

**GOVERNMENT OF INDIA
MINISTRY OF AYURVEDA, YOGA & NATUROPATHY,
UNANI, SIDDHA AND HOMOEOPATHY
(AYUSH)**

**LOK SABHA
UNSTARRED QUESTION NO. 1081
TO BE ANSWERED ON 18th SEPTEMBER, 2020**

RESEARCH IN AYUSH MEDICINE

**1081. SHRI S. VENKATESAN:
DR.T. SUMATHY (a) THAMIZHACHI THANGAPANDIAN:**

Will the Minister of **AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (AYUSH)** be pleased to state:

(a) whether it has come to the notice of Government that there are widespread practices of AYUSH which are incorporated in primary and secondary healthcare including various Siddha medicines popular in the country which is aiding Covid management in various districts of Tamil Nadu;

(b) if so, the details thereof;

(c) whether any steps are being taken by the Government towards research to explore the possibility of developing potential anti-Covid drug and an integrated protocol for prevention and management especially in Tamil Nadu using Siddha medicine; and

(d) if so, the details thereof and if not, the reasons therefor?

ANSWER

**THE MINISTER OF HEALTH AND FAMILY WELFARE
(DR. HARSH VARDHAN)**

(a) Yes, The Government is aware of the widespread practices of AYUSH system of medicine, which are incorporated in primary and secondary healthcare. AYUSH system of medicines including Siddha medicines are popular in aiding Covid management in various districts of Tamil Nadu and other parts of the Country.

(b) Ministry of AYUSH has issued detailed guidelines to be followed by practitioners of each AYUSH system including Siddha for combating Covid-19 pandemic. The details of activities carried out by Central Council for Research in Siddha (CCRS) are enclosed at **Annexure-I**.

(c) & (d) The Government has taken steps for various research activities to explore the possibility of developing potential anti-Covid drug through its autonomous Research Councils and National Institutions of various AYUSH systems to conduct clinical research in establishing the efficacy of AYUSH medicine including Siddha for prevention and management of Covid-19. Central Council for Research in Siddha (CCRS) and National Institute of Siddha (NIS) are conducting the clinical trials in Tamil Nadu. The details are enclosed at **Annexure-II**.

Annexure-1

A special Scheme named **Arogyam** have been launched by the Govt. of Tamil Nadu with guidelines for the prevention and treatment of COVID-19 through Siddha system of Medicine.

In Tamil Nadu, 29 Siddha COVID care centre have been functioning under Directorate of Indian Medicine and Homeopathy and treated 16,563 COVID positive patients. In addition to this, Kabasura Kudineer have been provided to all mild / asymptomatic COVID positive / patients in Allopathy medical colleges and hospitals as integrated therapy with modern medicine standard care of treatment.

Till date, around (1,27,37,395) beneficiaries have been provided *Kabasura Kudineer* and (1,32,53,115) beneficiaries have been provided Nilavembu Kudineer as immunity booster. Around 1,20,000 Kgs of *Kabasura Kudineer* and *Nilavembu Kudineer* chooranam have been distributed by Directorate of Indian Medicine and Homeopathy, Govt. of Tamil Nadu.

In addition to this, Central Council for Research in Siddha through its 3 institutes / units at Tamil Nadu have been continuously providing health care deliveries to the public sector and immunity boosting. Siddha formulation *Nilavembu Kudineer* and *Kabasura Kudineer* have been regularly distributed in the institutes of CCRS

Annexure-II

The traditional medicine system of Siddha can be utilized as preventive and management perspective for COVID -19. Siddha drugs like *Kabasura kudineer*, *Nilavembu Kudineer*, *Visha sura Kudinner*, *Brahmanada Bairavam*, *Amukurra chooranam*, *Nochi kudineer*, *Nellikai legyiom*, *Thippli rasayanam*, *Adathodai manapagu*, *Thalisathi Vadagam*, *Athimathura chooranam*, *Seenthil chooranam* are being used in the prevention and treatment of COVID- 19. CCRS have undertaken various studies with the above mentioned Siddha formulations. These formulations being anti-viral, anti- pyretic, anti –inflammatory, immune modulators with scientific rationale aids in the mitigation of COVID -19 pandemic crises.

Ministry of AYUSH have been supporting and encouraging Research related COVID -19 through various initiatives. Ministry of AYUSH have created COVID -19 outsourcing platforms to receive inputs related to Siddha stream for the management of COVID-19. In addition to this, Ministry of AYUSH have issued notification to Call application for supporting AYUSH related research studies in SARS-COV-2 infection and COVID -19 disease under EMR scheme.

CCRS have initiated pre-clinical and clinical studies with the support of Ministry of AYUSH to assess the utility and effectiveness of Siddha formulation in improving immunity and aiding in the management & treatment of COVID -19

Pre-clinical studies conducted by CCRS

- a. Siddha classical formulation *Kabasura Kudineer* subjected to molecular docking studies against the spike protein SARS-CoV-2 and research paper was published.

In *Silico* computational screening of *Kabasura Kudineer* - Official Siddha Formulation and JACOM against SARS-CoV-2 spike protein
<https://www.sciencedirect.com/science/article/pii/S0975947620300243>

- b. Immunomodulatory, thrombolytic and anti - viral activity of *Kabasura Kudineer* has been established.

Anti-viral activity – SARS-CoV-2: *Kabasura Kudineer*

Kabasura Kudineer showed significant activity when compared to standard drug Remdesivir, which showed KSK inhibit virus replication similar to standard drug Remdesivir.

Clinical Studies conducted by CCRS

The details of the clinical studies conducted by CCRS are as follows:

1. A prospective Non-randomized Open label Controlled Interventional study on the effect of Siddha intervention – *Kaba Sura Kudineer* (KSK) as a Prophylactic measure among high risk population (Health Care Workers/Containment Zone population) exposed to COVID-19 (SIDDHALION) Sample size – 20000
2. A prospective, single centre, randomized open labelled comparative clinical study to evaluate the effectiveness of Siddha medicine, *Kabasura Kudineer* and vitamin c-zinc

supplementation in the management of asymptomatic COVID 19 patients. at Government Stanley Medical College

3. A randomized open labeled clinical study to compare the effectiveness of *Kabasura Kudineer* and Vitamin-C Zinc supplementation in the management of asymptomatic SARS-CoV-2 patients at Govt. Theni medical college.
 4. Retrospective Survival analysis to assess the length of stay of novel coronavirus (COVID-19) patients in GMC & ESIH Coimbatore who were under- Integrated Medicine -Zinc, Vitamin C & *Kabasura Kudineer* (ZVcKK)
 5. Assessment of prophylaxis offered to frontline workers who has involved themselves in war footing of COVID – 19 in Tamil Nadu who are taking Siddha interventions like *Nilavembu Kudineer/Kabasura Kudineer*
 6. Awareness and practices regarding COVID-19 related prevention, control and promotive measures among population, Tamil Nadu, India: Cross-sectional study.
 7. A prospective, non-randomised, single arm observational study to access the safety and effectiveness of Siddha Sastric Medicines – Fixed Regimen intervention in prevention of COVID-19 disease progression of severity from COVID-19 Positive asymptomatic, mild or moderate to critical with reference to the Siddha guidelines of COVID-19 management, Ministry of AYUSH, Govt. of India at a Home Quarantine Chennai Containment Zone.
 8. A prospective, non-randomized, single-arm interventional study to assess the safety and efficacy of Siddha Sasthric Medicines – Fixed Regimen in the prevention of COVID-19 disease progression of asymptomatic, and mild at Siddha COVID Care Centre, Chennai, 2020 (SSM-FiRe)
 9. Clinical validation of the “Immune booster” potential of the Siddha medicine drug, *Kabasura Kudineer* (KSK) in asymptomatic contacts of COVID-19 cases: a controlled clinical trial at Sri Ramachandra Institute of Higher Studies, Chennai.
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