



**STRATEGIES FOR THE
IMPLEMENTATION OF AYURVEDA IN
THE PREVENTION, MITIGATION AND
REHABILITATION OF COVID-19**

ORGANISATIONAL ALGORITHM



APRIL 11, 2020

INTRODUCTION

The honourable Chief Minister of Kerala had convened a video conference among the selected Ayurvedic experts across the state seeking initiatives for developing Ayurvedic strategies for the management of COVID-19 in the state. A seven-member task force constituted for the purpose following the convention, had submitted a comprehensive report recommending the definite *Strategies for the Implementation of Ayurveda in the Prevention, Mitigation and Rehabilitation of COVID-19*. The report was approved by the government of Kerala and the action plan drafted in concurrence to the report was also accepted vide order GO(Rt)No.156/2020/AYUSH, Thiruvananthapuram dated 08.04.2020. This Organisational Algorithm has been framed in accordance to the accepted report and action plan for immediate implementation.

The organisational algorithms of the various components of the recommended implementation framework is as follows;

State Ayurveda COVID-19 Response Cell (SACRC)

- Formulation and endorsement of the necessary strategies and work plans for effective Ayurvedic management of COVID-19.
- Effective implementation of the endorsed strategies through Regional Ayurveda COVID-19 Response Cell (RACRC), District Ayurveda COVID-19 Response Cell (DACRC) and *Ayur Raksha* Clinics (ARC).
- Ensuring effective coordination among RACRC, DACRC and ARC.
- Assuring interdepartmental coordination and integration at all levels of execution (SARCRC, RACRC, DACRC and ARC).
- Mandatory monitoring and regulation of the implemented programmes at all levels (SARCRC, RACRC, DACRC and ARC).

- Timely identification and resolution of the issues on implementation.
- Formulation of the appropriate research framework and data collection mechanisms.
- Concurrent evaluation and reporting of the programme.
- Timely publication and presentation of findings in the concerned national as well as international platforms.
- Ayurvedic pharmacological intervention of uncomplicated COVID-19 patients shall be conducted at the three RACRC's with a well required legal and ethical approvals. Discussions in this regard shall be urgently initiated with public health mechanisms.
- Initiate various research activities by combining major institutions in Kerala for value added Ayurvedic formulations and drugs for the management of COVID-19.

The following resource groups have been suggested for assisting the SACRC for the effective execution of the programmes of the action plan approved by the government;

The Clinical Resource Group (CRG)

The CRG shall be constituted from the selected members of the group of Ayurvedic experts who had been invited to the video conference with the honourable Chief Minister.

- The CRG members shall assist the SACRC in modifying/formulating strategies for addressing the evolving epidemiological scenario of the COVID menace.
- They shall also assist the timely revision and modification of the essential drug list in response to the evolving scenario.

The Research Resource Group (RRG)

The RRG shall be constituted from the Ayurvedic experts in the field of research and data management.

- They shall assist the SACRC and RACRC in drawing out the necessary research designs, tools and data management systems required for the execution and evaluation of the programme.
- They shall be responsible for the collection, processing and publication of the entire data sourced from the RACRC with the endorsement of the SACRC.
- Scientific verification of the information to be circulated among the various public domains.

The Drug Resource Group (DRG)

The separate DRG comprising of Ayurvedic experts from the field of drug research shall be constituted.

- They shall initiate possible drug development process using Ayurvedic formulation for viral diseases.
- They shall assist the SACRC with the development of monographs and drug information systems for the recommended medicines in the essential drug list.

- They shall also consider the development of value-added formulations from existing Ayurvedic drugs.

The Multimedia Resource Group (MRG)

A dedicated group of experts shall be assembled under NAM for rolling out multimedia IEC materials.

- The launching, maintenance and updating of the official web portal – *Niramaya* shall be done by the MRG.
- The MRG shall prepare the necessary IEC materials required to be circulated among the public.
- The correspondences to the visual, print and social media regarding the various activities under the programme shall be maintained by the MRG with due approval of RRG and SACRC.

Regional Ayurveda COVID-19 Response Cell (RACRC)

- The entire state shall be divided into three zones for the effective implementation of the endorsed strategies.

- The southern zone operating from the Government Ayurveda College, Thiruvananthapuram coordinating the implementation at Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha and Kottayam.
- The central zone operating from Government Ayurveda College, Thripunithura coordinating the implementation of the programme at Ernakulam, Idukki, Thrissur, Palakkad and Malappuram districts.
- The northern zone operating from Government Ayurveda College, Kannur coordinating the implementation of the programme at Kozhikode, Kannur, Wayanad and Kasaragod districts.
- The RACRC shall function as the integral link between the SACRC and DACRC's.
- The RACRC shall function as the training, sensitisation and capacity building centres for the personals (doctors, nurses, pharmacists, paramedics, volunteers, students and other community health workers) involved in the implementation of the Ayurvedic Strategies for

COVID-19 at various levels. The virtual communication platform shall be extensively utilised for the delivery of the course/training modules.

- Training regarding isolation, quarantine and care of COVID-19 patients as well infection prevention and control shall be immediately imparted to all the personals (skilled and unskilled) intended be deployed in the programme. Necessary assistance for the same shall be solicited and ensured from the nearest Medical Colleges/District Medical Administration.
- Ensuring the required readiness, preparedness and other modalities for Infection prevention and control at all the three regional centres.
- RACRC shall operate in conjunction with the SACRC and Research Resource Group (RRG) for charting out necessary research framework and data collection mechanisms.
- RACRC shall assist the DACRC in the effective implementation of the strategies endorsed by the

SACRC in due recognition of the demands at the concerned districts.

- RACRC shall provide the provision of the necessary tools and guidelines for data collection to the respective DACRC's. It shall serve as the authority of constant academic support regarding the issues on implementation.
- The systematic collection, processing and consolidation of the obtained data from the ARC's and due submission of the data to RRG for further processing on a daily basis. The data in this regard shall include detailed case proformas indicating the recipients of various services, consent forms, video and audio footages, photo documents and others.
- Coordination of human resources (skilled and unskilled) and infrastructural facilities available at the various Ayurveda Medical Colleges functioning in the respective districts under their supervision.
- Judicious mobilisation of the entire human resources at their disposal for addressing the

requirements arising at the respective districts on consultation with the corresponding DACRC's.

- RACRC shall constitute a task force for assisting the smooth operation of the various activities drawn out for implementation under the RACRC's. The task force shall necessarily include one faculty each and the NSS programme officers from the regional Ayurveda Medical Colleges.
- The coordinator of the RACRC shall be responsible for the regular reporting of activities on a daily basis to the SACRC.
- Ayurvedic pharmacological intervention of uncomplicated COVID-19 patients shall be conducted at the three RACRC's with a well required legal and ethical approvals. Discussions in this regard shall be urgently initiated with public health authorities.
- The Institutional Ethical Committees and Scientific Committees currently in place at the regional centres shall be responsible for scientific and ethical approval of the therapeutic

management of the uncomplicated COVID-19 patients.

**District Ayurveda COVID-19 Response Cell
(DACRC)**

- Implementation of the protocols endorsed by the SACRC, modified in accordance to the specific requirements of the district in consultation with the RACRC shall be the responsibility of the DACRC.
- The DACRC shall be responsible for coordinating and ensuring the necessary administrative and technical assistance from the LSGD, public health mechanism and the district administration.
- The DACRC shall ensure the uninterrupted supply of the essential medicines specifically drawn out of the state protocol for the different programmes in the district. They shall operate in tandem with the DISM, NAM and *Oushadhi* for this purpose.
- The effective functioning of the ARC's shall be the responsibility of the DACRC. Any mechanism

deemed appropriate shall be taken up by the DACRC in consultation with RACRC.

- DACRC shall be responsible for deploying the necessary human resources (skilled and unskilled) for the effective implementation of the programmes through ARC's.
- The human resources as well as the technical paraphernalia associated to the grass root level implementation shall be ensured by the DACRC.
- DACRC shall constitute a task force comprising of ayurvedic professional from private sector, academic institutions, ayurvedic drug manufacturers, LSGD mechanisms and public health machineries for the smooth execution of the Ayurvedic strategies for COVID-19 in the district.
- The DACRC shall ensure systematic reporting from the ARC's to the RACRC's on a regular basis consistent to the approved data management protocols devised by the SACRC.
- The management of the recovering COVID-19 patients after the mandatory isolation shall be the

responsibility DACRC. A medical team with necessary precautionary measures shall visit the recovered COVID-19 patient and devise the necessary Ayurvedic convalescent care strategy in consensus to the endorsed protocol of the SACRC. Regular scientific reporting and follow up to the convalescent care shall be forwarded to the RACRC's.

- The coordinator of the DACRC shall be responsible for the regular reporting of activities on a daily basis to RACRC and the district administration.

The Ayur Reksha Clinics (ARC)

- The ARC's serve as the basic implementation unit of the Ayurvedic preventive strategies for COVID-19 management.
- The protocols endorsed by the DACRC shall be operationalised by the ARC's. They shall also be responsible for the preliminary data collection and reporting the same to the RACRC. The data in this regard shall include detailed case proformas

indicating the recipients of various services, consent forms, video and audio footages, photo documents and others.

- They shall ensure the close cooperation of the LSGD and public health mechanisms for the smooth implementation of the same.
- They shall constitute a local task force comprising of ASHA workers, volunteers, LSGD members, private Ayurveda practitioners, Ayurveda students from the locality and others.
- The ARC's and the taskforce shall immediately ensure the standard precautionary measures prescribed on the occurrence of any suspicious symptoms of COVID-19 in an individual and report the same urgently to DISHA (toll free number 1056). They shall also inform the same to the DACRC immediately.

Major stakeholders and their organisational responsibilities;

The Director Ayurveda Medical Education (DAME)

- Ensuring the participation of all the 17 ayurveda medical colleges (infrastructure, skilled and unskilled human resource) in Kerala in the fight against COVID-19.
- The setting up of the RACRC's shall be the responsibility of the DAME. The required infrastructural and transportational facilities for the smooth operation of the RACRC shall be provided at the three Government Ayurveda Medical Colleges.
- The effective functioning of the RACRC shall be ensured.

The Director of Indian Systems of Medicine (DISM)

- The state-wide implementation of the Ayurvedic strategies for the management of COVID-19 in association to National AYUSH Mission (NAM) shall be the done by the DISM.

- Amalgamation of the currently running health projects under the DISM also for the effective execution of the Ayurvedic strategies against COVID-19 in the state.
- Ensuring adequate coordination with the RACRC regarding data collection and management.
- Utilisation of the available human as well as infrastructural resources at the disposal for the effective execution of the Ayurvedic strategies against COVID-19.
- Proper implementation of the programmes at DACRC level and ARC's level ensuring the proposed Public Private Participatory (PPP) mode of operation.
- Ensuring sustained availability of essentials medicines by coordinating with NAM, *Oushadhi* and Ayurvedic manufacturing industry of the state.

Professional Organisations

- Coordination of all organisations related to Ayurveda functioning at the private sector in

Kerala for the successful implementation of the programme across the state in a PPP mode.

- Ensuring participation of all private ayurveda doctors in Kerala.
- Generating readiness and preparedness among the private Ayurveda hospital sector for utilising the available human as well as infrastructural facilities for effective COVID-19 management.

The National AYUSH Mission (NAM)

- The NAM shall be responsible for the generation and pooling of available financial assistance from national and state level sources for the effective implementation of the strategies.
- All human resources under NAM and Ayurveda doctors available with National Health Mission shall be incorporated into the programmes.
- The NAM shall play the pivotal role of facilitating effective collaboration among the DISM, DAME, professional organisation from the various sectors of Ayurveda and all other stake holders and various departments for the successful execution

of the entire Ayurvedic strategies for COVID-19 management.

- The responsibility of the setting up and operationalization of the official multi-media platform for the programme (*Niramaya*) shall be entrusted to NAM. The NAM shall set up official communication media among the various components of the implementation framework.

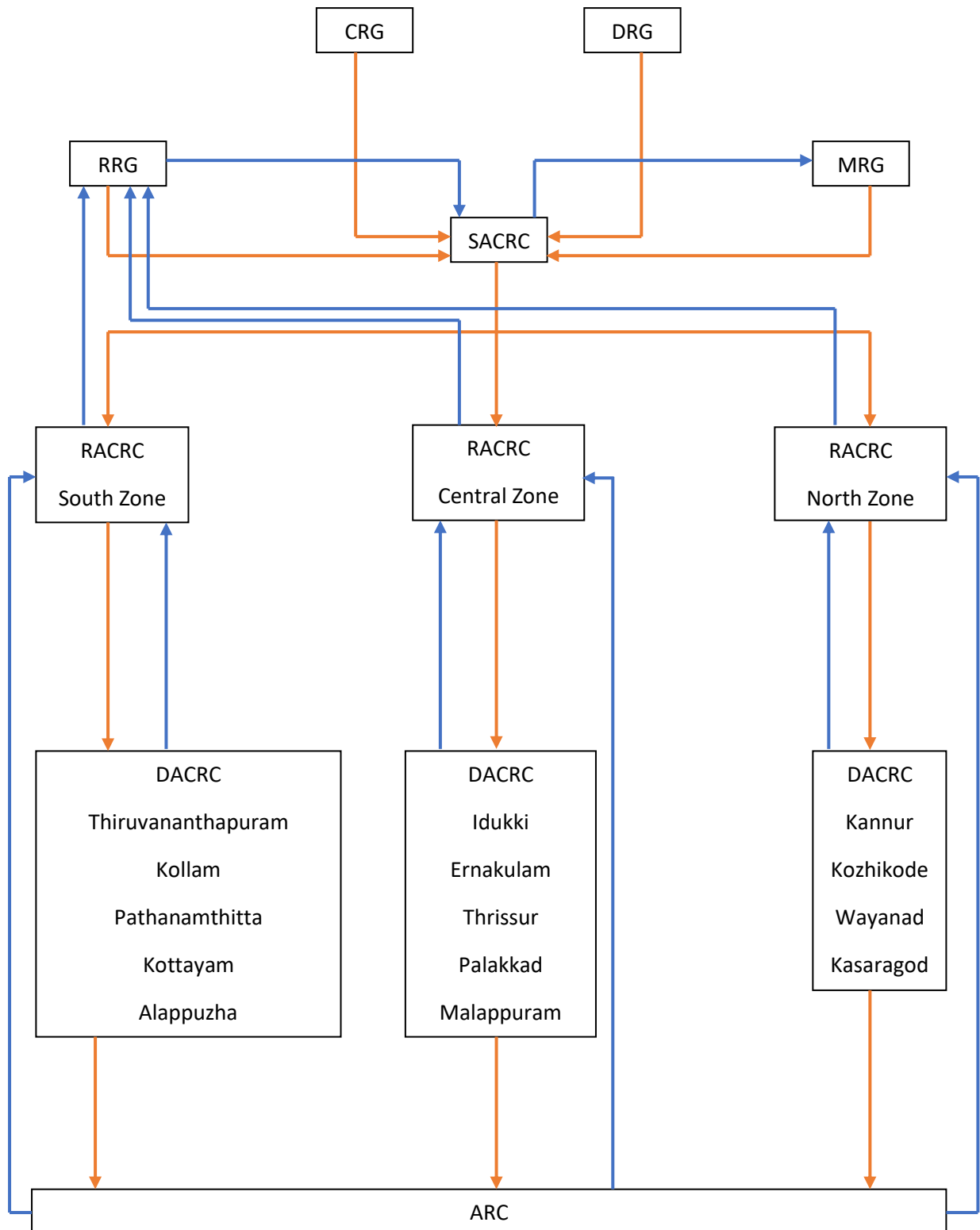
The drug regulatory authority of ASU drugs in Kerala (DRA)

- The DRA shall ensure the quality and safety of ayurvedic medicines served for all programmes envisaged in the COVID management strategy.
- A specific approval from the DRA is necessary for the medicines specially prepared for the purpose of treating uncomplicated COVID-19.

***Oushadhi* – The Pharmaceutical Corporation of Kerala**

- *Oushadhi* shall be responsible for guaranteeing the ready and sustained supply of the essential Ayurvedic Medicines recommended for the

programme. It shall coordinate among the various
Ayurvedic drug manufacturing organisations in the
state for this purpose.



The organisational framework for the implementation of Ayurvedic Strategies for the Management of COVID-19 in Kerala