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

# LOK SABHA STARRED QUESTION NO. 142 TO BE ANSWERED ON 11<sup>TH</sup> FEBRUARY, 2022

### SIDDHA RESEARCH CENTRES

### \*142. SHRI SELVAM G.: SHRI DHANUSH M. KUMAR:

Will the Minister of AYUSH be pleased to state:

- (a) whether the Government has developed Siddha Research Centres in the country, if so, the details thereof and if not, the reasons therefor;
- (b) whether most of the Siddha Research Centres lack infrastructure facilities, if so, the details thereof and the corrective steps taken in this regard;
- (c) whether the Government plans to open new Siddha Research Centres and strengthen/upgrade the existing ones and if so, the details thereof;
- (d) whether the Government provides funds to the National Institute of Siddha for enhancing infrastructure including increase in the strength of doctors and research facilities, if so, the details thereof indicating the allocation made during the last five years along with the number of doctors working at present; and
- (e) the details of research which is underway in Siddha Research Centres to cure life threatening diseases and the outcome thereof?

# ANSWER THE MINISTER OF AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY(AYUSH)

### (SHRI SARBANANDA SONOWAL)

(a) to (e) A Statement is laid on the Table of the House.

# STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 142\* FOR 11<sup>TH</sup> FEBRUARY, 2022

- (a) Yes, Ministry of Ayush has established the Central Council for Research in Siddha (CCRS) the apex body for research in Siddha System of Medicine. The CCRS has following 8 peripheral Institutes / Units across the country;
  - 1. Siddha Central Research Institute, Chennai, Tamil Nadu.
  - 2. Siddha Regional Research Institute, Puducherry.
  - 3. Siddha Regional Research Institute, Thiruvananthapuram, Kerala.
  - 4. Siddha Clinical Research Unit, Govt. Siddha Medical College Campus, Palayamkottai, Tamil Nadu.
  - 5. Siddha Clinical Research Unit, Vardhman Mahavir Medical College & Safdarjung Hospital Campus, New Delhi.
  - 6. Siddha Clinical Research Unit, Sri Jayachamarejendra Govt. Ayurvedic Hospital Campus Bengaluru, Karnataka.
  - 7. Siddha Medicinal Plants Garden, Mettur Dam, Tamil Nadu.
  - 8. Siddha Clinical Research Unit, Sri Venkateswara Institute of Medical Sciences (SVIMS) Campus Tirupati, Andhra Pradesh.

In addition to the above, the following Co-located Siddha units of CCRS are functioning across country:

- i. AYUSH Wellness Clinic, Rashtrapathi Bhawan, New Delhi
- ii. All India Institute of Ayurveda, New Delhi,
- iii. National Institute of Epidemiology ICMR unit, Chennai, Tamil Nadu and
- iv. Pondicherry University, Kalapet, Puducherry.
- **(b)** There is no lack of infrastructure facilities in CCRS.
- (c) There is no proposal for opening of new Siddha Research Centre is under consideration. However, following activities have been carried out to strengthen / upgrade the existing institutes/units of CCRS.
  - i. The Construction of Headquarters office building at Tambaram, Chennai at an estimated cost of Rs.12.09 crore has been completed and will be inaugurated shortly.
  - ii. The steps have already been initiated to obtain National Accreditation Board for Hospitals & Healthcare (NABH)accreditation for Siddha Central Research Institute (SCRI), Chennai.

- iii. Various sophisticated equipments have been procured to augument the research and development facilities such as Liquid Chromatography coupled with Mass Spectrometry (LC-MS), Inductively Coupled Plasma coupled with Optical Emission Spectrometry (ICP-OES), High Performance Liquid Chromatography (HPLC), High Performance Thin Layer Chromatography (HPTLC), Fully Automated Analyser, Real Time Polymerase Chain Reactions (RT-PCR), Random Access Bio-chemical Analyzer, Ultrasound Color Flow Doppler (CFD), Haematology Analyzer, Powder X-Ray Diffractometer (PXRD), etc.
- iv. **Siddha Medicinal Plants Garden:**A Poly green house in an area of 500 Sq.mt. having 359 species including 37 Rare Endangered Threatened (RET) species is arranged. Nursery and Cultivation of Piper longum L. (Thippili) and Coleus vettiveroides K.C. Jacob (Vilamitcham) are also being maintained inside the poly green house. The nursery is functioning with 190 medicinal plants. An arboretum with 3.7 acres with 638 plants covering 211 species is being maintained.
- v. Regional Raw Drug Repositories (RRDR's), a project under Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants supported by National Medicinal Plants Board (NMPB) is being carried out at SCRI, Chennai. The outcome monograph would be used for the routine analysis in the quality control laboratories in order to ensure the purity and quality of the procured/collected raw drug. Control on the quality of the raw drug would positively impact the formulation processes and hence would result in the quality herbal medicines in ASU&H systems.
- vi. Cancer OPD has also been initiated in Siddha Clinical Research Unit, Vardhman Mahavir Medical College & Safdarjung Hospital Campus, New Delhi.
- vii. CCRS has entered into Memorandum of Understanding (MoU) with premier medical institutions like Government Institute of Medical Sciences(GIMS), Noida, All India Institute of Ayurveda, National Institution of Nutrition ICMR for carrying out collaborative studies. In addition, a MoU has been made with Accelerating Growth of New India Innovation (AGNIi) for the commercialization of R&D technologies and products developed by CCRS.
- viii. Nationwide Distribution of Kabasura Kudineer: CCRS through its peripherial Institutes/units has carried out the project entitled "Documentation of efficacy of selected Ayush Interventions Ayush-64 and Kabasura Kudineer in asymptomatic, mild to moderate Covid-19 patients in home isolation through Ayush Sanjivani mobile app: A prospective multicenter Community based study". With the support

- of Seva Bharathi workers mass distribution of Kabasura kudineer chooranam was carried out in the COVID-19 affected areas. Total sample size covered was 30,000.
- ix. An Integrated Siddha cancer OPD is successfully functioning at All India Institute of Ayurveda campus aiding the Palliative care of cancer patients through Siddha system.
- x. AYUSH-Hospital Management Information System (AHMIS) has been implemented in the peripheral institutes/units of CCRS

## xi. Activities under WHO Collaboration:

The following activities on Siddha System of Medicine have been initiated under the agreement of WHO with Ministry of Ayush:

- a. Inclusion of Siddha Morbidity Codes in 2<sup>nd</sup> Module of Traditional Medicine Chapter of ICD-11
- b. Siddha Terminology document
- c. Bench marks for practice in Siddha and Bench marks for practice in Varmam.

### xii. CCRS has developed following Mobile applications:

- a. Validation of Siddha Udal Iyal Inventory -YI for the Assessment of Body Constitution (ABC) It forms the fundamental basis of diagnosing the diseases, the prognosis and in deciding the treatment modality. It will also provide lifestyle modification / recommendation based on the constitution.
- b. **SiddAR app** Siddha initiative for documentation of drug Adverse Reaction has been developed to document the observed and reported side effects of Siddha drugs which benefit the public.
- c. Doorman is an Android Mobile Application for Misleading advertisements, Tall claim and magical remedy Act management mobile application.
- xiii. **Siddha Day:** Siddha day is being observed on the birth star of Siddhar Agasthiyar, the father of Siddha medicine to bring about awareness and popularize Siddha system of medicine amongst the public. The Fifth Siddha Day was celebrated on 23<sup>rd</sup> December, 2021 by CCRS, National Institute of Siddha & Government of Tamil Nadu at Chennai Trade Centre, Nandambakkam, Chennai. The theme of 5<sup>th</sup> Siddha Day was "Strength of Siddha for Communicable Diseases".
- (d) Yes, Ministry of Ayush has allocated sufficient funds to the National Institute of Siddha to enhance infrastructure including increase in the strength of doctors and research facilities. Details of fund allocation for the last five years are provided below:

S.No.	Year	Allocated(Capital)	<b>Total Grant Allocated</b>
		(in Cr)	(in Cr)
1.	2016-2017	0.50	25.00
2.	2017-2018	0.35	29.42
3.	2018-2019	6.00	35.50
4.	2019-2020	16.00	51.81
5.	2020-2021	6.00	47.58

Total 40 doctors (including regular and on contract basis) are working in NIS at present.

(e) The following are details of research studies by CCRS on life threatening diseases and their outcome.

### i. Completed studies and manuscript has been published:

- a. A Multi-centric Open labelled clinical trial on D5 Choornam in Mathu Megam (Diabetes Mellitus), Based on the results of the trial, a patent has been filed by CCRS which is under examination.
- b. 777 oil for the management of Psoriasis for which patent has been obtained through National Research Development Council and is now in the public domain.
- c. An Interventional Cohort Study in Dengue Prevalent Area by Using Nilavembu Kudineer and Awareness Programme
- d. A combination of Nilavembu Kudineer and Adathodai Manapagu in the management of dengue fever.
- e. Management of Chikungunya through Siddha formulation.
- f. Clinical management of Rheumatoid Arthritis using Linga Chenduram and Gowri Chinthamani.

## ii. The following studies are underway:

a. A Clinical trial to evaluate the safety and efficacy of Siddha Medicine Nandhi Mezhugu in Stage I and II Breast Cancer Patients has been initiated in collaboration with All India Institute of Ayurveda, New Delhi.

- b. Multi-centric single arm prospective open trial to check the safety and efficacy of a classical Siddha formulation Rasagandhi Mezhugu in Karuppai Narthasai Kattigal (Fibroid Uterus) among women (25-45 years) attending CCRS-research institutes / unit.
- c. A pilot study to evaluate the safety and efficacy of Sivanarvembu Kuzhi Thailam (SVK) in the management of Kalanjagapadai (Psoriasis)
- d. A single centre randomized parallel group clinical trial to compare the efficacy of Siddha Varmam Therapy and Thailam Application (SVT) versus Thailam Application (TA) in terms of pain and disability in the treatment of Kumbavatham (Adhesive capsulitis)
- e. A pilot open single arm clinical trial to evaluate the efficacy of Sirupeelai Kudineer in Diabetic Nephropathy.
- f. A pilot study to evaluate the safety and efficacy of Gunmakudori Mezhugu (GKM) in the management of Garpavayu Polycystic Ovarian Syndrome in the women of reproductive age.
- g. An open-label, pilot, hospital-based, interventional study with aqueous extract of vellaikarisalaisamoolam (Eclipta al, linn.) in NAFLD (Non-Alcoholic Fatty Liver Disease).

### iii. COVID-19 related Research:

- a. A prospective Non-randomized Open label Controlled Interventional study on the effect of Siddha intervention *KabaSura Kudineer*(KSK) as a Prophylactic measure among high risk population (Health Care Workers/Containment Zone population) exposed to COVID-19 (SIDDHALION) Sample size 20000. Data has submitted to Data and Safety Monitoring Board (DSMB) and it is in progress.
- b. 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, Chennai. The study results have been published in the journal "TRIALS" a springer nature indexed international journal. Trials. 2021 Sep 15;22(1):623. doi: 10.1186/s13063-021-05583-0. PMID: 34526104; PMCID: PMC8441246.
- c. 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, Tamil Nadu. The publishing of study result is in process.

- d. A Double blinded RCT Namely "A Double Blinded controlled RCT to evaluate the efficacy *Nilavembu Kudineer* and *Kabasura kudineer* in Symptomatic COVID 19 Patients" was planned as a collaborative study with Govt. Institute of Medical Sciences, Greater Noida and Siddha Clinical Research Unit, New Delhi. The study results has been published in TRIALS journals. Efficacy of two siddha polyherbal decoctions, Nilavembu Kudineer and KabaSura Kudineer, along with standard allopathy treatment in the management of mild to moderate symptomatic COVID-19 patients—a double-blind, placebo-controlled, clinical trial. Trials 22, 570 (2021). https://doi.org/10.1186/s13063-021-05478-0
- e. 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). The publishing of study result is in process.
- f. Awareness and practices regarding COVID-19 related prevention, control and promotive measures among population, Tamil Nadu, India: Cross-sectional study. The publishing of study result is in process.
- g. 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. The study is in process.
- h. An Open labelled RCT to Evaluate the Efficacy and Safety of Siddha Supplement (MAM Granules) along with Standard Allopathy Treatment in the management of RT PCR Positive Pre Symptomatic COVID 19 patients. The study has been completed and publication work is in progress.

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