SARS-COV-2 and Kabasura Kudineer. A Mini review on the antiviral properties of ancient siddha medicine from India.

Divya R
Associate Professor, Department of Physiology, Dhanalakshmi Srinivasan Medical College and Hospital, (Affiliated by Tamilnadu Dr MGR Medical University, Chennai) Perambalur, Tamilnadu, India – 621212.

Corresponding author: Divya R, Associate Professor, Department of Physiology, Dhanalakshmi Srinivasan Medical College and Hospital, (Affiliated by Tamilnadu Dr MGR Medical University, Chennai) Perambalur, Tamilnadu, India – 621212.

Received date: June 23, 2020; Accepted date: July 09, 2020; Published date: July 15, 2020

Citation: Divya R (2020) SARS-COV-2 and Kabasura Kudineer. A Mini review on the antiviral properties of ancient siddha medicine from India. J Thoracic Disease and Cardiothoracic Surgery, 1(2); DOI:10.31579/jtcs.2020/011

Copyright: © 2020 Divya R, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction
As on 8 June 2020, World Health Organization reports that there were 6 931 000 COVID-19 cases, 400 857 deaths worldwide. In India has 256 611 COVID-19 cases, and 7135 deaths [1]. The current situation demands more effective preventive and therapeutic agents [2].

Siddha Medicine
Siddha medicine is one of the oldest Indian systems of medicine. And it is most commonly practiced in India. Siddha medicine, a traditional form of indigenous medical system uses specific polyherbal formulations for the treatment of such infections with considerable success. Disparate modern medicine that doesn’t have an impact on the host immunity, Siddha medicine has various immuno-modulatory effects. Various herbs used in siddha medicine such as Amukkara, Nilavembu augments and reinstates the human immunity ensuing its antiviral action [3].

Kaba-sura-kudineer
According to Siddha physiology, 'Kaba' or 'Kabam' epitomizes one of the three physiological principles prevailing in our body (Vatham, Pitham, Kabam). For physical and mental well-being of an individual, these three

‘Kirumiyal vandha thodam perugavundu’

- Guru naadi
has to be sustained in equilibrium, imbalance will end up in diseases. Derangement of 'Kabam' designates the signs and symptoms of respiratory tract diseases. 'Sura' or 'Suram' means fever. 'Kudineer' epitomizes a therapeutic formula in the form of decoction. 'Kaba Sura Kudineer', is a decoction indicated for the management of fever due to the derangement of 'Kabam'.

**Role of kabasura kudineer and the pandemic:**

It is a potent preparation with anti-viral and Immuno-modulatory properties. With minimal side effects on immuno compromised and patients with co-morbid conditions [2]. The Siddha doctors community endorses 'Kaba Sura Kudineer' for the management of the signs and symptoms of covid-19. Since the medicine was in practice for more than 1000 years and it encompasses herbal ingredients, it is safe to be used [4].

**Composition of Kaba Sura Kudineer:**

1. Sukku - Zingiber officinale – Rhizome
2. Thippili - Piper longum – Fruit
3. Ilavangam – Syzygium aromaticum – Flower bud
4. Ciru kanjori ver – Tragia involucrata – Root
5. Akkirakaram ver – Anacyclus pyrethrum - Root
6. Mulli ver – Solanum anguivi - Root
7. Katukkai – Terminalia chebula – Fruit rind
8. Adathodai ilai – Justicia adhatoda - Leaf
9. Karpuravalli Ilai - Coleus aromaticus - Leaf
10. Kottam – Saussurea costus - Root
11. Seendhil – Tinospora cordifolia - Stem
12. Siruthekku – Clerodendron serratum - Root
13. Nilavembu – Andrographis paniculata – Aerial parts
14. Vattathiruppi ver – Cissampelos pareira L. - Root
15. Korai kizhangu – Cyperus rotundus – Root tuber

**Preparation of Kaba Sura Kudineer:** Equal part of these 15 ingredients, made into coarse powder called Kabasura Kudineer Chooranam. For decoction, add 8 gm powder in 4 glass water, boiled and reduced into 1 glass.

**Dosage for COVID-19 Management:** twice or thrice daily according to the severity of the fever and other respiratory symptoms. As prophylaxis once a day for three days, repeated after a gap of 3-4 days [5].

**Scientific evidence:**

Recent silico molecular docking studies from India tested 37 Phytoconstituents in Kabasura Kudineer against the spike protein of SARS-COV-2 (PDB ID: 6VSB). The Chrysoeriol and Luteolin in Kabasura Kudineer Chooranam have high binding affinity and good binding interactions with spike protein. The silico pharmacokinetic and toxicity prediction found that all the Phytoconstituents have good oral bioavailability and non-toxic [2].

**Conclusion:** Further research is warranted to establish the efficacy of Kabasura Kudineer and its anti-viral property against SarsCoV-2, therapeutic effectiveness in covid-19 management.

**References**