



# Concerning the Article - A Perspective Review on Siddha System of Medicine in the Management of Corona Virus Disease 2019

The article by Radha *et al.*,<sup>1</sup> is undeniably interesting and is significant at the time of pandemic (COVID-19), when the whole world turns its attention towards alternative medicine. In the study, the author had collected information on nearly 20 herbs/formulation having anti-viral property and immuno-modulatory property as well as antioxidant property.

The author has included information about recent preclinical and clinical studies to enhance the scientific validation of the formulations and herbs that are suggested for the management of COVID-19 in the published article. The drugs were selected from classical *Siddha* literature based on their indication for ailments such as flu like infections, fever, cough, bronchial asthma, pulmonary tuberculosis, and other respiratory infections. The ingredients of the drugs, possessing anti-viral property and immune-modulatory, antioxidant effects were also elaborated. The herbs which were highlighted with scientific evidence and tabulated are recommended in the “Guidelines for *Siddha* Clinical Management of COVID-19”, framed, and published by the Central Council for Research in *Siddha*. The author’s conclusion that, the said *Siddha* formulations/herbs needs clinical trials for the management, prevention and eradication of pandemic outbreaks is undisputable and is the need of the hour.

The *Siddha* formulations and herbs specified in published article are validated and proved of its efficacy by clinical trials and have been published in peer-reviewed journals. Some *Siddha* formulations are approved by the Ministry of AYUSH, Government of India and are being widely used by the public.

More than twenty *Siddha* formulations and herbs mentioned in the published article were recommended for COVID-19 pandemic. Some of the formulations were included for research. The following clinical and

preclinical analysis have confirmed the hypothesis of the concerned article.

- One of the studies has been pointed out that in-silico molecular docking studies of *Kabasura Kudineer* (KSK), the 37 phytoconstituents were seen working against the spike protein of SARS-CoV-2 (PDB ID: 6VSB). Obtained results from molecular docking showed that acetoside, luteolin 7 -rutinoside, rutin, chebulagic acid, syrigaresinol, acanthoside, violanthin, andrographidine C, myricetin, gingerenone -A, tinosporinone, geraniol, nootkatone, asarianin, and sitosterol are main compounds from KSK plants which may inhibit COVID-19 giving a better energy score compared to synthetic drugs<sup>2</sup>.
- The retrospective cross-sectional study about the data on 251 positive COVID-19 patients of both sexes irrespective of age were recorded a reduced length of stay on an average as noted<sup>3</sup>.
- The study among the 50 participants in each group, by the sixth day, RT-PCR turned negative for 27 patients in group B, by the 10th day 25 in group A and 22 in group B, by 14th day 25 in group A and remaining 1 in group B became negative were observed<sup>4</sup>.
- In a pre-clinical study on KSK has immunomodulatory and thrombolytic properties in *in-vitro* models<sup>5</sup>.
- In a study among the 200 SARS CoV-2 RT-PCR Positive cases, the tests turned negative for 78.33% of them who were on Siddha add on therapy that included KSK, *Adathodai manapagu*, *Thippili rasayanam* and 33.33% in standard treatment after 11–14 days in RCT of *Siddha* regimens on COVID-19<sup>6</sup>.

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- In a RCT on *Nilavembu kudineer* and KSK arms showed a statistically significant reduction in hospital stay time, reduction in viral load of SARS-CoV-2 and time taken for patients to become asymptomatic from symptomatic, when compared to the placebo (decaffeinated tea) was observed<sup>7</sup>.
- In another RCT on KSK significantly reduced SARS-CoV-2 viral load among asymptomatic COVID-19 cases and did not record any adverse effect, indicating the use of KSK in the strategy against COVID-19<sup>8</sup>.

As suggested in the published article, *Kabasuara kudineer*, *Nilavembu kudineer*, *Adathodai manapagu*, *Thippili rasayanam* and herbs like *Zingiber officinale*, *Vitex negundo*, *Piper longum*, *Curcuma longa* and *Azadirachta indica*, were seen having significant effect on SARS Cov-2, recommended for the management of COVID-19. Based on the encouraging results of KSK in the management of asymptomatic, mild to moderate COVID-19 as adjunct to Standard care, the Ministry of AYUSH launched the nationwide campaign for distribution of AYUSH-64 and KSK with Central Council for Research in *Siddha* (CCRS). In consideration of the concerning article having significant recommendations for COVID-19 management, it is deemed that furthermore intense analysis in *Siddha* system may give the remarkable outcomes for the days to come.

## References

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