptoms of both pains and swelling in knee joints. Thirikadugu choornam is used in the treatment of digestive disorders such as indigestion, dyspepsia, flatulence, and intermittent fever. Development of Ayurvedic and Siddha Medicine via the Application of Modern Pharmaceutical Technique. It is believed that the Siddha System of Medicine is effective in treating any type of disease. For example, it is effective in the treatment of skin diseases, arthritis. Siddha medical practitioners have also recorded that this system is very effective in reducing the highly debilitating conditions in HIV/AIDS as well as found to cure HIV positive and sexually transmitted diseases (STD). Siddha medicine can also be used to reduce hypertension. Other diseases such as cancer and diabetes (literally known as putruni and neerzhivu noi in Siddha System of Medicine) can also be treated using Siddha drugs.

Role of Siddha medicine in COVID-19

Nilavembu kudineer composition is equal to the heartwood of Santalum album Linn. (Santalaceae), rhizomes of Zingiber officinalis Rosc. (Zingiberaceae), fruits of Piper nigrum Linn (Piperaceae), the whole plant of Andrographis paniculata (Burm) Wall. ex Nees (Acanthaceae), tubers of Cypereus rostrundus Linn. (Cyperaceae), the roots of Vetiveria Zizanioides (Linn) Nash. (Poaceae), whole plant of Hedychium corymbosum (Linn.) Lam. (Rubiaceae), root of Plectranthus Vettiveroides (Linn.) Nash. (Lamiaceae) and the entire plant of Trichosanthes cucumerina Linn. (Cucurbitaceae). All these plants are commonly used in the treatment of fever, inflammation, arthralgia, arthritis, gastric ulcer, jaundice and general debility conditions.

In Siddha, Kabasura kudineer chowram is broadly prescribed for the control and prevention of swine flu. The phytochemical elements present in chowram may responsible for its anti-inflammatory, antipyretic, analgesic, anti-viral, anti-bacterial, anti-fungal, anti-oxidant, hepatoprotective, anti-diabetic, anti-asthmatic, antitussive, immunomodulatory, anti-diarrheal and anti-oxidant activities.
CONCLUSION
The present study focused on limited Siddha-based medicinal herbs. In the future, further study has to be done using other traditional plants. Considering the anti-viral, anti-inflammatory properties of traditional herbs as well as absence of side effects of Siddha medicine, the present study thus concludes that Siddha-based decoctions are a better remedy to overcome COVID-19.

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Conflict of Interest
The authors declare no conflict of interest

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