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## MITIGATION AND MANAGEMENT OF COVID-19

Compendium of **Ayush-based** Practices from Indian States and Union Territories



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#### MITIGATION AND MANAGEMENT OF COVID-19: COMPENDIUM OF AYUSH-BASED PRACTICES FROM INDIAN STATES AND UNION TERRITORIES

#### Year of Publication: 2022

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Shri Suman K Bery Vice Chairman National Institution for Transforming India Government of India New Delhi, India

Over the course of the last two years, the COVID-19 pandemic has challenged healthcare systems across the globe. To deal with the absence of a specific treatment or protocol for COVID-19, collective efforts were required from the medicinal systems existing in India, including both modern medicine and the Ayush systems. Ministry of Ayush (MoA) and the Ministry of Health and Family Welfare (MoHFW) have partnered on several fronts to help India's battle against COVID-19 with greater precision. These include training of Ayush personnel and identifying them as Covid-warriors to expand the pool of available Human Resources (HR) in the country to fight COVID-19.

From the start of the pandemic, MoA has issued several advisories, guidelines, notifications, and protocols for the prevention and mitigation of COVID-19, and has worked in close coordination with the MoHFW and with the Governments of all States and Union Territories (UTs). MoA has taken several initiatives to train Ayush HR, utilize Ayush infrastructure as well as promote tele-consultation, R&D, and other such activities.

Based on MoA's initiatives, States and UTs have adopted several policies and practices. Ayush HR and infrastructure has been extensively utilized in States and UTs for the mitigation of COVID-19 as well as for vaccination drives. Ayush preventive measures have been widely used and propagated among the masses. Many States have established Ayush Covid helpdesks and mobile Apps for facilitating home isolation of Covid patients and the general public. Post-Covid Ayush clinics have also been established in some States and UTs. Ayush therapies are being successfully used as adjuvants, for standard care in managing Covid cases.

NITI Aayog has also been playing an instrumental role in enhancing the country's preparedness and response capabilities, providing technical guidance as well as active support by setting up the Cov-Aid portal and through partnerships with civil society





organizations, the private sector, and multilateral institutions. NITI Aayog's contribution through the Empowered Groups, headed by its Member (Health) and CEO, has been critical for ensuring timely action in combating the virus.

In order to document the efforts made by different stakeholders including State Governments to popularize Ayush practices, this report on the "Mitigation and Management of COVID-19: Compendium of Ayush-based Practices from Indian States and Union Territories" has been prepared. During these testing times, it is critical to communicate the Ayush practices that have been implemented at the national and state levels for the benefit of the people. The compendium provides information focused on practices adopted by various States and UTs of India for strengthening the country's fight against COVID-19, using Ayush resources and interventions. I am hopeful that this document will be a crucial knowledge resource for stakeholders from other countries, who have a good network of traditional medicine systems. It will significantly aid our fight against COVID-19, other epidemics and pandemics in the future.





**Dr. Vinod K. Paul** Member National Institution for Transforming India Government of India New Delhi, India

The Ministry of Ayush has played an active role in nudging the States for utilizing the Ayush resources for mitigation of COVID-19 and issued various guidelines, advisories, protocols, and notifications related to COVID-19. The States in India followed the guidelines issued by the MoA as well as adopted various strategies for strengthening their efforts for mitigation of COVID-19 spearheaded by the Health Departments of States by appropriately utilizing the Ayush systems of medicine.

COVID-19 placed an unprecedented strain on the healthcare system, and it was critical to pool available resources to combat the threat of COVID-19. States have taken initiatives to suitably utilize Ayush human resources and infrastructure for Covid related activities. These efforts have resulted in boosting the available pool of HR and infrastructure for the mitigation of COVID-19. Some of the States have also adopted their State-specific initiatives and launched various programs for the prevention and management of COVID-19 and post-COVID-19 cases. Some of the constraints faced by the Ayush Departments in a few States and UTs are also documented in this compendium.

These learnings have highlighted the need to further strengthen the traditional healthcare systems in the country. The experience of working together in these testing times has shown how Ayush services and products complemented India's fight against COVID-19.

I am hopeful that practices documented in this compendium will be useful to address any future surge of pandemic, as also serve as a model of integrative approach to health action.





Shri Amitabh Kant Chief Executive Officer National Institution for Transforming India Government of India New Delhi, India

Since 2020, the world has been dealing with the COVID-19 pandemic, which has resulted in an unprecedented publichealth crisis. It has posed as a threat to healthcare systems across the world. India is a country with well-regulated modern and traditional medical systems. Since the outbreak of COVID-19, the Ministry of Health and Family Welfare (MoHFW) and the Ministry of Ayush (MoA) have been working relentlessly to combat the pandemic. The MoA has taken several steps to bolster India's fight against the COVID-19 pandemic. The Central Government, the States, and the Union Territories (UTs) have worked together to manage the COVID-19 pandemic in the country. The States and UTs have adopted a multipronged approach for the prevention and management of COVID-19 in the local context, based on the comprehensive advisories. protocols, as well as guidelines issued by the Centre, from time-to-time.

For instance, in Kerala, 1,206 AYUR Raksha Clinics were made functional to manage the pandemic. In Uttarakhand, Ayush Rath distributed Ayush Raksha Kits along with AYUSH-64 (a polyherbal medicine), as well as generated awareness of Ayush-based practises in all district headquarters. Gujarat established Dhanwantari Rath mobile vans to provide basic health services at the doorstep. In Goa, post-COVID-19 clinics (Ayush) were established at all Ayush dispensaries co-located at every Primary Health Centre (PHC), Community Health Centre (CHC), Urban Health Centre (UHC), Sub-district Hospital (SDH) and District Hospital (DH) in the State. Delhi established dedicated Ayush Covid Healthcare Centres at teaching hospitals of Ayush Government Institutes and established 175 Ayush post-Covid Centres.

Several States and UTs made substantial use of technology in the fight against COVID-19. For instance, Uttar Pradesh developed a mobile App called "Ayush Kavach" to raise awareness about COVID-19 prevention and management. Due to the increasing number of Covid cases, Uttarakhand launched the Covid





Ayush Desk on April 30, 2021 to provide National Clinical Management Protocol Ayush-based tele-consultation to Covid patients.

Preventive measures are vital in keeping our health in good shape. States took various preventive measures to combat COVID-19. Similarly, timely supply of medicines is equally important; State and UT licencing authorities have taken steps to speed up the process of approving Ayush medicines for use in the prevention and treatment of COVID-19.

While the contemporary medical system is playing a vital role in combating COVID-19, it is equally important to take note of practices of Ayush systems adopted by various States and UTs. Sharing of these practices provides States and UTs with the opportunity to learn from one another, and to equip themselves against the Covid.

Since NITI Aayog's mandate includes documentation and dissemination of progress made in various areas, this publication is another step in that direction. An email was sent to all States and UTs by NITI Aayog in the month of September 2021 requesting them to share the practices or initiatives of Ayush that they believed had been useful and had helped in COVID-19 mitigation and management. Thirty-four States and UTs responded in writing to this request for information, except Ladakh and Chandigarh, and accordingly, documentation of said Ayush initiatives has been done.

As we continue our battle against COVID-19 on a war footing, I take this opportunity to congratulate the States and UTs across India for their initiatives in tackling this unprecedented crisis. I also appreciate the effort of the National Ayush Mission section, MoA for providing support in collecting the information from the States and UTs.

I appreciate the work of the team at NITI Aayog led and guided by Dr. Rakesh Sarwal, Additional Secretary, consisting of Vd. Shobhit Kumar, Research Officer, Vd. Rajeshwari Singh, Research Officer and Dr. K. Madan Gopal, Senior Consultant for the planning, coordination and documentation of these initiatives and Mr. Shoyabahmed Kalal, Deputy Secretary for peer-reviewing of this document. I also appreciate the work of Ms. Saloni Sachdeva, Young Professional and Ms. Vaishnavi lyer, Young Professional for language editing of the compendium.



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## LIST OF ABBEREVIATIONS

AHWC	Ayush Health and Wellness Centre
AIIMS	All India Institute of Medical Sciences
AIR	All India Radio
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
ASU	Ayurveda, Siddha, Unani
ASU&H	Ayurveda, Siddha, Unani and Homoeopathy
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homoeopathy
BAMS	Bachelor of Ayurvedic Medicine and Surgery
BCC	Behaviour Change Communication
BSF	Border Security Force
САВ	Covid Appropriate Behaviour
ССС	Covid Care Centre
сссс	Community Covid Care Centres
ССН	Covid Care Homes
CCRAS	Central Council for Research in Ayurvedic Sciences
CCRH	Central Council for Research in Homoeopathy
CCRS	Central Council for Research in Siddha
CCRUM	Central Council for Research in Unani Medicine
CCRYN	Central Council for Research in Yoga & Naturopathy
CDM & PHO	Chief District Medical & Public Health Officer
CFLTC	Covid First Line Treatment Centres



СНС	Community Health Centre
СМО	Chief Medical Officer
COVID 19	Coronavirus Disease 2019
CSIR	Council of Scientific and Industrial Research
CSLTC	Covid Second Line Treatment Centres
СТС	Covid Testing Centres
DBT	Department of Biotechnology
DCC	Domiciliary Care Centres
DCH	Dedicated Covid Hospital
DCHC	Dedicated Covid Health Centre
DH	District Hospital
DHS	Directorate of Health Services
DNO	District Nodal Officer
DSMB	Data and Safety Monitoring Board
EG	Empowered Groups
ERSS	Emergency Response Support System
ESF	Emergency Support Functions
GIS	Geographical Information System
GMC	Government Medical College
GOI	Government of India
GPS	Global Positioning System
НСС	Healthcare Centre
HQ	Headquarters
HR	Human Resource
HWC	Health and Wellness Centre
ICMR	Indian Council of Medical Research
ICU	Intensive Care Unit
IDSP	Integrated Disease Surveillance Programme
IEC	Information, Education and Communication
igot	Integrated Government Online Training
ICDS	Integrated Child Development Services
LSG	Local Self-Government
мо	Medical Officer

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#### List of Abbereviations

МоА	Ministry of Ayush
MoHFW	Ministry of Health and Family Welfare
NAM	National Ayush Mission
NGO	Non-Government Organization
NIMHANS	National Institute of Mental Health and Neurosciences
NHM	National Health Mission
NIT	National Institute of Technology
NITI	National Institution for Transforming India
PHC	Primary Health Centre
PMU	Project Management Unit
PSU	Public Sector Undertaking
R&D	Research and Development
RAT	Rapid Antigen Test
RBSK	Rashtriya Bal Swasthya Karyakaram
RRT	Rapid Response Team
RTPCR	Reverse Transcription-Polymerase Chain Reaction
RWA	Resident Welfare Association
OPD	Out Patient Department
QRT	Quick Response Team
SACRC	State Ayurveda Covid Response Cell
SDH	Sub-District Hospital
SHC	Sub Health Centre
SOP	Standard Operating Procedures
SpO2	Peripheral Capillary Oxygen Saturation
SVYASA	Swami Vivekananda Yoga Anusandhana Samsthana
UHC	Urban Health Centre
UT	Union Territory



## EXECUTIVE SUMMARY

The COVID-19 pandemic has gravely affected nations across the globe from its very first wave. It has challenged the best healthcare systems of the world due to the non-availability of any specific treatment and high infectivity, virulence, and case-fatality. The medical systems in India are broadly divided into two categories — the modern medicine system and the Ayush (Ayurveda, Yoga, and Naturopathy, Unani, Siddha, and Homeopathy) systems. Along with the Ministry of Health & Family Welfare, the Ministry of Ayush has also taken several initiatives for strengthening the fight against Covid in India from the beginning of the pandemic. The various States and Union Territories (UTs) have adopted many practices and done many innovations. The current compendium is an attempt to document these practices/innovations. This compendium is based on the information received from different States/UTs. The Ayush-based practices described in this compendium may be adopted, adapted, replicated, or customized as per need by the States/UTs and may be planned for scale-up in respective contexts, building on these practices and learning.

#### A. MINISTRY OF AYUSH INITIATIVES

The Ministry of Ayush (MoA) has played an active key role in nudging the States and UTs towards the utilization of Ayush resources such as Ayush services, infrastructure, and modalities in the mitigation and management of COVID-19. The Ministry has issued various advisories, guidelines, protocols, notifications for self-care, prevention, management of COVID-19 and post-Covid cases, telemedicine, Ayush industry and research etc., conducted awareness programmes, webinars, and training as well as providing support to the Ministry of Health and Family Welfare (MoHFW) along with various State and UT Governments for the mitigation of COVID-19 from time to time.



**Executive Summary** 



Figure ES.1: Ministry of Ayush Initiatives

### 1. Advisories, Guidelines, and Protocols Issued by the Ministry of Ayush

During the outbreak of COVID-19 in 2020, the MoA issued several advisories, including preventive measures for self-care during the COVID-19 pandemic, self-care guidelines for prevention and boosting immunity with special reference to respiratory health, practitioners' guidelines for registered Ayush practitioners, and National Clinical Management Protocol based on Ayurveda and Yoga for management of COVID-19. Further, during the resurgence of COVID-19 in 2021, preventive measures for self-care during COVID-19 pandemic for respective Ayush systems (Revised Advisory), Guidelines for practitioners for COVID-19 patients in home isolation for respective Ayush systems, Yoga protocol for psycho-social rehabilitation of COVID-19 patients, Advisory for Ayush practitioners on ethical practices during COVID-19, Information for Homeopathy and Ayurveda Practitioners on Mucormycosis, Home-care guidelines and advisory for Ayush practitioners about prophylactic care in children, and Ayush recommendations for the public on holistic health and well-being (Preventive measures and care during COVID-19 and long COVID-19) were issued.



#### 2. Ayush Human Resource and Infrastructure

The MoA collaborated with the MoHFW for the utilization of Ayush HR as Covid warriors for the management of COVID-19 with various identified roles.

The two ministries jointly provided training to 33,000 Ayush master trainers. Further, a total of 83,000 Ayush personnel obtained training at the Integrated Government Online Training (iGOT) portal. Around 28,473 Ayush staff members were deployed for COVID-19-related healthcare services. The MoA issued a directive on March 20, 2020, to all State Governments,

- Virtual training of 33,000 Ayush master trainers.
- Training of 83,000 Ayush HR at iGOT portal.
- Deployment of 28,473 Ayush staff for COVID-19 related healthcare Services.

principals of all Ayurveda, Siddha, Unani, and Homoeopathy (ASU&H) colleges (approximately 727 colleges), and all universities affiliating Ayush colleges for the utilization of available Ayush infrastructure, facilities such as hospitals (both in-patient and out-patient departments), pathology laboratories, ICUs and HR, including medical and paramedical staff to combat the pandemic. All the colleges were requested to

offer available facilities and services to the local health authorities as and when the situation required. To overcome the shortage of HR and infrastructure in the second wave of the COVID-19 pandemic, the Ministry of Ayush again undertook similar initiatives. The States and UTs were advised to utilize Ayush infrastructure — 50,000+ beds, hospitals of 750+ Ayush colleges, 86 clinical facilities of National Institutes and Research Councils under the MoA, by appropriately converting them into Covid Care Centres or hospitals while utilizing their existing staff of Ayush doctors and nurses.

 States and UTs were nudged to utilise Ayush infrastructure for Covid management.

 50,000+ beds, hospitals of 750+ Ayush colleges as well as 86 clinical facilities of National Institutes and Research Councils under the MoA were made available.

All States and UTs were also requested to issue appropriate instructions to District authorities to urgently involve District Ayurveda Officers in the management and mitigation of COVID-19 in the districts and to extensively utilize the services of Ayush doctors, Ayush healthcare providers, and Ayush healthcare facilities to address the shortage of HR and infrastructure for the management of COVID-19.

#### 3. Digital Platforms and Community Support

#### 3.1. Ayush COVID-19 Dashboard

The Ministry set up an Ayush COVID-19 Dashboard to display all the guidelines related to Ayush measures available for improving immunity, along with official communications, research undertaken on COVID-19, and measures for prophylaxis and management.

- Ayush COVID-19 Dashboard.
- National Repository on Ayush COVID-19 clinical and other R&D initiatives.
- Ayush Covid community support helpline.
- Ayush Sanjivani mobile App.
- "AYUSH for Immunity" campaign.



#### 3.2. A National Repository on Ayush COVID-19 clinical and other R&D

*initiatives* was developed to disseminate information related to Ayush R&D initiatives, COVID-19-related Ayush clinical trials along with scientific publications, and is also available on the Ayush Research Portal of the MoA.

#### 3.3. Ayush Covid community support helpline

The MoA operationalized a dedicated community support helpline toll-free number #14443, to provide Ayush-based solutions and support for the challenges that emerged due to COVID-19.

#### 3.4. Ayush Sanjeevani mobile App

The Ministry developed the Ayush Sanjivani mobile App, for the assessment of effectiveness, acceptance, and usage of Ayush advisories along with the measures in the prevention of COVID-19. Through this App, the Ministry documented acceptance, perception, and utilization of Ayush advisories and measures in the prevention of COVID-19 of around 1.35 crores respondents.

#### 3.5. "AYUSH for Immunity" campaign

The MoA launched this campaign, to sensitize the general public towards the promotion of immunity through Ayush interventions wherein more than fifty thousand people participated. The Ministry also published a bulletin on "AYUSH for Immunity". A series of webinars were also organized to sensitize Ayush practitioners.

#### 4. R&D Initiatives

The MoA has undertaken several R&D initiatives to harness the potential of Ayush systems to contain the impact of the COVID-19 pandemic by collaborating with several research organizations to encourage, promote, and advance evidence-based research on Ayush systems.

To facilitate and expedite the Ayush interventionbased research, the Ministry constituted an Inter-disciplinary Ayush R&D Task Force involving experts from premier organizations and research institutions. The Task Force formulated and designed clinical research protocols for prophylactic studies and add-on interventions in COVID-19 positive cases through a very thorough review and the consultative process by experts of high repute from different organizations across the country. Further, the MoA also issued a gazette notification in April 2020 for defining the conditions for undertaking the research on COVID-19 to generate evidence through Ayush systems.

#### **139 Research Studies:**

- 22 experimental studies.
- 44 prophylactic studies.
- 44 therapeutic (standalone and add-on treatment) studies.
- 15 observational studies.
- 10 survey studies.
- O2 pharmacopeia standard development.
- 02 systematic reviews.
- Repurposing of AYUSH-64 and Kabasura Kudineer.



All these efforts have resulted in the commencement of 139 clinical, pre-clinical, and epidemiological studies of the Ayush systems, which have been undertaken by the Research Councils and National Institutes under the Ministry.

These include 22 experimental studies, 44 prophylactic studies, 44 therapeutic (standalone and add-on treatment) studies, 15 observational studies, 10 survey studies, two pharmacopeia's standard development, and two systematic reviews.

During the second wave of the pandemic, Central Council for Research in Ayurvedic Sciences (CCRAS) repurposed AYUSH-64, a polyherbal formulation in the treatment of asymptomatic, mild, and moderate COVID-19 infection as an adjunct to standard care; in addition, the Central Council for Research in Siddha (CCRS) repurposed Kabasura Kudineer in mild to moderate COVID-19 respectively based on the findings of clinical trials. Accordingly, The Ministry requested the State and UT Governments to utilize AYUSH-64 and Kabasura Kudineer for asymptomatic, and mild to moderate COVID-19 patients. The MoA has informed State and UT licensing authorities and drug controllers to allow the licensed manufacturers to produce AYUSH-64 under their jurisdiction.

#### **B. STATES/UTs INITIATIVES**



#### Figure ES.2: States & UTs Initiatives



Based on the advisories, guidelines, protocols, and notifications issued by the MoA from time to time, various initiatives and practices have been undertaken by the State Governments. Further, several states have also taken various new initiatives and innovations apart from complying with the directives of MoA. All the States and UTs were requested to share the practices or initiatives of Ayush that they believed had been useful and had helped in mitigation and management of COVID-19.

Thirty-four States and UTs responded in writing to this request and, accordingly, documentation of Ayush initiatives has been done in the following areas.

#### **1.** Ayush Infrastructure and Human Resource

Infrastructure and HR are the main pillars for enabling the efficient delivery of healthcare services. It was evident during the COVID-19 first and second waves that there was a huge demand on all healthcare facilities. Ayush HR and infrastructure were utilized by the health authorities of various States and UT as per their situation and need. Ayush HR played an important part in the mitigation and management of COVID-19 through various identified roles. It was utilized for multiple tasks including surveillance, contact tracing, testing, telephonic consultations, distribution of medicines, counselling, vaccinations, and duties in various capacities at health facilities, care centres, health centres, civil hospitals, guarantine centres, Covid First-Line Treatment Centres (CFLTC), Covid Second Line Treatment Centres (CSLTC), Domiciliary Care Centres (DCC), helpdesks, post-Covid clinics, and Flu clinics. Ayush HR worked with rapid response teams, as well as involved in physical and tele-triaging, district vigilance committees for monitoring bed and oxygen supply along with District surveillance teams. Ayush infrastructure was utilized by the State and UT Governments as fever clinics, vaccination centres, CCCs, Covid health centres, and post-Covid clinics. Some instances from States follow:

*In Gujarat:* Ayush HR (Medical officers, academicians, para-medical staff, and students) was deployed at various levels of the healthcare system including civil hospitals, CCCs, Dedicated Covid hospitals (DCH), Dedicated Covid health centres (DCHC), Tele-counselling centres as well as in Dhanvantari Rath and Sanjivani Rath in different capacities. 11 Ayush hospitals with the availability of 496 beds and 60 Ayush Medical Officers (MOs) were converted into CCCs.

*In Maharashtra:* 182 Ayush facilities were utilized as CCCs and 144 as quarantine centres.

*In Chhattisgarh:* Services of Ayush HR were utilized at Home Care Call Centre. The Government Ayurveda College Hospital, Raipur was developed as a 400-bedded CCC.

*In Goa:* The State Government initiated the contractual appointment of Ayush doctors for Covid-related duties. All Ayush doctors (Ayurvedic / Homoeopathic physicians), Rashtriya Bal Swasthya Karyakaram (RBSK) doctors, Ayush MOs, Ayush consultants under the National Health Mission (NHM), National Ayush Mission (NAM) were deployed at CCCs, shelter homes, isolation wards, and Covid hospitals.

*In Odisha:* 100 Yoga instructors were empanelled to conduct Yoga awareness programs



in various districts.

*In Kerala:* The State Ayurveda Covid Response Cell (SACRC) was formed and they were assigned several tasks related to various Covid activities. A total of 1206 AYUR Raksha Clinics comprising of all Ayurvedic institutions like Ayurveda dispensaries and hospitals, college hospitals, NHM Ayurveda dispensaries were opened for tackling the pandemic. Post-Covid complications management was also done through 45+ Siddha hospitals and clinics.

*In Karnataka:* The Ayush staffs were part of the home quarantine enforcement squad in the Bangalore Urban District. CCCs were set up at all the seven teaching hospitals attached to the Department of Ayush during the first and second wave of COVID-19, respectively.

*In Himachal Pradesh:* The Ayush Department formed Quick Response Teams (QRTs) at the State, district, and sub-divisional levels as well in regional Ayurvedic hospitals, and educational institutions.

*In Uttar Pradesh:* The State Government established Integrated Covid Command and Control Centres in all districts headed by the district nodal officers.

*In Delhi:* The Government established dedicated Ayush Covid Healthcare Centres at Ayush teaching hospitals and AYUSH Government Institutes and established 175 Ayush post-Covid Centres.

*In Tamil Nadu:* During the first wave, 36 AYUSH CCCs including 33 Siddha CCCs were operationalized. During the second wave, 79 AYUSH CCCs including 64 Siddha CCCs were made operationalized across the State.

*In Bihar:* General OPD and IPDs were equipped specially to tackle post-COVID-19 cases.

#### 2. Pandemic Surveillance and Contact Tracing

Contact tracing and surveillance were some of the key measures for preventing and curbing the spread of COVID-19. Ayush HR was extensively utilized by the State and UT Governments for contact tracing and surveillance. Ayush HR was posted at check-posts, State borders, airports, ports, bus stands, and testing centres as per State-specific demands. For instance, in Himachal Pradesh, given the need for diligent and meticulous surveillance of Covid suspects and to propagate the message of social distancing, an "Active Case Finding Campaign" was launched by the Department of Health and Family Welfare (DoHFW). For this, Ayush Medical Officers, Ayurvedic pharmacists, and Bachelor of Ayurvedic Medicine and Surgery (BAMS) graduates working as medical officers in RBSK were made team leaders to visit households, and for door-to-door, for proactive and intensive surveillance.

#### 3. Prophylactic and Therapeutic Intervention

Prophylaxis is one of the important measures for fighting against COVID-19. States and UTs have adopted the guidelines and advisories issued by the MoA and taken several



initiatives to safeguard the public, frontline workers, quarantined individuals, and management of Covid cases. Further, many States/UTs have utilized Ayush intervention in the management of COVID-19 cases as an adjuvant to Standard care and these interventions have shown promising results. Some of the States like Maharashtra and Karnataka have also developed their State-specific guidelines for the prophylaxis of COVID-19. States and UTs translated the self-care preventive advisories and guidelines into regional languages and disseminated them widely through various digital modes, print media, and Information, Education, and Communication (IEC) materials. States and UTs extensively distributed the immunity-boosting Ayush medications. Few States and UTs like Madhya Pradesh, Gujarat, Kerala, and Delhi also undertook research studies related to the prevention and management of COVID-19 through Ayush intervention.

#### 4. Digital Platform and Telemedicine

Digital platforms and tele-medicines services are playing a vital role during the COVID-19 pandemic. They have emerged as a safe interactive system for healthcare workers, the public, and patients. The States and UTs extensively utilized digital platforms for disseminating information related to self-care guidelines as well as monitoring Covid related activities. Ayush-based prophylactic measures like daily regimes, diets, Yoga practices, and awareness about other preventive guidelines were disseminated through television programs, radio talks, Facebook, Twitter, and mobile Apps as well as through animation and videography. Tele-consultation was provided to the general public, for preventive measures including counselling and reducing the stigma of COVID-19, to home-quarantined patients. States and UTs issued state-specific helpline numbers and developed mobile Apps for facilitating these services. For instance:

*In Uttarakhand:* The State Government established the Covid Ayush Desk on April 30, 2021. In each district, teams were formulated utilizing 4 to 12 Ayush MOs for providing the National Clinical Management Protocol, and Ayush-based tele-consultation to the Covid-positive patients, headed by a district nodal officer. A centralized Ayush Desk was also established at the Directorate for training, monitoring, data collection, and reporting. Till September 30, 2021, a total of 1,58,651 calls had been made by the Ayush Desk and each response was documented digitally.

*In Uttar Pradesh:* The State developed the Ayush Kavach App during the COVID-19 pandemic. After the Aarogya Setu App, this App was one of the most popular Apps. It was downloaded by approximately two million users. Patients were able to directly contact specialized Ayush doctors through this App and more than 26,000 consultations were provided till October 22, 2021. Live Yoga sessions were telecasted every morning at 8 a.m. for patients as well as others, for boosting immunity and a live "AYU-SAMVAD" programme was telecasted every evening for the prevention of COVID-19 and other common diseases through this App.

*In Gujarat:* The location of 538 Ayurveda dispensaries, 39 Ayurveda hospitals, and 272 Homoeopathy dispensaries was made available to the general public through a helpline number (104), from where people could get information regarding prophylactic and therapeutic measures. As part of community sensitization, a "COVID-19-related Ayush



Health Lecture Series" was started from May 14 to October 12, 2021, as a live daily program on the Vande Gujarat Channel-2. A total of 108 episodes were telecast.

*In Madhya Pradesh:* The Telemedicine App "Ayush Qure" was launched to facilitate the tele-consultation facility. The health institutions under the Department of Ayush were linked to this app for wider public utility.

*In Jammu & Kashmir:* An Aarogya Sampark Dashboard was created for real-time tracking of COVID-19 related efforts of Ayush J&K. This monitoring system is one of the examples of excellence.

*In Bihar:* The State Ayush Society made the Ayush Tele-consultation App to accelerate the tele-consultation services.

In Jharkhand: Tele-consultancy was provided through Helpline No.104 across the State.

#### 5. Support to Ayush Industry

It is important to have an uninterrupted supply of medicines for ensuring the successful implementation of prophylactic and therapeutic interventions. The States and UTs facilitated the process of licensing/approval and renewal of licenses for manufacturing Ayush healthcare products for boosting immunity as well as for manufacturing sanitizers. Further, the State and UT Licensing Authorities expedited licensing and approval, for manufacturing AYUSH-64 tablets, based on the recommendations of MoA. For instance:

*In Rajasthan:* With the increased demand for hand sanitizers and Ayush Kwath, 100 private Ayurveda drug manufacturers were provided provisional licenses for producing these medicines in the State.

*In Himachal Pradesh:* Issued approval for manufacturing of sanitizers, hand wash, and Ayush Kwath immunity boosters to 60 firms for 382 formulations.

#### C. CONCLUSION AND WAY FORWARD

The MoA, GoI has played an active role in strengthening the efforts spearheaded by MoHFW for the mitigation and management of COVID-19 from its inception in January 2020. As the healthcare system was overwhelmed during the pandemic, Ayush HR and infrastructure were substantially utilized by the States to mitigate COVID-19. The various States and UTs have adopted guidelines issued by the MoA and implemented them in their States as per the feasibility, while many have also done some innovations. Some States have adopted their State-specific policies and launched various programmes for the prevention and management of COVID-19 and post-COVID-19 cases. Ayush departments from a few States and UTs have also reported some constraints faced by them, such as insufficient Ayush staff and funds, statutory restrictions for treating COVID-19 patients through Ayush intervention, and lack of autonomy for taking initiatives through Ayush interventions, and so on.



Executive Summary

There is a need to revisit the State policies to further strengthen the traditional healthcare systems in the country. The integration of evidence-based Ayush services with the contemporary system can play a vital role in strengthening India's fight against COVID-19 and similar crises in the future.



#### CHAPTER

## Introduction

The Indian System of Medicine (ISM) has a long history of its usage in the country. An independent Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was established in 1995, which was then rechristened as the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy with the acronym as AYUSH in November 2003; Sowa Rigpa was added further in acronym in 2011. Later on, the Department of Ayush was granted the status of Ministry of Ayush (MoA) under the Government of India on November 9, 2014 to ensure optimal development, propagation, and popularization of Ayush systems of health care at national and international platforms.

A broad institutional framework has been developed over the years to carry out the various activities of the MoA. There is a widespread of Ayush infrastructure across the country, which incorporates various educational institutes, research organizations, hospitals, dispensaries, licensed drug manufacturing units, and registered practitioners providing health care. There are five research councils and 12 national institutes under the ambit of MoA. Since the creation of a separate Ministry, there has been a substantial increase in the infrastructural facilities under Ayush systems in the country. There is a nationwide network of 3,781 Ayush hospitals having a bed capacity of 60,632. There are 6,46,013 registered Ayush practitioners.

Since January 2020, the MoA has taken various initiatives and issued various guidelines, advisories, protocols, and memorandums for the mitigation of the COVID-19 pandemic. These advocacies were continually revised based on the emerging scenario with respect to the COVID-19 outbreak. The States and Union Territories (UTs) took various initiatives based on the Central Government advisory. State-specific policies were also adopted by some States and UTs.

MoA requested NITI Aayog to document the initiatives undertaken by the various States/UTs. NITI Aayog sent an email to all States and UTs in the month of September 2021 requesting them to share the practices or initiatives of Ayush that they believed had been useful and had helped in COVID-19 mitigation and management. The email was followed up with phone calls to officials from the health and Ayush departments in the States and UTs. Thirty-four States and UTs, except Ladakh and Chandigarh, responded in writing to this request for information from September 2021 to February



Introduction

2022. Information was collected and collated from these States/UTs in a pre-defined template.

This compendium provides comprehensive details on the various practices and activities, and innovations undertaken by the Indian States and UTs for the mitigation of the COVID-19 outbreak using Ayush interventions and resources. The time frame for these practices/ activities has been mentioned for those States/UTs, who have provided the details regarding it. The compendium also contains information on the use of Ayush personnel and infrastructure. It is worth noting that NITI Aayog is not referring to these as "best practices" because that would necessitate a separate and extensive study along with long-term monitoring and follow-up. Further, in a continuously changing scenario, it can be difficult to consistently and fully associate practices with outcomes.

Based on the information received from various States and UTs, the practices have been categorized into the following broad themes:

- i. Overview and objectives of activities;
- ii. Utilization of Ayush infrastructure and HR;
- iii. Interventions and initiatives;
- iv. Usage of the digital platform and tele-medicine; and
- v. Issues occurred or addressed by the State/UT.

Based on these themes, State-wise practices have been documented in the compendium.



#### CHAPTER

## Initiatives Taken by the Ministry of Ayush for Mitigation of COVID-19\*

The COVID-19 pandemic has gravely affected all nations across the globe from its first wave. It has challenged the best healthcare systems of the world due to the non-availability of any specific treatment, high infectivity, virulence, and fatality. As of March 23, 2022 (12:30 PM IST), there were 470,839,745 confirmed cases and 6,092,933 deaths due to COVID-19 across the globe.<sup>1</sup> In India, along with the contemporary medicine system, Ayush systems have played an active role on various fronts to tackle the health crisis caused by the COVID-19 pandemic.

The MoA has played a key role in nudging the States and UTs to tackle COVID-19 by facilitating the utilization of Ayush services, infrastructure, strategies, and modalities in the mitigation of COVID-19. The Ministry has issued various advisories, guidelines, protocols, and notifications. MoA also conducted webinars, training of Ayush staff through virtual platforms, collaborated with the Ministry of Health and Family Welfare (MoHFW) as well as various State and UTs to tackle the COVID-19 situation from time-to-time. The various activities undertaken by MoA are as follows:

#### 2.1 ADVISORIES, GUIDELINES, AND PROTOCOLS ISSUED BY THE MINISTRY OF AYUSH

#### 2.1.1 During the outbreak of COVID-19 in 2020

- Ayurveda preventive measures for self-care during the COVID-19 pandemic<sup>2</sup>
- Self-care guidelines for prevention and immunity with special reference to respiratory health<sup>3</sup>

<sup>3</sup> Guidelines for prevention and immunity with special reference to respiratory health. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/125.pdf.



 $<sup>\</sup>ensuremath{^*\text{Source:}}$  Based on the information provided by the Ministry of Ayush

<sup>1</sup> WHO Coronavirus (COVID-19) Dashboard. World Health Organization. Retrieved on March 23, 2022 from https://covid19.who.int/.

<sup>2</sup> Ayurveda's immunity boosting measures for self care during COVID 19 crisis. Ministry of Ayush, Government of India. Available at https:// health.ncog.gov.in/ayush-covid-dashbaord/assets/Classified/ Measure\_to\_increase\_the\_immunity.pdf.

Initiatives Taken by the Ministry of Ayush for Mitigation of COVID-19\*

- Telemedicine practice guidelines<sup>4, 5</sup>
- Guidelines for registered practitioners of respective systems of Ayush were made available in the public domain for the benefit of registered Ayush practitioners including Homoeopathy to help uniformly in the management of COVID-19 pandemic.<sup>6</sup>



Figure 2.1: Guidelines for Ayush Practitioners for COVID-19



<sup>4</sup> Telemedicine Practice Guidelines for Ayurveda, Siddha and Unani Practitioners. CCIM, Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/CCIM\_Telemedicine\_Guidelines.pdf.

<sup>5</sup> Telemedicine Practice Guidelines for homoeopathic practioners. CCH, Ministry of Ayush, Government of India. Available at https://www. ayush.gov.in/docs/126.pdf.

<sup>6</sup> Guidelines for Ayush Practitioners for COVID-19, Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/ayushguidelines.html.



Figure 2.2: Immunity Boosting Measures for Self-care

**Figure 2.3:** National Clinical Management Protocol based on Ayurveda and Yoga

- National Clinical Management Protocol based on Ayurveda and Yoga for the management of COVID-19<sup>7</sup>
- Memorandum for expediting the process for grant of approval/license/renewal of license for manufacturing of ASU immunity-boosting healthcare products and sanitizers<sup>8</sup>

#### 2.1.2 During the Resurgence of COVID-19 in 2021

- Ayurveda preventive measures for self-care during COVID-19 pandemic (Revised Advisory)
- Guidelines for Ayurveda, Unani, Homoeopathy, and Siddha Practitioners for COVID-19 patients in home isolation<sup>9, 10, 11</sup>

<sup>11</sup> Guideline for Siddha Practitioners for COVID-19 Patients in Home Isolation. Ministry of Ayush, Government of India. Available at https:// www.ayush.gov.in/docs/Guidelines%20for%20Siddha%20Practitioners%20for%20Home%20isolation%20COVID-CCRS\_26April2021. pdf.



<sup>7</sup> National Clinical Management Protocol based on Ayurveda and Yoga for the management of COVID-19. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/ayush-guidelines.html.

<sup>8</sup> Expediting the process for grant of approval/license/renewal of license for manufacturing of ASU immunity boosting healthcare products and sanitizers. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/124.pdf.

<sup>9</sup> Guidelines for Homoeopathy Practitioners for Prophylaxis and Symptomatic Management of COVID-19 Patients in Home Isolation. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/CCRH-%20Revised%20Guidelines%20for%20 Homoeopathy%20Practitioners%20for%20Prophylaxis%20and%20Symptomatic%20Management%20of%20COVID-19%20Patients%-20in%20Home%20Isolation.pdf.

<sup>10</sup> Guidelines for UNANI Practitioners for COVID-19 Patients in Home Isolation. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/Home%20Isolation%20COVID-19%20Patients%20-%20Guidelines%20for%20UNANI%20Practitioners-converted.pdf.

- Yoga protocol for the psychosocial rehabilitation of COVID-19 patients (CCRYN, NIMHANS, and SVYASA)<sup>12</sup>
- Advisory for Ayush practitioners on ethical practices during COVID-1913
- Information for Ayurveda Practitioners for Prophylactic, Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis<sup>14</sup>
- Information for Homoeopathy practitioners for Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis<sup>15</sup>
- Home-care guidelines and advisory for Ayush practitioners about prophylactic care in children<sup>16</sup>
- Ayush recommendations for the public on holistic health and well-being "Preventive measures and care during COVID19 and long COVID-19"<sup>17</sup>



Figure 2.4: COVID-19 & Long COVID-19 Guidelines



Figure 2.5: Home care guidelines for children

- 12 Yoga protocol for the psychosocial rehabilitation of COVID-19 patients. CCRYN, Ministry of Ayush, Government of India. Available at http://www.ccryn.gov.in/sites/default/files/Protocol\_for\_Psychosocial\_Rehabilitation.pdf.
- 13 Advisory for Ayush practitioners on ethical practices during COVID-19. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/advisory%20for%20ethical%20use%20final.pdf.
- 14 Information for Ayurveda Practitioners for Prophylactic, Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/Mucor%20mycosis%202%20(1).pdf.
- 15 Information for Homoeopathy Practitioners for Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/Information%20for%20homoeopathic%20management%20 of%20Mucormycosis-reg.pdf.
- 16 Home care guidelines for children and Advisory for Ayush Practitioners about prophylactic care in Children during the COVID-19 Pandemic. Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/Ayush\_HomeCareGuidelinesForChildren. pdf.
- 17 Ayush recommendations for the public on holistic health and well-being "Preventive measures and care during COVID19 and long COVID-19". Ministry of Ayush, Government of India. Available at https://www.ayush.gov.in/docs/AyushRecommendations4\_LongCovid. pdf.


## 2.2 AYUSH HUMAN RESOURCE AND INFRASTRUCTURE

The Central Government reconstituted Empowered Groups (EG) to oversee the preparation and management of COVID-19, with a mandate to oversee the augmentation of all HRs and capacity-building during the pandemic. To further decentralize and ensure meticulous action, EG-3 constituted two subgroups, along with seven thematic expert groups under subgroup II for the development of training content. Till now, 28 courses for the Ayush sub-group are available on the iGOT platform. All States and UTs have also been requested to issue necessary directions to their health authorities to train healthcare workers on these courses.

As part of the efforts aimed to achieve maximum mobilization of stakeholders, the Ministry take immediate actions for utilization of Ayush Infrastructure and Human resources as detailed below:

## 2.2.1 Ayush Infrastructure

During the first wave of the pandemic, a communication was sent to the MoHFW on March 16, 2020 from MoA, offering integration and mobilization of Ayush infrastructure to combat the COVID-19 pandemic. Similarly, on March 23, 2020, the Ministry communicated with all State Government authorities, and all universities affiliating Ayush colleges, for the utilization of available Ayush infrastructure facilities like hospitals(both in-patient and out-patient departments), pathology laboratories, ICUs, and HR including medical and paramedical staff to combat the COVID-19 pandemic. All 727 ASU&H colleges were requested to offer their services to local health authorities for the utilization of the available facilities by them as per the situation.

During the second wave also, the States and UTs were again advised to use the Ayush infrastructure including over 50,000 beds, hospitals of 750+ Ayush colleges, 86 clinical facilities of the National Institutes and Research Councils under the MoA, by converting them into CCCs and/or hospitals, with the help and service of Ayush doctors, nurses and other staff.

## 2.2.2 Training and Utilization of HR

Training on "COVID-19 Preparedness, Response, and Containment" was provided to Ayush stakeholders to develop master trainers across the States. The MoA and the MoHFW jointly provided training to 33,000 Ayush master trainers. A total of 83,000 Ayush personnel were trained through the iGOT portal on a continuous basis. The various States also provided training to about 1.06 lakh Ayush personnel. As per available information, around 28,473 Ayush staff members were deployed for COVID-19-related healthcare services. During the increased demand of HR and infrastructure in the second wave of the COVID-19 pandemic, the MoA released an advisory for the augmentation of Ayush (HR in the management of COVID-19) at appropriate levels, under the supervision of medical experts/specialists and in managing the e-Sanjeevani portal for tele-consultation and counselling.



Initiatives Taken by the Ministry of Ayush for Mitigation of COVID-19\*

The Ministry requested to all States and UTs to issue appropriate instructions to district authorities to include district Ayurveda officers in COVID-19 containment strategies and interacted with the Principal Secretaries and Directors of Ayush from all States and UTs, to expedite the utilization of Ayush HR and infrastructure.

## 2.3 DIGITAL PLATFORMS AND COMMUNITY SUPPORT

## 2.3.1 Ayush COVID-19 Dashboard

The Ministry had set-up an Ayush COVID-19 Dashboard to furnish the guidelines related to Ayush measures for improving immunity, disseminating official communications, and research undertaken on COVID-19, and measures for prophylaxis and management.<sup>18, 19</sup>

## 2.3.2

A **National Repository on Ayush COVID-19 clinical and other R&D initiatives** was developed to disseminate information regarding Ayush R&D initiatives, COVID-19-related Ayush clinical trials, and scientific publications. This is available on the Ayush Research Portal of the MoA.<sup>20</sup>

## 2.3.3 Ayush Sanjivani mobile App

The Ministry developed the Ayush Sanjivani mobile App. Through this App, the Ministry documented acceptance, perception, and utilization of Ayush advisories and measures in the prevention of COVID-19 of around 1.35 crore respondents. The analysis of 7.24 lakh public data revealed that 85.1 per cent of the respondents reported using Ayush measures for the prevention of COVID-19, among which 89.8 per cent confirmed to have benefited from the following the Ayush advisory.



Figure 2.6: Ayush Sanjivani mobile App

## 2.3.4 "AYUSH for Immunity" campaign

The MoA launched a campaign, "AYUSH for Immunity", for promoting awareness regarding immunity through Ayush interventions. More than fifty thousand people

<sup>20</sup> National Repository on Ayush COVID-19 clinical and other R&D initiatives, Ayush research Portal. Ministry of Ayush, Government of India. Avaialable at https://ayushportal.nic.in/Covid.aspx.



<sup>18</sup> COVID-19 Related Information, Ministry of Ayush, Government of India. Avaialable at https://www.ayush.gov.in/.

<sup>19</sup> Ayush COVID-19 dashboard, Ministry of Ayush, Government of India. Available at https://health.ncog.gov.in/ayushcovid-dashbaord/#.

participated. Bulletins on "AYUSH for Immunity"<sup>21</sup> were also published and webinars were organized to sensitize Ayush practitioners.

## 2.3.5 Ayush community support helpline

The MoA operationalized a dedicated community support helpline, toll-free number #14443, to provide Ayush-based solutions for the challenges caused by COVID-19. The helpline is operational pan-India from 6 a.m. to 12 midnight, all days of the week. Through the helpline #14443, experts from different streams of Ayush, are available to address disease-related queries of the public. These experts not only provide counselling and feasible remedies to the patients but also guide them about the availability of nearby Ayush facilities. The portal received a total of 1,93,520 calls between May to December 2021.



## 2.4 R&D INITIATIVES

The MoA has undertaken several R&D initiatives to harness the potential of Ayush systems during the COVID-19 pandemic. The Ministry has collaborated with several research organizations to encourage, promote, and advance evidence-based research on Ayush systems. These multi-pronged initiatives, from the very beginning of the pandemic, were aimed at creating public awareness regarding the measures to improve immunity and mitigate the impact of COVID-19.

The Ministry issued a gazette notification dated April 21, 2020, for defining the conditions for undertaking the research on COVID-19 to generate evidence through Ayush systems. It included prophylactic measures, intervention during quarantine, asymptomatic and symptomatic cases of COVID-19, Public Health Research, Survey, and Lab-based Research.<sup>22</sup>

To facilitate and expedite the research activities, an Interdisciplinary Ayush R&D Task Force was constituted, comprising various experts from different domains from national institutes of repute. The Task Force formulated and designed clinical research protocols for conducting prophylactic studies and clinical studies with Ayush interventions as add-on in the treatment of COVID-19,<sup>23</sup> which was made available in the public domain for a larger benefit on May 2, 2020.

<sup>23</sup> Interdisciplinary AYUSH Research & Development Task Force Guidelines for AYUSH Clinical Studies in COVID-19. Ministry of Ayush, Government of India. Avaialable at https://www.ayush.gov.in/docs/clinicalprotocol-guideline.pdf.



<sup>21</sup> AYUSH for Immunity Bulletin. Ministry of Ayush, Government of India. Avaialable at https://main.ayush.gov.in/?s=Ayush+for+immunity.

<sup>22</sup> Gazette notification dated April 21, 2020 regarding undertaking research on COVID-19 to generate evidence through the Ayush systems. Ministry of Ayush, Government of India. Avaialable at https://www.ayush.gov.in/docs/127.pdf.

Initiatives Taken by the Ministry of Ayush for Mitigation of COVID-19\*

## **2.4.1 Research Studies**

As a result of efforts made by MoA, the research councils and national institutes under the MoA undertook 139 clinical, pre-clinical, and epidemiological studies<sup>24</sup>: 70 Ayurveda, 29 Homoeopathy, 13 Siddha, 8 Unani, and 19 Yoga and Naturopathy. These included 22 experimental, 44 prophylactic, 44 therapeutic (stand-alone and add-on treatments), 15 observational, 10 surveys, 2 pharmacopeia standard development studies, and 2 systematic reviews. The clinical studies were monitored and reviewed by the Data and Safety Monitoring Board (DSMB) for monitoring clinical trials and population-based prophylactic studies of Ayush interventions related to COVID-19. The Ministry constituted a Project Management Unit (PMU) to coordinate these studies and to provide technical assistance throughout all phases of the studies conducted at different centres.

During the second wave of the pandemic, it was found through scientific study that AYUSH-64, a polyherbal formulation developed by CCRAS, MoA, is useful in the treatment of asymptomatic, mild, and moderate COVID-19 infection as an adjunct to standard care. The MoA-CSIR collaboration completed a robust multi-centric clinical trial to evaluate the safety and efficacy of AYUSH-64 in managing mild to moderate COVID-19 patients. Similarly, the CCRS which also comes under the MoA conducted clinical trials on Kabasura Kudineer, a Siddha preparation for studying its efficacy in COVID-19 patients. It was also found useful in managing mild to moderate COVID-19 infections.

Further, to facilitate the availability of AYUSH-64, the State licensing authorities were requested to expedite the process of the licensing and approval of applications for the manufacturing of AYUSH-64.<sup>25</sup>

## **2.5 OTHER INITIATIVES**

The Ministry issued an order to prohibit the dissemination of misleading information and advertisement of Ayush-related claims for COVID-19 on April 1, 2020.

MoA extended budgetary support by deploying funds from the National Ayush Mission for procuring AYUSH-64 and Ayuraksha Kits to further strengthen the fight against COVID-19.

Further, the State and UT Governments were requested to consider using AYUSH-64 and Kabasura Kudineer in the treatment of asymptomatic, mild to moderate COVID-19 patients at isolation centres, CCCs, Covid Healthcare Centres, Ayush hospitals and dispensaries, as well as patients in home isolation. A nationwide campaign was launched through 87 clinical units of research councils and national institutes under the MoA to distribute AYUSH-64 and Kabasura Kudineer across the country in order to maximise the benefits of Ayush systems of medicine.

<sup>24</sup> Updated Status of the Research Studies on COVID-19 undertaken by Institutes/Councils under Ministry of AYUSH, Government of India. Available at https://www.ayush.gov.in/docs/Updated%20status%20COVID%20Studies.pdf.

<sup>25</sup> Memorandum to expedite the process of the licensing and approval of applications for the manufacturing of AYUSH-64. https://www.ayush.gov.in/docs/memorandum%2029.4.2021.pdf.



CHAPTER

# **State- and Union Territory-Wise Practices**

# 3.1 ANDAMAN AND NICOBAR ISLANDS

## 3.1.1 Overview and Objectives

The UT has undertaken various initiatives for the mitigation of COVID-19 through Ayurveda, Homoeopathy, and Yoga interventions based on the guidelines issued by the Central Government, with the following objectives:

- Use of Ayush medicines for prophylaxis in high-risk populations and primary contacts.
- Use of Ayurvedic medicines for COVID-19 cases as an adjuvant therapy along with the modern medicines prescribed as per the guidelines.



Figure 3.1: Distribution of Ayush prophylactic medicines and IEC materials amongst community in A&N Islands



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories As per the advisories and guidelines of the MoA, the Ayush wing of the Directorate of Health Services (DHS), Andaman & Nicobar, and the State Ayush society promoted prophylactic and therapeutic Ayush interventions for frontline workers, containment zones, CCCs, and households in the UT.

## 3.1.2 Ayush Human Resource

- Ayush doctors were engaged in multiple tasks including surveillance, contact tracing, testing, telephonic consultations, distribution of medicines, containment of COVID-19, counselling, and vaccinations, under the Directorate of Health Services and the District administration during the pandemic. Ayush paramedics were also engaged in playing multiple roles at airports, ports, bus stands, testing centres, medicine distribution vans, CCCs, as well as at State and District control rooms.
- The surveillance team of Ayush doctors deputed at the airport and those leading the vaccination centres at Port Blair were awarded the Lt. Governor's commendation certificates for their excellent services.

## **3.1.3 Interventions and Initiatives**

- Ayurvedic medicines (Sanshamani Vati, Giloy Churna, Trikatu Churna, Shunthi Churna, Chyavanprash, Ashwagandha Churna, and Anu Taila) were given to 1,18,181 persons and Homoeopathic medicine, Arsenicum album-30, was administered to 23,433 persons as a prophylactic measure to strengthen immunity.
- Ayush medicines recommended by the GoI were procured from Public Sector Undertakings (PSUs) and distributed or administered to asymptomatic, mild, moderate, and even high-risk COVID-19 patients.
- Sanshamani Vati was administered as an add-on therapy to 7,619 Covid cases in the UT.
- Ayush advisories issued by the MoA during the COVID-19 were extensively propagated in the UT through print media, Doordarshan Port Blair, and All India Radio (AIR). The MoA's guidelines for COVID-19 prevention and management were shared with Ayush MOs and Yoga instructors and the same were implemented by the Ayush units as feasible.
- Ayush physicians utilized the Ayush Sanjivani App for reporting the data of prophylactic interventions led during the pandemic.

## 3.1.4 Digital Platform/Telemedicine

• Telemedicine support was provided by Ayush doctors to asymptomatic, mild, moderate, and high-risk COVID-19 patients.



- Ayush advisories for mitigating and managing COVID-19 were propagated through WhatsApp.
- Online webinars were organized for Ayush doctors and paramedics.
- Yoga practices and classes were conducted for the public through virtual platforms.
- Doordarshan, radio talks and television shows were conducted by Ayush doctors for creating awareness.

## 3.1.5 Issues Occurred or Addressed

The available Ayush HR was not sufficient to manage multiple tasks during the pandemic.



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories

# 3.2 ANDHRA PRADESH

#### 3.2.1 Overview and Objectives

The guidelines issued by the MoA, GoI were implemented to the maximum potential of available resources in the State from time-to-time. The initiatives were taken by the State Government mainly with the objectives of COVID-19 prophylaxis and for hastening post-Covid recovery.

## 3.2.2. Ayush Human Resource

- About 339 Ayush officers working in the Government Ayush dispensaries were assigned duties for contact tracing, distribution of medicines, containment, counselling, and clinical management.
- About 400 PG scholars and interns extended their services for surveillance and distribution of prophylactic medications of Ayurveda and Homoeopathy as prescribed by the MoA. These activities were extended in 13 districts to staff and family members of the Andhra Pradesh Secretariat, office of the Director General of Police (DGP), District Collectorates, Magistrate Courts, Andhra Pradesh Medical Services and Infrastructure Development Corporation (APMSIDC) officers and staff of the Police Commissionerate, Vijayawada, Director of Public Health, Endowment Department, and sanitation workers in containment zones, as well as in quarantine and isolation wards.
- Faculties from colleges conducted a series of free medical camps and awareness lectures.

## 3.2.3 Interventions and Initiatives

- The State took various prophylactic measures and distributed the following Ayurveda and Homoeopathy medicines for prophylaxis:
  - a. Arsenicum album: 34,83,750 drachms
  - b. Sanshamani Vati: 5,95,000 doses through 119 dispensaries
  - c. Chyavanprash: 1,07,695 units
  - d. Agastya Haritaki Rasayan: 47,481 units
  - e. Ayush Kwath
- The faculties of the Ayush colleges conducted awareness camps with the assistance of PG scholars and interns. Awareness programmes on Covid prevention and on the potential of Ayush systems (AYU-SAMVAD) were conducted in rural villages, educational institutions, residential schools, and colleges.



- The State has thoroughly propagated the guidelines issued by the MoA on different perspectives of COVID-19, from time-to-time. These guidelines and advisories were utilized to the fullest potential of available resources.
- The State provided special relaxation for manufacturing Ayush Kwath in pursuance of the guidelines issued by the MoA.
- Extensive awareness campaigns were conducted through IEC materials.

## 3.2.4 Digital Platform and Telemedicine

The State participated in the AYU-SAMVAD campaign and lectures were conducted in schools through PowerPoint presentations. The campaign specifically focused on the role of Ayurveda preventive, promotive, therapeutic, and rehabilitative measures in the management of COVID-19.

## 3.2.5 Issues Occurred or Addressed

Ayush-related therapies could not be taken up due to statutory constraints.



# **3.3 ARUNACHAL PRADESH**

## 3.3.1 Overview and Objectives

Ayush prophylactic medicines have been distributed through all Ayush health facilities across the State, along with the advice to follow COVID-19 appropriate behaviour. Various initiatives were taken up by the State with the following objectives:

- Strengthen the immune system through Yoga and Ayush medicines.
- Create awareness regarding COVID-19.
- To use Ayush prophylaxis as per advisory.
- Early detection and the management of asymptomatic and mild cases through Ayush medicine.

## 3.3.2 Ayush Human Resource

A total of 159 Ayush MOs were deployed at quarantine centres, CCCs, Flu, and Acute Respiratory Infection (ARI) clinics, and also engaged in surveillance and contact tracing.

## 3.3.3 Interventions and Initiatives

- Prophylactic interventions were adopted by distributing Ayush medicines such as Pathyadi Kwath, Sanshamani Vati, Ayush Kwath, Ashwagandha Churna, Anu Taila, Behidana, Unnab, Sapistan, and Arsenicum album-30 as per the advisory of the MoA through all Ayush health facilities across the State to the public, State police departments, North-eastern Regional Institute of Science and Technology (NERIST), and the National Institute of Technology (NIT).
- Supportive therapy provided in the form of immunity boosters and medicines like Arsenicum album-30 in addition to modern medicines to treat mild and asymptomatic Covid patients at the CCC, Chimpu, Lekhi.
- Advisories issued by the MoA and State Covid Management Protocol were followed from time-to-time. All Ayush professionals have followed and utilized advisories and practitioners guidelines issued by the Central Government.

## 3.3.4 Digital Platform and Telemedicine

The State took special initiatives for mass campaigning and generating awareness through talk shows on Doordarshan and Radio Jingle through Big FM Channel.

## 3.3.5 Issues Occurred or Addressed

As there are no separate Ayush facilities in the State, exclusive management of cases through the Ayush system could not be executed. Further, as there is no separate Ayush directorate, Ayush HR is engaged along with allopathic HR for the management of COVID-19.



# 3.4 ASSAM

## 3.4.1 Overview and Objectives

The Government of Assam took rapid measures in the control, prevention, and treatment of COVID-19 by following several advisories and guidelines issued by the MoA. Various IEC materials (banners, posters, and leaflets) were prepared for creating awareness on immunity-boosting measures as advised by the MoA and distributed through different health institutions, public places, quarantine centres across the State. The State took up several activities with the following objectives:

- To prevent COVID-19 by adopting self-care guidelines.
- To boost immunity with the help of various immunity-boosting measures.
- Manage COVID-19 through integrated therapies.

## 3.4.2 Ayush Human Resource and Infrastructure

#### 3.4.2.1 Identified Role of Ayush HR

The State participated in the training organized by the MoA for Ayush HR. Ayush HR was utilized in the State for surveillance, contact tracing, distribution of medicines, containment of COVID-19, counselling, and clinical management.

#### 3.4.2.2 Ayush infrastructure

Government Ayurvedic College, Jalukbari, Guwahati was converted into a Covid hospital. The building of the integrated Ayush Hospital at Dudhnoi, Goalpara was utilized as a CCC.

#### 3.4.3 Interventions and Initiatives

- Immune-boosting medicines were procured and distributed to front-line health workers and the public.
- AYUSH-64 was used in mild cases of COVID-19.
- Advisories and self-care guidelines issued by the MoA were translated into the local language and distributed among the public.
- The State followed the guidelines issued by the MoA for Ayush practitioners for the prevention and management of COVID-19.



State- and Union Territory-Wise Practices



Figure 3.2: Distribution of Ayush prophylactic medicine in Assam

## 3.4.4 Digital Platform/Telemedicine/Similar Initiatives

- IEC materials (banners, posters, and leaflets) were prepared for creating awareness on immunity boosting measures as advised by the MoA and were distributed at different health institutions, public places, and quarantine centres across the State.
- State has taken initiatives like the production of radio spot on preventive measures of COVID-19 and audio-visual clips for television commercials on preventive measures of COVID-19.



# 3.5 BIHAR

## 3.5.1 Overview and Objectives

The State put various initiatives in place for prophylaxis against COVID-19 through Ayush intervention and utilization of Ayush HR for multiple tasks to strengthen the fight against COVID-19.

## 3.5.2 Ayush Human Resource

Ayush doctors were deployed in quarantine centres. Ayush health workers distributed Ayush Kadha to the public.

## 3.5.3 Intervention and Initiatives

- Ayush Kadha was supplied in quarantine centres. Ayush Kadha and Joshanda were also distributed to the public through the Ayush medical colleges, PHCs, APHCs, and CHCs. Arsenicum album-30 was distributed to more than 9,000 patients through the Rai Bahadur Tunki Sah (RBTS) Government Homoeopathy Medical College and Hospital, Muzaffarpur.
- For the prevention of COVID-19, various immunity-boosting single and compound drugs were dispensed free of cost. These included: Tiryaq-e-Wabai, Tiryaq-e-Nazla, Sharbat Unnab, Tiryaq-e-Arbah, Arq-e-Ajeeb, Khamera Marwareed, Habb-e-Humma, Sharbat Aijaz, Ayush Kadha, Unnab, Bahedana, Zanjabeel, Elaichi, Tulsi, Giloy, and so on.
- The State utilized the guidelines issued by the MoA and implemented them through Ayush medical colleges and promoted awareness through the centres in districts/block/villages.
- General OPD and IPDs were equipped specially to tackle post-COVID-19 cases as well as prophylaxis with a focus to improve the immunity of patients.

## 3.5.4 Digital Platform/Telemedicine

Patients were given consultation and counselling through telephone calls, teleconsultation and WhatsApp. The State Ayush Society also developed the Ayush Tele-consultation App to accelerate this means of consultation.



# 3.6 CHHATTISGARH

#### 3.6.1 Overview and Objectives

The State has taken various initiatives for the mitigation of COVID-19. The State has utilized Ayush HR for various Covid-related activities and utilized Ayush infrastructure as a CCC and for vaccinations. The State has also distributed Rog Pratirodhak Kadha all over across the State, through Ayush dispensaries.

## 3.6.2 Ayush Human Resource and Infrastructure

#### 3.6.2.1 Identified Role of Ayush HR

- Ayush doctors and pharmacists were deployed for various Covid related duties. Ayush doctors were stationed at check posts, for testing and surveillance. They were posted at CCCs for round-the-clock duties. Ayush doctors were also engaged at home-care call centres.
- Ayush pharmacists were engaged in door-to-door home visits and at CCCs.

#### 3.6.2.2 Ayush Infrastructure

- Govt. Ayurveda College Hospital, Raipur was developed as a 400-bed CCC.
- Ayush wings, polyclinics, and hospitals were used as vaccination centres.

## 3.6.3 Intervention and Initiatives

 Rog Pratirodhak Kadha was distributed through Ayush dispensaries to the public. IEC of GoI protocols was conducted for COVID-19 prophylaxis. Advisories of the GoI were communicated to the public through various media platforms. The State followed the guidelines issued by the GoI for Ayush practitioners for the prevention and management of COVID-19.



# 3.7 DADRA & NAGAR HAVELI AND DAMAN & DIU

#### 3.7.1 Overview and Objectives

The COVID-19 pandemic caused widespread suffering of an unprecedented nature across the globe. The Ayush systems of medicine are time-tested for preventive and promotive healthcare. Ayurvedic and Homoeopathy medicines were used as preventive measures and in post-Covid cases for the restoration of health in the UT as per the feasibility along with Covid Appropriate Behaviour (CAB). The Ayush staff were trained and deployed in various capacities. Digital/social media was effectively used for IEC activities. Various initiatives were taken up by the UT to analyse the preventive role in Ayush systems of medicine vis-à-vis COVID-19 and to assess the effectiveness of Ayush medicines in its management.

## 3.7.2 Ayush Human Resource

Ayush staff was trained and utilized for surveillance, contact tracing, distribution of medicines, and COVID-19-related IEC and Behaviour Change Communication (BCC) vis-à-vis Ayush interventions.

## 3.7.3 Interventions and Initiatives

- Ayush treatment was given to suspected cases in OPDs at Ayush healthcare facilities. Ayurvedic medicines were also used in post-Covid cases.
- The Homoeopathic medicine, Arsenicum album-30 was distributed to the masses. The Ayush-Kadha was propagated and popularized among the masses through various platforms including door-to-door distribution. There was overwhelming acceptance of Ayush immunity boosters.
- The UT undertook BCC and IEC activities related to COVID-19 such as CAB, Ayush Kadha, Homoeopathic interventions, hand-wash techniques, and selfcare measures for boosting immunity.
- Guidelines and advisories issued by the MoA, for the public and physicians were utilized to a large extent.
- The licensing process of Ayush Kadha as a ready-made Ayush formulation in the interest of health promotion of the masses was facilitated for the Ayush Drug Manufacturers, in accordance with the provisions of Drug and Cosmetic Rules, 1945.

## 3.7.4 Digital Platform and Similar Initiatives

 Various digital and social media platforms were used to disseminate awareness on Ayush interventions, especially a video on the preparation, dosage, and health benefits of Ayush Kadha. Similarly, e-flyers were used for sensitizing the masses about self-care and immunity-boosting measures.



State- and Union Territory-Wise Practices

• Preventive and promotive healthcare measures were propagated and popularized among the masses through various digital/social media platforms, and door-to-door IEC.





# 3.8 DELHI

## 3.8.1 Overview and Objectives

The UT has taken various initiatives for the mitigation of COVID-19 through Ayush interventions. Delhi established dedicated Ayush Covid healthcare centres for mild to moderate COVID-19 cases and provided Ayush interventions as adjuvant therapy in some of the Covid hospitals. Delhi also distributed Ayush prophylactic medicines in containment areas, to police personnel, prisoners, and among others. The UT deployed Government Ayush doctors for different Covid-related activities. As the number of COVID-19 positive cases soared worldwide in the second wave, it was contemplated that a holistic approach may lead to better outcomes in terms of decreased infectivity and decreased mortality. To achieve this, in Delhi, Ayush systems were integrated with conventional treatment modalities in the management of COVID-19.

## 3.8.2 Ayush Human Resource and Infrastructure

## 3.8.2.1 HR Training

As a capacity-building exercise, online training on COVID-19 was imparted to about 5000 registered Ayush practitioners and Yoga instructors in Delhi. The training was conducted to further enhance their knowledge to enable them to identify, treat, and report COVID-19 cases from their private clinics.

## 3.8.2.2 Identified Role of Ayush HR

More than 300 trained Government Ayush doctors were deployed in Covid testing, CCC, Covid health centres, quarantine centres as well as Tele-consultation hubs. They were involved in the screening of suspected cases and treating patients with mild symptoms. Other works done by them includes monitoring the distribution of immunity-boosters Ayush medicines, and monitoring and counselling of patients under home isolation. Yoga instructors were posted at Covid facilities.

## 3.8.2.3 Ayush Infrastructure

Delhi converted the following Ayush teaching hospitals into dedicated Covid Healthcare Centres (HCCs):

- Nehru Homoeopathic Medical College and Hospital, Defence Colony
- Ayurveda and Unani Tibbia College and Hospital, Karol Bagh
- Ch. Brahm Prakash Ayurveda Charak Sansthan, Khera Dabar

These hospitals were also designated as Covid testing centres and vaccination centres.



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Figure 3.3: Distribution of Ayush medicine at dedicated Covid HCC in Delhi



Figure 3.4: Conduction of Yoga session in Delhi

## 3.8.3 Intervention and Initiatives

#### 3.8.3.1 Distribution of Preventive Ayush Medicines

House-to-house distribution of Sanshamani Vati and Arsenicum album-30 was systematically rolled out by the CCRAS and Central Council for Research in Homoeopathy (CCRH) in more than 50 containment zones, and in all prisons of Delhi, covering a population of about 1 lakh, as an immunity-boosting measure. Ayush modalities were also advocated proactively to the Delhi police and traffic police personnel, to women and child shelter homes, and to Delhi residents through Ayush MOs and pharmacists posted at Covid Testing Centres (CTCs), quarantine centres, and at Ayush dispensaries. The objective was to provide health education and prevent these areas from being converted into containment zones. These activities were undertaken in collaboration with RWAs and through patients attending dispensaries, covering a population of about 5 lakhs.

## 3.8.3.2 Establishment of Dedicated Covid HCCs

Mild to moderate Covid patients were admitted to the Ayush Covid HCCs. They dispensed Ayush medicines along with standard conventional treatment as required. Three Ayush hospitals were declared as Covid HCCs namely Ayurveda and Unani Tibbia College, Nehru Homoeopathic Medical College, Ch. Brahm Prakash Ayurveda Charak Sansthan, and more than 2500 patients were treated.



## 3.8.3.3 Ayush Treatment at Covid Hospitals

Adjuvant Ayush treatment along with standard conventional care was provided at Lok Nayak Hospital, Rajiv Gandhi Super-speciality Hospital, Satyawadi Raja Harish Chandra Hospital, and Deep Chand Bandhu Hospital for the treatment of Covid patients, with the consent of the patients. The prescribed Ayush interventions were accepted by patients getting standard treatment in Allopathic hospitals.

## 3.8.3.4 Dietary and Self-care Measures

In consonance with the advisory of the MoA, a diet plan incorporating simple dietary modifications, along with Ayush Kwath and Chyavanprash was used at Lok Nayak Hospital, Rajiv Gandhi Super-speciality Hospital, Satyawadi Raja Harish Chandra Hospital, Deep Chand Bandhu Hospital, and at Ayush Covid HCCs.

## 3.8.3.5 Establishment of Ayush Post-Covid clinics

The advisory issued by the MoA for COVID-19 prevention and for treating post-Covid complications were fully utilized. In consonance with the guidelines, more than 175 Ayush post-Covid centres were opened. The advisories issued by the MoA were circulated widely and implemented in all Ayush hospitals as well as Allopathic hospitals.

#### 3.8.3.6 Documentation and Evaluation

The Directorate of Ayush is continuing with the data compilation and their retrospective analysis at the Ayush Covid HCCs for setting the stage for undertaking even more rigorous studies.

#### 3.8.3.7 Research Studies

The UT has taken up the following studies through Ayush interventions:

- Study the role of Chyavanprash in prevention of COVID-19 in healthcare workers and its safety profile: a single-arm pilot study<sup>26</sup>
- Evaluate the efficacy of AYUSH-64 in asymptomatic, mild to moderate COVID-19 patients: an open-labelled single-arm clinical study
- A prospective, interventional, case control study to observe and assess the safety and efficacy of the Unani regimen in preventing the progression of the severity of the disease in hospitalized SARS-COV-2 tested positive, asymptomatic, and mild to moderate symptomatic COVID-19 cases,<sup>27</sup> as managed as per the Gol COVID-19 management guidelines at a COVID-19 management facility

<sup>27</sup> http://ctri.nic.in/Clinicaltrials/showallp.php?mid1=44637&EncHid=&userName=026462 .



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<sup>26</sup> http://ctri.nic.in/Clinicaltrials/showallp.php?mid1=44043&EncHid=&userName=025425.

- A pragmatic, placebo-controlled, parallel group randomised clinical trial to assess the efficacy of Ayush medicine(s) in the prevention of COVID-19 in a high-risk and/or exposed population<sup>28</sup>
- Prophylactic studies were conducted on COVID-19 patients at the Guru Teg Bahadur (GTB) Hospital during the first and second waves of COVID-19
- Retrospective analysis of Ayurvedic dietary modification in COVID-19 patients
- Prakriti analysis of COVID-19 patients: an observational study<sup>29</sup>
- COVID-19: a retrospective, cohort study on clinical characteristics and treatment outcome.
- Clinical characteristics and remedy profiles of patients with COVID-19: a retrospective, cohort study.

**3.8.3.8** Advisory (in Hindi, Urdu, and English) for using the Ayush systems for selfcare and immunity-boosting measures was circulated to the public through social media and to patients visiting Ayush dispensaries. Advice on lifestyle modifications and maintaining general hygiene measures with social distancing was highlighted, especially in containment areas. The advisory along with kits was circulated to home-isolated people with the help ASHA workers. Guidelines issued by the MoA, Gol were followed and circulated widely.

#### 3.8.3.9 Support to Ayush industry

The Ayush industry was fully supported by way of fast-track granting of manufacturing licenses for Ayush Kwath, AYUSH-64 and other Covid-related medicines to the manufacturers as per the provisions of the Drugs and Cosmetic Act and Rules made thereunder.

## 3.8.4 Digital Platform and Telemedicine

Yoga instructors were posted in tele-consultation hubs for managing dietary interventions and for providing Yoga sessions for staff and patients admitted in Covid facilities as well as virtual Yoga training to patients and their families under home isolation at least twice a day.

#### 3.8.5 Issues Occurred or Addressed

The integration of Ayush interventions with the standard Allopathic treatment guidelines was a challenge. This was suitably addressed by meetings with the higher authorities in the Health and Family Welfare department and with the medical superintendents of the hospitals to overcome the pandemic.



 <sup>28</sup> http://ctri.nic.in/Clinicaltrials/pdf\_generate.php?trialid=48199&EncHid=&modid=&compid=%27,%2748199det%27
29 https://pubmed.ncbi.nlm.nih.gov/33609346/

# 3.9 GOA

## 3.9.1 Overview and Objectives

In the wake of the COVID-19 pandemic, the State has played a proactive role in the mitigation and management of COVID-19. As a preventive measure, Ayurvedic and Homoeopathic prophylactic medicines were procured at the earliest and distributed to the public along with the advisory released at the time, by the MoA in the State. Ayush doctors in the health services department were assigned various tasks.

The post-Covid Ayush clinics were made functional within a short duration for the benefit of patients in recovery. The regular OPDs also catered to the patients for counselling during these difficult times to relieve their mental stress, anxiety, and fear. The collaborative initiative was taken by the Goa Ayurvedic Medical Association and OPD Cell, health services to provide tele-consultation to home-quarantined patients for Ayush-related Covid management. The State Government initiated the contractual appointment of Ayush doctors specifically for Covid-related duties at the various Covid facilities. The State took up various activities with the following objectives:

- Distribution of Ayurvedic and Homoeopathic prophylactic medicines
- Management of mild to moderate Covid patients through Ayush interventions as adjuvant therapy
- Clinical management of post-Covid patients through Ayush interventions
- Counselling of patients for the management of mental stress and anxiety related to Covid
- Tele-consultation of patients in home quarantine

## 3.9.2 Ayush Human Resource

All Ayush doctors (Ayurvedic/Homoeopathic physicians, RBSK doctors, Ayush MOs, Ayush consultants under NHM, Ayush doctors under NAM) were deployed at CCCs, shelter homes, isolation wards, and Covid hospitals. Ayush doctors were in-charge of CCCs and also monitored home-quarantine patients. Ayush doctors and staff were deputed and assigned the following duties:

- 1. Examination of patients in the Flu/Covid OPD
- 2. Swab collection at centres
- 3. Counselling of Covid patients
- 4. Monitoring and reporting of Covid patients in home isolation
- 5. Distribution of home kits to Covid patients
- 6. Distribution of Ayush prophylaxis medicines
- 7. Tele-consultation for patients in home isolation
- 8. Conducting Yoga sessions at CCCs



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- 9. Supportive Ayush treatment along with standard protocol at CCCs
- 10. Conduction of post-Covid (Ayush) clinics regularly at all the health centres

The Directorate of Health Services contracted around 24 Ayush medical officers for Covid duties at CCCs.

## 3.9.3 Interventions and Initiatives

- The State procured and distributed Ayurvedic and Homoeopathic medicines for prophylactic and mild symptomatic patients as per the guidelines of the MoA from NAM funds.
- Ayush prophylactic medicines, Chyavanprash, Sanshamani Vati, and the Homoeopathic prophylactic medicine Arsenicum album-30 were distributed to Govt. offices, non-government organizations (NGOs) as well as the public through volunteers, NGOs, Village Panchayat members, Municipal Councillors, and Ayush staff.
- Ayush medicines were provided to CCCs, shelter homes, and home-quarantine patients.



Figure 3.5: Distribution of Ayush prophylactic medicines amongst Community in Goa



• The State took the initiative of starting a post-COVID-19 Clinic (Ayush) at every Ayush Dispensary co-located at PHC, CHC, UHC, SDH, and DH in the State.



Figure 3.6: Ayush Post COVID-19 clinics in Goa

- A common post-COVID-19 Ayush management protocol adhering to the norms of the MoA, GoI was followed across the State in prescribing advice regarding diet, lifestyle, and yoga interventions. Medicines for any debility or symptoms persisting post-recovery were also prescribed, to patients on a case-to-case basis.
- The advisories and self-care guidelines released by the MoA were circulated to the public and guidelines released for the prevention and management of COVID-19 were followed by Ayush practitioners.
- Ayush Cell, DHS printed Ayurveda advisory and Homoeopathic leaflets in English, Marathi and Konkani were distributed to around 3,50,000 families, door-to-door at all villages in Goa for public awareness regarding immunityboosting measures.



- To combat the ill effects caused by the pandemic, preventive healthcare through proper diet and lifestyle was emphasized while conducting annual calendar programmes and celebrations, such as Ayurveda Day, International Day of Yoga, Poshan Maah, Homoeopathy Day, and Naturopathy Day.
- At every function, the public was made aware of a healthier lifestyle, through the Ayush way of life. Immunity-boosting medicines were also distributed. IEC materials with general guidelines for overall health were widely disseminated too.
- Regular awareness activities were conducted under the AYU-SAMVAD campaign of the MoA. Through these activities, awareness towards a good diet and healthier lifestyle for the prevention of diseases and general wellness was promoted in the society. These include camps, talks, interactive sessions, competitions, and workshops.
- Active Yoga sessions were conducted for the public for general health and to improve immunity. Along with this, yoga OPDs was also established to provide specific postural and breathing advice for specific conditions.
- Timely supply of Ayurvedic and Homoeopathic prophylactic medicines was ensured by the State through Goa Antibiotics Pharmaceutical Ltd. (GAPL), HLL Life Care Ltd. and The Punjab Homoeo Pharmacy, respectively.

## 3.9.4 Digital Platform and Telemedicine

Consultations and follow-ups through telemedicine for patients in home isolation were provided, in collaboration with the State Ayurvedic association. The guidelines released by the MoA were adhered to during tele-consultation by the State.

Yoga videos were released on the occasion of the Seventh International Day of Yoga, to propagate healthy living through Yoga practice.

Social media presence was established and activated through a dedicated YouTube channel and a Facebook account for the dissemination of information.

## 3.9.5 Issues Occurred or Addressed

• Re-appropriation of NAM funds for the urgent procurement of Ayurvedic and Homoeopathic prophylactic medicines was done.



# 3.10 GUJARAT

## 3.10.1 Overview and Objectives

Since the initial wave of the pandemic, Ayush has worked relentlessly in the State in terms of HR and infrastructure utilization, research activities, mass campaigning for COVID-19-appropriate behaviour, and dissemination of prophylactic and therapeutic Ayush measures. Ayush, Gujarat has been a part of the Health Department Covid response team of the State. It has been observed that Ayush prophylactic measures are well accepted by the public. Various initiatives were taken up by the State with the following objectives:

- Provide excellent health with the prophylactic intervention of Ayush during the COVID-19 pandemic.
- Integrate Ayush add-on protocol with the established treatment guidelines of contemporary medicine for the welfare of patients.

## 3.10.2 Ayush Human Resource and Infrastructure

#### 3.10.2.1 Identified Role of Ayush HR

It was ensured that the entire Ayush workforce should be trained with all COVID-19related aspects and different guidelines published by the MoA. A nodal officer was appointed to conduct training in each institute of Ayush in Gujarat. Maximum Ayush HR in the State completed the iGOT training modules for COVID-19.

To address the HR shortage during the COVID-19 outbreaks, the Ayush workforce including medical officers, academicians, para-medical staff, and students were deployed at various levels of the healthcare system like in civil hospitals, CCC, DCH, DCHC, Tele-counselling centres, Dhanvantari and Sanjivani Rath in different capacities such as surveillance, contact tracing, distribution of medicines, counselling, and clinical management. The Ayush workforce did a tremendous job in ensuring quality healthcare services for everyone during difficult times.



Figure 3.7: Virtual Covid related training of Ayush Staff in Gujarat



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Figure 3.8: Ayush staff serving at CCC in Gujarat

## 3.10.2.2. Ayush infrastructure

- The State Government converted the State Model Ayurveda Hospital, Kolavada into a dedicated CHC hospital by installing a pressure swing adsorption oxygen plant to cater to 85 patients in the initial phase of the COVID-19 pandemic. This reduced the burden on the GMERS Civil Hospital, Gandhinagar. This DCHC served with maximum utilization in the second wave of COVID-19 as well.
- Eleven Ayush hospitals were converted into CCCs, where 496 beds were made available with 60 Ayush medical officers on duty.
- For infrastructural support during the peak of COVID-19, Ayush hospitals Smt. M.A. Hospital, Asarava, Ahmedabad, and Govt. Homoeopathy Hospital, Dethali, were also converted to DCHCs following all the related guidelines.

## 3.10.3 Interventions and Initiatives

The Government of Gujarat did significant work in providing both prophylactic and therapeutic treatment. To combat the spread of COVID-19, the Ayush Department, Government of Gujarat adopted a proactive approach. Ayush Gujarat started disseminating prophylactic measures with the input of eminent experts of Ayurveda in which one decoction that contains Dashamula Kwatha, Pathyadi Kwatha, and Trikatu Churna was distributed all over Gujarat other than those in the national prophylactic guidelines.

#### 3.10.3.1 Prophylactic Intervention

The State initiated the distribution of preventive medicines from March 6, 2020, during the first wave and this was continued (as noted on October 12, 2021). The distribution data are detailed in Table 1.



Medicines	Total distributed doses (in crores)	
Amrut Peya Ukala (Dashamula Kwatha 20 ml, Pathyadi Kwatha 20 ml, Trikatu Churna 2 gm), one day prepared dose	13.53	
Sanshamani Vati (7-day dose)	1.18	
Arsenicumalbum-30 (4-day dose)	7.06	

Table 3.1: Details of prophylactic medicine distributed in Gujarat

Source: State Ayush, Gujarat

The distribution of preventive medicine was done by the cumulative efforts of Ayush doctors, NGOs, volunteers, and field-level social leaders.

## 3.10.3.2 Ayush intervention at Quarantine Centres

Ayush interventions were provided at quarantine centres from April 4, 2020, till October 31, 2020. Total beneficiaries of Ayush intervention in this period were 34,634 including 19,686 Ayurveda and 14,948 Homoeopathy beneficiaries.



Figure 3.9: Distribution of Ayush medicines in Gujarat

## 3.10.3.3 Therapeutic Intervention

Ayush was also integrated with the mainstream healthcare system. Gujarat is one of the pioneer State allowing add-on Ayush treatments in mild to moderate Covid cases at DCH.

During the period of April 24, 2020, to June 30, 2021, total of 25,965 beneficiaries received Ayurveda interventions and 7,164 received Homoeopathy intervention through 21 DCHC and DCHs. 16,330 patients were treated at CCCs with Ayurvedic and/or Homoeopathic medicines.



The following add-on protocol was developed for positive cases of COVID-19 in CCCs, DCHCs, and DCHs by the State:

- a. Dashamula Kwatha 20 ml, Pathyadi Kwatha 20 ml, Trikatu Churna 2 gm.
- b. Sanshamani Vati 1 gm; twice a day
- c. AYUSH-64 500 mg; twice a day
- d. Yastimadhu Ghanvati 3 grams a day in six divided doses

## 3.10.3.4 Use of AYUSH-64 in Covid treatment

Since the first wave of COVID-19, AYUSH-64 was included in the treatment guidelines of asymptomatic and, mild to moderate COVID-19 patients in addition to the standard treatment protocol.

- a. From April 2020 to June 7, 2021, 16,317 patients were treated at various CCCs.
- b. Similarly, 25,730 patients were treated at DCHCs and hospitals.
- c. AYUSH-64 was integrated as part of the treatment protocol in 15,312 Community CCCs under the campaign, "My Village, Corona Free Village".
- d. The Directorate of Ayush, Gujarat State, distributed approximately 10 lakh AYUSH-64 tablets. This medicine was administered at all Community CCCs across 33 districts and 8 municipal corporations of the State. Ayush Gujarat also placed an order for one crore tablets to boost up the distribution in the near future.
- e. The Government of Gujarat undertook IEC activities to sensitize Government and private health sector professionals and institutions on the usage of AYUSH-64.

#### 3.10.3.5 Research Study

The Directorate of Ayush, Health, and Family Welfare Department, Gujarat conducted a research study to evaluate the efficacy of Ayurveda interventions at a 1200-bedded civil hospital. The research study entitled, "Evaluation of Efficacy of an Ayurveda Management as a Supportive Therapy in SARS-CoV-2 Mild Positive patients: An Open-Labelled Randomized Active Control Trial"<sup>30</sup> was sponsored by the Director, Ayush, Gandhinagar.

## 3.10.3.6 Other initiatives

• All students, academicians, medical officers, and the entire Ayush workforce were encouraged to download the Ayush Sanjivani App and to furnish data through a Covid-related questionnaire in the App. They were also asked to amplify the usage of the app.

<sup>30</sup> http://www.ctri.nic.in/Clinicaltrials/pdf\_generate.php?trialid=45252&EncHid=&modid=&compid=%27,%2745252det%27.

- The guidelines published by the MoA have been translated and published in the local regional language for the public.
- The State has followed national guidelines for Ayush practitioners for the prevention and management of COVID-19. Ayush Gujarat has adopted and utilized all the guidelines and advisories issued by the MoA, in combating the pandemic through its various prophylactic and therapeutic interventions.

## 3.10.4 Digital Platform, Telemedicine, and Similar Initiatives

- **Telephonic Guidance through Helpline number #104:** Information on various guidelines published by the MoA for COVID-19, along with its regional translated version, location of 568 Ayurveda dispensaries, 39 Ayurveda hospitals, and 272 Homoeopathy dispensaries from where people could get prophylactic as well as therapeutic medicines and guidance, were made available to the public through telephone helpline no. #104.
- All the guidelines developed by the MoA were disseminated from the grassroots level with the help of audio and video clips and wider dissemination was done through various radio stations, television channels, and social media platforms. All these promoted awareness of the potential of Ayush interventions to improve immunity, especially during the pandemic and also about the initiatives taken by the Ayush Department, Gujarat.
- As a part of the community sensitization for Ayush prophylactic, preventive, and therapeutic measures as add-on protocol for COVID-19 and Covidappropriate behaviour, "A COVID-19-related Ayush Health Lecture Series" was telecasted from May 14 to October 12, 2021, as a daily live programme on the Vande Gujarat Channel-2. A total of 108 episodes on different streams and subjects of Ayush were telecasted and made available on YouTube. This series, in regional language, without jargon, was planned for creating awareness of Ayush practices and its relevance during the COVID-19 pandemic for the public, ASHA workers, Anganwadi workers, and Auxiliary Nurse Midwives (ANM) or female health workers. With this series, the Ayush department was able to disseminate different Ayush guidelines, healthy diets, and lifestyle modifications required during COVID-19. One of the key factors of this series was that it offered a platform for the audience to ask any questions regarding the disease, during the live programme through the toll-free number. Subjects relevant to COVID-19 were covered, including various Ayush guidelines, immunity-building techniques, diets, seasonal regimen, post-Covid rehabilitation through Ayush, Mucormycosis, post-Covid mental care, the role of yoga practices in Covid, Ayurvedic dietetics, the concept of the kitchen garden, terrace garden, nutri-garden, the role of Panchakarma procedures, nutrition and Ayurveda, and so on. More than 100 resource faculties from well-known academicians to renowned private practitioners were invited from different streams of Ayush to share their expertise. For creating further continuous awareness in society, these lectures were also made available on



YouTube. This programme got an overwhelming response from the audience in terms of live question-answer sessions large viewership.

## **3.10.5 Issues Occurred or Addressed**

Covid-patients were admitted under the allopathic system and Ayush interventions were only permitted as an add-on therapy, which could not establish the full potential of the different streams of Ayush in COVID-19 patients. Furthermore, since Ayush HR was deployed in providing quality healthcare services in the Covid dedicated centres, at some places the Ayush healthcare service delivery was affected.



# 3.11 HARYANA

## 3.11.1 Overview and Objectives

The Haryana State Government took immediate action to overcome the situation caused by the COVID-19 pandemic and implemented guidelines and advisories issued by the MoA, from time-to-time. The State procured and distributed Ayush immunity-boosting medicines, through district Ayurveda medical officers to police personnel, sanitation workers, Panchayati Raj Personnel, DC offices, senior citizens at home, and at old-age homes. The State launched Ayush Kwath with the scheme name "Jan Aarogya Kavach". An MoU was signed between Shaheed Hasan Khan Mewati Govt Medical College, Nalhar, Nuh and Shri Krishna Ayush University, Kurukshetra (Ayush Department) to start Ayurvedic treatment as an add-on therapy to the standard treatment protocol of COVID-19 patients, which was later implemented in other medical colleges and hospitals. During COVID-19, Ayush doctors, pharmacists, and students were trained in all aspects.

To work closely with the State health department, 206 Ayush volunteers were appointed. They also performed Covid duty at medical mobile units, control rooms, quarantine and isolation centres, surveillance, and OPDs. Various initiatives were taken by the State with the following objectives:

- To overcome the COVID-19 pandemic situation
- To create awareness in the public about immunity-boosting through home remedies and herbal medicinal plants

## 3.11.2 Ayush Human Resource and Infrastructure:

#### 3.11.2.1 Identified Role of Ayush HR

As per the advisory or guidelines issued by the MoA, 834 Ayush doctors, 206 Ayush volunteers, 647 pharmacists, and 1,771 students got training in all aspects. Ayush doctors and paramedic staff were deputed to carry out fieldwork duties at sample collection centres, isolation centres, containment zones and for surveillance of quarantine patients, distribution of Ayush immunity-boosting medicines, counselling and clinical management, to extend maximum cooperation, as per the requirement of the concerned civil surgeons.

#### 3.11.2.2 Ayush Infrastructure

Baba Kheta Nath Govt. Ayurvedic College and Hospital, Patikara was converted as a CCC to implement the protocol as prepared by Shri Krishna Ayush University, Kurukshetra and approved by CCRAS, New Delhi for management of COVID-19 patients.

#### **3.11.3 Interventions and Initiatives**

 According to the population and the number of cases of COVID-19, the Government of Haryana procured immunity-boosting medicines as per the



advisory of the MoA, GoI, New Delhi, and the same were distributed to Covid patients and people residing in containment zones (approximately 12.06 lakhs), Police personnel, sanitation workers, Panchayati Raj personnel, DC offices, senior citizens at home and old-age homes. Ayurvedic immunity-boosting medicines were distributed to 26.72 lakh people of Haryana.

- Ayurvedic treatment protocols were prepared by Shri Krishna Govt. Ayurvedic College and Hospital, Kurukshetra, and 5105 patients were treated with addon Ayurvedic treatment along with the standard treatment. The public took interest and showed faith in the Ayush system of medicines during the pandemic.
- The Government of Haryana launched Ayush Kwath as per the Ministry guidelines with a scheme, "Jan Aarogya Kavach".
- Guidelines and advisories issued by the MoA were circulated for the prevention and management of COVID-19. Haryana State fully utilized and implemented these guidelines and advisories
- The State Licensing Authority, Haryana issued licenses to manufacturers of sanitizers and Ayurvedic immunity-boosting medicines.
- IEC activities, such as the distribution of pamphlets (in Hindi and English) on Ayurvedic/Homoeopathic immunity-boosting measures, were carried out in each district. Wide publicity through loudspeakers was also done by Private vehicles/ Municipality vehicles on Ayurveda/ Homoeopathic Immunity Boosting measures.

## 3.11.4 Digital Platform and Telemedicine

Telemedicine facility was established at a Call Centre with Tollfree number 1075, of the health department for guidance related to Ayush medicines and consultation. Doctors were deputed on a rotational basis from 8 a.m. to 10 p.m.



# 3.12 HIMACHAL PRADESH

#### 3.12.1 Overview

The Ayush Department, Government of Himachal Pradesh has extended full support for strengthening the fight against COVID-19 in the State. The State Executive Committee of the HP State Disaster Management Authority headed by the Chief Secretary, HP and constituted by the Government of HP under Section 20 of the Disaster Management Act, 2005 notified Emergency Support Functions (ESF) and Additional ESFs defining the roles and responsibilities of various departments. For ESFs namely Public Health and Medical Preparedness (COVID-19), Ayush Department was designated as the secondary agency and mandated to perform the same functions as the primary agency that is the Health and Family Welfare (HFW) Department. The Ayush Department provided HR and other resources to the primary agency as per their requirements. A State-level orientation and training of trainers programme to strengthen the capacity and skill of the healthcare workforce was conducted to effectively tackle the threat of the Corona Virus Disease (COVID-19). Ayush doctors were deployed to perform multifarious duties as per the needs of the different districts to combat COVID-19. The Ayush Department constantly made the public aware about personal hygiene, the importance and technique of hand washing, the precautions to be taken while sneezing and coughing, and the symptoms of COVID-19, through the display of posters, and handbills distributed to the public as well as patients visiting the Ayurvedic health institutions. The department also contributed effectively in implementing social distancing. Widespread popularization of the Aarogya Setu App was done effectively in the State. The State also launched the Ayurveda Kadha on May 1, 2020, as an immunity booster and distributed it to frontline Covid warriors. Similarly, the Homoeopathic immunity booster Arsenicum album-30 was also distributed to the sanitary workers of the urban local body. The State also launched the Ayush Ghar Dwar programme under the theme, "Happy Healthy Swarnim Himachal".

## 3.12.2 Ayush Human Resource and Infrastructure

#### 3.12.2.1 Identified Role of Ayush HR

All the Ayush health institutions were functional and provided outdoor consultation to the general public. Ayush health services were declared essential by all the deputy commissioners of the State and all departmental institutions were open and functional during the curfew or lockdown. The Ayush department notified the QRTs at the State level as well as at all districts, subdivisions, regional Ayurvedic hospitals, educational institutions, the Rajiv Gandhi Government Post Graduate Ayurvedic College (RGGPGAC), Paprola Ayurvedic College and College of Ayurvedic pharmaceutical sciences (COAPS), Jogindernagar, Research Institute of Indian Systems of Medicine (ISM), three Govt. Ayurvedic Pharmacies, and the Drug Testing Laboratory at Jogindernagar. The details of these QRTs were displayed on the departmental website along with the names and contact numbers. Besides this, the following duties were performed by Ayush MOs and support staff in all the districts of the State:



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories

- Manning of interstate and inter-district border check-posts established for medical screening of passengers and/or travellers with reference to COVID-19.
- b. Manning of COVID-19 call centres established for providing guidance and medical advice to callers seeking help regarding queries on Covid.
- c. Monitoring of COVID-19 suspected cases under home and institutional quarantine.
- d. Paying home visits to patients as per requisitions received from the District Surveillance Officer and/or the chief medical officer (CMO).
- e. Yoga sessions were conducted by the Assistant Medical Officers (AMOs) for the destitute kept in shelters or homes during the lockdown period, keeping in mind the social distancing guidelines.
- f. In some districts, mobile clinic services by the Ayush MO and pharmacists were provided.

The several activities carried out by Ayush staff have been detailed in Table 2.

Sr. No.	Activities	Nature of duties and cumulative deployment of Ayush HR as of April 20, 2021			
		Number of Ayush doctors	Number of Ayush pharmacists	ANM and Staff nurse/ students/others	Total
1	Awareness relating to COVID-19 protection measures	869	979	286	2134
2	For quarantine and isolation	42	23	10	75
3	For screening at check post	295	247	11	553
4	Nodal Officer (surveillance)	26	2	0	28
5	At Covid Control Room	17	4	0	21
6	For Yoga Sessions in DCCC/ DCH or any other place	59	3	4	66
7	For active case finding	218	210	9	437
8	Others (any innovative practice)	49	30	2	81
9	Members of Rapid Response Teams (RRTs)	34	10	0	44
10	For sample collection	35	4	0	39
11	For DCC (cumulative)	194	279	169	642
12	Ayush staff in COVID-19 vaccination duty	16	6	17	39
13	Training	396	461	328	1185
Total		2250	2258	836	5344

**Table 3.2:** Nature of duties and cumulative deployment of Ayush HR asof April 20, 2021, in Himachal Pradesh

Source: State Ayush, Himachal Pradesh

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## 3.12.2.2 Ayush infrastructure

Ayurvedic hospitals were prepared for providing quarantine and isolation facilities in case of any emergent need and beds were provisioned for the quarantine and isolation of COVID-19 suspected cases and patients.

# 3.12.3 Interventions and Initiatives

- The State launched the Ayurveda Kadha on May 1, 2020, as an immunity booster and the Ayush department distributed 7,80,084 packets of Kadha to the frontline Covid warriors. Homoeopathic medicine Arsenicum album-30 was also distributed to the sanitary workers of the urban local bodies.
- The State Government launched the Ayush Ghar Dwar Programme in the State in convergence with the Art of Living organization of the State. Virtual Yoga sessions were conducted. Through this programme, 3,42,543 individuals were benefited.
- In view of the need for diligent and meticulous surveillance of Covid suspected cases and to propagate the message of social distancing among the masses, an "Active Case Finding Campaign" was launched by the Department of H&FW in which Ayush MOs, Ayurvedic pharmacists and BAMS graduates working as MOs in Rashtriya Bal Swasthya Karyakaram (RBSK) were made team leaders to conduct door-to-door visits for proactive and intensive surveillance. These activities were seen as the backbone of the strategy to deal with Covid.
- During the period of COVID-19, the department issued approval for the manufacturing of sanitizers, hand-wash, and Ayush Kwath immunity boosters to 60 firms; and 382 formulations were approved for the same.
- Ayush Ghar Dwar, Jan Andolan, and AYU-SAMVAD were fully implemented in the State.

## 3.12.4 Digital Platform and Telemedicine

The State provided online training to Ayurvedic MOs, pharmacists, staff nurses, ANMs, and other staff on COVID-19 protection measures, awareness, and prevention measures through virtual meetings and on the Facebook page of Ayush Vibhag.



# 3.13 JAMMU AND KASHMIR

#### 3.13.1 Overview and Objectives

Jammu and Kashmir, in the laps of the Himalayas, is mostly hilly and interspersed with valleys that are often difficult to reach, with 72 % of its population living in rural areas. During the COVID-19 pandemic and different phases of the lockdown, access to healthcare services was further hampered due to travel restrictions, unavailability of transportation, and shortage in the deputation of healthcare staff and workers in COVID-19 hotspots. Equitable public health care delivery emerged as one of the major public health delivery challenges, and the Directorate of Ayush, J&K took the lead in popularizing the health promotion and disease prevention principles of Traditional Systems of Medicine. Directorate of Ayush J&K provided the much-demanded Ayush products and medicines prescribed by MoA, Gol. Directorate of Ayush, J&K reached more than 44 lakhs people through its Public Health Outreach Programs and Peripheral OPDs and awareness camps, where COVID-19 Ayush essentials were distributed among the vulnerable population, COVID-19 affected isolated and convalescents, and also for post-COVID-19 debility management. Using its wide network of Ayush Health and Wellness Centres, Ayush Dispensaries, Co-located Ayush Units in CHCs/ DH/ GMCs, Ayush J&K was able to reach marginalized population groups, front-line COVID-19 workers, and healthcare workers. Directorate of Ayush, J&K also used digital and social media platforms to promote self-health care models, by popularizing non-pharmacological and lifestyle modifications like Yoga, Pranayama, Dincharya, Ritucharya, diet, and nutrition for prevention and management of COVID-19 disorders. To adequately re-orient and equip the Ayush workforce with the principles and practices of Ayush and its role in the prevention and management of COVID-19, digital platforms were used to give real time training. An upsurge in demand for Ayush remedies and products among the general masses, increased OPD attendance in Ayush institutions, and demand for more mass promotion activities from social organizations and Government departments and organizations. The Directorate of Ayush played a critical role in the mitigation and management of COVID-19, especially in community settings with respect to health promotion and, disease prevention. Therefore, district administrations are giving an even more inclusive role to Ayush in terms of manning and managing CCCs, isolation facilities, and guarantine centres. The UT has taken various initiatives with the following objectives:

- To complement and supplement the efforts of the UT and district administration in the containment of the disease, through health promotion and preventive measures as advocated by MoA, Gol.
- To popularize and promote "self-health care", through traditional health principles and practices like Yoga-Pranayama, use of home and Ayush remedies for prevention, prophylaxis, and management of a spectrum of illnesses associated with COVID-19 and post-COVID-19 debility management (health restoration).



- To make Ayush immunity boosters accessible to the public, healthcare workers, other frontline workers, and other vulnerable groups through the outreach program.
- To effectively use various media for promotion and propagation of Ayush i.e., organizational network, inter-departmental organization convergence, social media, NGOs, and digital platforms for awareness generation, and distribution of Ayush COVID-19 essentials.

# 3.13.2 Ayush Human Resource and Infrastructure

#### 3.13.2.1 Identified Role of Ayush HR

• On an average 55 per cent of the Ayush workforce, from district headquarters was deputed for COVID-19 mitigation efforts including surveillance, testing, contact tracing, and distribution of medicines as well as on roaster duties in CCCs.



Figure 3.10: Ayush staff at Jammu railway station for surveillance



Figure 3.11: Ayush staff involved in testing and surveillance in J&K



Figure 3.12: Ayush doctors on round at District Hospital Udhampur CCC in J&K



#### 3.13.2.2 Ayush Infrastructure

- Government Ayurvedic Hospital, Jammu was converted into a quarantine centre for COVID-19 positive patients.
- COVID-19 vaccination was provided from the Ayush HWCs of District Reasi, Shopian, Bandipora and Anantnag.

#### 3.13.3 Interventions and Initiatives

- Ayush Immunity Booster Kits were designed comprising various classical preparations like Chyavanprash, Anu Taila, Khameer-e-Gaozaban, Sharbet-e-Unnab, Sanshamani Vati, Amalaki Churna, Tulsi Churna, and so on. A complete Ayush non-plastic packaging was used for distributing the COVID-19 Ayush essentials, with an information leaflet for the users.
- With a network of 651 Ayush Institutions comprising stand-alone and colocated facilities in the year 2020-21, 15,20,778 beneficiaries availed the Ayush medicines. In the current year, up to January 7, 2022, the tally is 29,26,393.
   Almost one-third of the population of J&K has been covered by the Directorate of Ayush, J&K over and above the regular out-patient services.
- **Distribution of Prophylactic Medicine**: 48 Ayurvedic Preparations, 12 Unani medicines and Arsenicum album, a Homoeopathic remedy, were distributed. These medicines were distributed through door-to-door distributions, with the help of ASHA and healthcare workers. Many Ayush preparations became household names.
- Yoga and pranayama classes were conducted through social media platforms for COVID-19 asymptomatic patients and people suffering from mild to moderate symptoms. Directorate of Ayush, J&K also initiated special Yoga classes for post-Covid debility.
- Aarogya Sampark, Public Health Outreach Programme: In order to reach at least 25 per cent of the J&K population, Directorate of Ayush, J&K rolled out an extensive Public Health Outreach Programme with two main objectives:
  - i. Public awareness about the role of Ayush in Health Promotion, COVID-19 prevention and management
  - ii. Distribution of immunity boosters among the public, healthcare workers, and other front-line workers like police personnel, military and paramilitary forces, functionaries of other line departments, Integrated Child Development Services (ICDS) functionaries, and NGOs and social organizations.

#### The strategy adopted for the programme:

a. **Weekly Outreach Camp**: It involves at least one out-reach camp per Ayush Institution including Ayush Dispensary, and AHWCs co-located Ayush facilities.

- Inter-sectoral Convergence: To converge with other line departments, b. banks, NGOs and social organizations for out-reach activities and Ayush immunity booster distribution. More than 1,134 inter-sectoral out-reach programmes were conducted with other line departments, such as agriculture, education, ICDS, industry and commerce, police department, municipal councils and committees, Social Welfare, Jal-shakti, Border Security Force (BSF), CMOs, Government medical colleges, and many other departments including NGOs. The highlight of the inter-sectoral convergence is outreach programmes in slums and programmes for jail inmates. 2.89 lakh units of Ayush Kwath and 1.92 lakh Ayush-64 tablets were distributed through outreach programmes.
- Block Level Ayush Teams: In order to effectively implement the Ayush C. out-reach programme, block-level Ayush teams were constituted to liaise with Panchayati Raj Institutions (PRIs), line departments, and NGOs to maximize reach.
- d. Uninterrupted supply chain of Ayush medicines for distribution in the periphery.
- Routine OPDs and peripheral OPDs, so that people could receive e. healthcare service delivery at their doorstep during the lockdown.
- Directorate of Avush. J&K translated the advisories and self-care guidelines. issued by the MoA, in Dogri and Kashmiri and published them in newspapers for wider circulation.
- In order to fully equip the Ayush workforce on the role of Ayush principles and practices of Ayush in the prevention and management of COVID-19 illness, the Ayu-samvad guidelines of MoA, Gol have been fully implemented.



Figure 3.13: Outreach Programmes in Pulwama Figure 3.14: Distribution of Ayush medicines in District



Kathua District





Figure 3.15: Outreach Programmes in collaboration with Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST)

# 3.13.4 Digital Platform and Telemedicine

- Aarogya Sampark Dashboard: A daily dashboard has been created by the Directorate of Ayush J&K, which is to be updated by 4:00 pm, daily with respect to the number of beneficiaries and outreach activities conducted by each district, for real-time tracking of COVID-19 related efforts of Ayush J&K.
- District Administration Udhampur and Samba conducted free yoga classes for COVID-19 patients through digital platforms.
- Directorate of Ayush J&K used digital platforms for the training of the Ayush workers and for the field outreach bureau of Jammu and Kashmir; conducted 56 such sessions for creating mass awareness among healthcare workers, ASHAs, teachers, and social activists.

#### 3.13.5 Issues Occurred or Addressed

- A major Ayush service delivery challenge was to maintain the continuous flow of services for the public even during the lockdown, when primary healthcare services were restricted due to logistical issues. Ayush Institutions were supplied with a sufficient amount of Ayush medicines to take care of the routine health needs of the public. The presence of Ayush medical officers and healthcare workers was ensured to make the process of comprehensive healthcare a continuous phenomenon.
- Ayush Health and Wellness Centre Operationalization: During the period of the COVID-19 pandemic, the Directorate of Ayush operationalized 194 Ayush health and wellness centres, and ensured their infrastructural upgradation. More than 15 diagnostic tests are being conducted in the Ayush Health and Wellness Centres. During the lockdown, the Directorate of Ayush, J&K raised AHWCs as centres of holistic healthcare through established principles and practices of Ayush.



# **3.14 JHARKHAND**

# 3.14.1 Overview and Objectives:

In Jharkhand, the first case of COVID-19 was confirmed on March 31, 2020. There are 650 Ayush doctors under the Department of Health, Medical Education and Family Welfare in the State. Ayush doctors were virtually trained for the prevention and management of COVID-19 and accordingly, their services were utilized. Medicines like Arsenicum Album-30, Ayush Kwath & AYUSH-64 were distributed to health workers, in quarantine centres and various offices as well as to the public through Home visits. People were sensitized about Ayush principles for the prevention of COVID-19 through advertisements and through the distribution of IEC materials. The State has taken several initiatives with the following objectives:

- To prevent COVID-19
- To improve the immunity of the public
- To manage asymptomatic and mild patients of COVID-19
- To manage post-Covid patients

# 3.14.2 Ayush Human Resource and Infrastructure

#### 3.14.2.1 Identified Role of Ayush HR

 Ayush doctors under the Department of Health, Medical Education and Family Welfare were deployed for prevention and management of COVID-19 cases in quarantine centres, CCCs, home-isolation, screening of COVID-19 patients, and vaccination. They have provided tele-consultancy through Helpline No. #104, distributed Ayush immunity booster medicines & AYUSH-64 as well as contributed in bed management and other management work during the COVID-19 pandemic. Ayush staff was also deployed for the distribution of handbills.

## 3.14.2.2 Ayush infrastructure

• Ayush facilities were used for vaccination and for conducting COVID-19 tests.

## 3.14.3 Interventions and Initiatives

- "Birsa Jeevan Ayush progamme" was launched by the State on May 10, 2021 for providing Ayurvedic, Homoeopathic & Unani kits to health workers, mild and moderate COVID-19 patients and in quarantines centres.
- Ayush immunity boosters like Arsenicum Album-30, and Ayush Kwath were distributed among people in quarantine centres, different offices, through home visits and to health workers.



- People were sensitized about Ayush principles for the prevention of COVID-19 through advertisements and distribution of IEC materials.
- Yoga related paper advertisements, and IEC materials in HWCs were displayed for pre and post-Covid infection.
- Study on the effect of Unani Medicine in COVID-19 Patient was taken up by the Rajendra Institute of Medical Sciences (RIMS), Ranchi.
- Ayurveda, Unani, Homoeopathic & Yoga based guidelines for COVID-19 were made available to Ayush practitioners for the prevention and management of COVID-19 cases.
- All guidelines, advisories issued by the MoA, GoI have been followed by the state.
- To facilitate the availability of Ayush Kwath in the State, licenses have been provided to Ayush industries for the manufacturing of Ayush Kwath.

# 3.14.4 Digital Platform and Telemedicine

• Tele-consultancy on COVID-19 has been provided by Ayush doctors through helpline number #104.



# **3.15 KARNATAKA**

# 3.15.1 Overview and Objectives

The COVID-19 pandemic created a great burden on governments and the medical fraternity globally. The Department of Ayush, Government of Karnataka (GoK) took various initiatives and planned the strategy for controlling the COVID-19 pandemic crisis as per the directions of the Ayush Directorate, GoK, the MoA and the District Administration.

In the first phase of COVID-19, GoK gave the opportunity to open a stand-alone Ayush CCC in Mysore. All teaching hospitals were also converted into CCCs, where Ayush HR was deputed as per requirement. In the second phase, the Ayush Department joined hands with the HFW Department by posting Ayush doctors and staff in CCCs, war-rooms, and vaccination centres and some of the MOs were designated as nodal officers to mitigate COVID-19. District level offices conducted health camps and distributed relevant medicines and immunity boosters in affected areas. Various programmes such as Janandolan, Poshan Pakwada were used effectively to educate the rural public and frontline workers. A series of talks were given to the frontline department regarding the COVID-19 pandemic, immunity-boosting diet and lifestyle. The State took various initiatives with the following objectives:

- Boost the immunity of the public to combat the pandemic
- Find out various preventive measures to contain the spread of the pandemic in the community
- Treat various associated conditions with the available Ayurveda classical medicines
- Utilize Ayush HR as Covid warriors
- Create awareness among the public regarding the mode of spread and prevention measures of COVID-19
- Strengthen immunity of frontline Covid warriors
- Treat mild to moderate cases of COVID-19 through Ayush remedies
- Mitigate the misconceptions and fears about COVID-19
- Provide psychosocial care to the community as well as to the geriatric patients

# 3.15.2 Ayush Human Resource and Infrastructure

## 3.15.2.1 Identified Role of Ayush HR

i. The medical staff were deployed for various responsibilities such as performing duties at quarantine centres, CCCs, RRT work, fever clinics, CTCs, physical as well as tele-triaging, and district vigilance committee for monitoring Covid beds, oxygen supply, and other drugs.



- ii. The staff in Bangalore Urban were posted for different Covid-related emergency duties:
  - Home quarantine enforcement squad duties.
  - Zonal ambulance control duties at all the five zones for identification and early transport of the Covid-positive people across Bangalore.
  - Tele-medicine duties assigned by Bruhat Bengaluru Mahanagara Palike (BBMP)
  - Faculty, PG scholars and interns were posted to handle the Apthamitra Sahayavani App, and to respond to the 24x7 helpline phone number #14410, an exclusive initiative of the Ayush Dept., GoK.
  - Faculty, PG scholars and interns were posted to the fever clinic set up by the BBMP in various PHC and medical centres across the city.
  - Faculty, PG scholars and interns were posted at containment zones for surveillance and screening duty.
  - Faculty, PG scholars and internes were posted to screen international and inter-state travellers at airports and railway stations.
- iii. PG and UG students from Ayush educational institutes were involved in various types of Covid duties like performing RT-PCR and RAT tests, teletriaging, home-isolation care through telemedicine and, distributing Ayush medicines to patients in CCCs.
- iv. Faculty, medical officers, PG scholars, and interns were posted in CCCs on a rotational basis following strict Covid protocol.

#### 3.15.2.2 Ayush infrastructure

- The Ayush training centre at Sugganahalli, Ramangara District was utilized as a CCC.
- CCCs were set up at all the seven teaching hospitals attached to the Department of Ayush during both the waves of COVID-19.
- The Government Ayurvedic and Medical College (GAMC) and hospital at Shimoga were also utilized as a Covid triage centre during the first and second waves of COVID-19.
- The hospitals and dispensaries under the department of Ayush functioned as vaccination centres.

## 3.15.3 Interventions and Initiatives

- Immunity-boosting Ayush drugs as per the GoI protocol were distributed to an estimated 3,77,871 frontline workers across various departments.
- Ayush medicines were distributed to 58,959 patients in various CCCs across the State.

• Yoga sessions were conducted across all CCCs twice every day, morning and evening. A total of 479 offline sessions and 520 online sessions were conducted during the second wave of COVID-19 with approximately 7,596 beneficiaries.



Figure 3.16: Yoga sessions at CCCs in Karnataka

- Ayush interventions were given to asymptomatic and mild to moderate COVID-19 positive cases.
- Awareness camps were conducted in NGOs, Government offices, and for frontline workers. District level officers conducted mass awareness campaigns on the prevention of COVID-19 and distributed IEC materials (pamphlets, flexbanners, and posters) at public places.



Figure 3.17: Awareness creation, screening and distribution of Ayush medicines in Karnataka



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- The State conducted the AYU-SAMVAD, programme focused on educating frontline workers and the public.
- The State issued separate Ayurveda, Unani, and Homoeopathy guidelines for the prevention and management of COVID-19 apart from utilizing and adopting guidelines and advisory issued by the MoA.

## 3.15.4 Digital Platform and Telemedicine

- Faculty, medical officer, PG scholars, and interns were posted to manage the Apthamitra Sahayavani App, and answer phone calls on the helpline number #14410 an exclusive Ayush Dept., GoK initiative.
- Webinars were conducted for students, teachers, patients, and the public on the digital platform.
- U.G students were deployed for tele-triaging.
- COVID-19 awareness was created through radio and television programmes, print media, and social media.
- Online Yoga sessions were conducted for COVID-19 patients.



# 3.16 KERALA

#### 3.16.1 Overview and Objectives

Kerala has extensively utilized Ayush system to strengthen the fight against Covid and adopted new innovations to effectively manage crisis caused by the pandemic. Policy, strategies, activities, and programmes were implemented in the State of Kerala through the Ayush systems. Practices for the prevention, mitigation, and treatment of COVID-19 and the management of post-Covid cases were adopted. The major Ayush systems with the good organizational and structural frameworks are Ayurveda and Homoeopathy. Other traditional systems such as Siddha, Unani, and Naturopathy are also practiced in some pockets of the State.

#### 3.16.1.1 Ayurveda

The State Ayurveda Covid Response Cell (SACRC) started functioning under the Department of Ayush to roll out various activities. A total of 1,206 Ayur Raksha Clinics in the State comprising all Ayurveda institutions like Ayurveda dispensaries and hospitals, college hospitals, NHM Ayurveda dispensaries were opened for managing the pandemic.

Initially, the Ayurveda system was utilized for the prevention of the disease or to reduce the complications with medicine and lifestyle practices through its network of clinics.

#### 3.16.1.2 Homoeopathy

At the very beginning of the pandemic in 2020, the State widely distributed Homoeopathic immunity boosters. Around 2 crore people were covered under this initiative, distribution is still underway.

#### 3.16.1.3 Siddha

The Siddha system of medicine is well accepted in some parts of Kerala. Medicines like Nilavembu Kudineer and Kabasura Kudineer were given for prevention and for post-Covid complication management through over 45 Siddha hospitals and clinics.

#### 3.16.1.4 Unani

The Unani system of medicine is practiced in some pockets of northern and middle Kerala. After the release of the Unani advisory from the MoA, the public was familiarized with the medicines and practices regarding the prevention of COVID-19 through the Unani system.



## 3.16.2 Ayush Human Resource and Infrastructure.

#### 3.16.2.1 Identified Role of Ayush HR

Doctors and paramedical staff working under the Ayush department were effectively used by the State for surveillance duty at check-posts, airports, and seaports. Doctors from Ayush were posted at CFLTCs, CSLTCs, and DCCs. Distribution of medicine at the Local Self-Government (LSG) level was supported by concerned Ayush staff working at dispensaries and hospitals under Ayush. Students from the 14 Ayurveda colleges in the State were given charge of recording, and processing data, related to COVID-19, from all 14 districts of Kerala. Also, separate teams of five doctors were deployed in the 14 districts for research-related activities.

#### 3.16.2.2 Ayush infrastructure

Many hospitals/institutions under the department of Ayush were converted to CFLTC, CSLTC, quarantine centres, reverse quarantine centres (accommodation for vulnerable geriatric and morbid groups), and vaccination centres.

#### **3.16.3 Interventions and Initiatives**

#### 3.16.3.1 Ayur Raksha clinics

A unique network of clinics for Covid management under the name of Ayur Raksha clinics were established across the State in support with Ayur Raksha task force. This network is comprised of doctors and students of Ayurveda, members from Kudumbashree (the poverty eradication and women empowerment programme), the Local Self-Government (LSG) ward, and volunteers. All the 1206 such clinics got support from the volunteer groups. This people-centric approach helped the system of Ayurveda to reach more people. A three-tier system under the Department of Ayush functioned for coordinating all Covid-related activities — SACRC at the State level, RACRC at the regional level (for a block of four or five districts), and DACRC at the district level.

#### 3.16.3.2 Swasthyam and Sukha Ayushyam Programmes

Two programmes for two different age groups, Swasthyam and Sukha Ayushyam, for the prevention of the pandemic by boosting immunity with medicine, lifestyle practices, and Yoga were implemented as a beginning. Swasthyam was meant for people below the age of 60 and Sukha Ayushyam for the geriatric group. These programmes created widespread awareness about Ayurvedic medications, lifestyle practices, and Yoga among the people for managing the disease and the safety precautions they needed to follow. Medicines were also distributed among frontline workers such as police personnel, revenue workers, and health workers.



#### 3.16.3.3 Amrutham programme

The programme Amrutham was started for quarantined groups in May 2020. Domestic and International travellers were mandated to quarantine for 14 days, either at quarantine centres or at home. The medicines were given to nearly 8 lakh quarantined persons in that time frame. A study was conducted within the groups of quarantined persons during the first wave.<sup>31</sup>

## 3.16.3.4 Bheshajam Programme

When the Central Government released the treatment protocol for mild to moderate COVID-19 cases based on Ayurveda and Yoga, the State Government also launched a programme called Bheshajam for promoting traditional Ayurveda treatment.

#### 3.16.3.5 Punarjani programme

For post-Covid management, the State Government launched the Punarjani programme. Separate wards for in-patient management opened in major Ayurveda Hospitals and special out-patient facilities were started in many dispensaries.

All the programmes based on Ayurveda are well-accepted and continued. Data of beneficiaries as of September 30, 2021, is given in Table 3 for all the programmes.

Sr. No.	Programme	Beneficiaries
1	Swasthyam	15,48,128
2	Sukha Ayushayam	8,19,167
3	Amrutham	8,09,756
4	Bheshajam	5,11,743
5	Punarjani	6,28,100

#### Table 3.3: Beneficiaries of various programmes in Kerala

Source: State Ayush, Kerala



Figure 3.18: Reports on Amritham, Bheshajam and Punarjani Programmes released by Kerala

<sup>31</sup> https://www.frontiersin.org/articles/10.3389/fpubh.2021.732523/full



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#### 3.16.3.6 SAVE Campaign

The SAVE Campaign (S for SMS, sanitation, mask, and social distancing, A for Ayurveda, V for vaccination, and E for exercise, Yoga) was initiated by the Department of Ayush with the support of the public and the LSG. IEC videos and posters were used as regular campaigning tools. Film stars and artists also appeared in the promotion videos of Ayush interventions.

#### 3.16.3.7 Other initiatives

- The State Government issued guidelines for Ayush practitioners for the prevention and management of COVID-19, and these were revised as and when required.
- The State Government implemented all the guidelines issued by MoA, Gol. The Ayush PSUs under the State Government have utilized their services for uninterrupted supply of the medicines. In addition, the State also procured medicine from Indian Medicines Pharmaceutical Corporation Limited (IMPCL) the central PSU, for an amount of Rs 0.75 crore using NAM funds.

#### 3.16.4 Digital Platform and Telemedicine

- A tele-medicine platform was set up at different levels.
- Ayurveda and Homoeopathy telemedicine services were started through the NHM e-Sanjeevani platform. At all district hospitals and dispensaries telephone numbers of the medical officer's in-charge were displayed for tele-consultation for Covid-related queries and for daily needs.



# 3.17 LAKSHADWEEP

## 3.17.1 Overview and Objectives

Lakshadweep is the smallest Union Territory of India, scattered in the Arabian Sea. This archipelago consists of 36 Islands, of which only 10 are inhabited. There are nine Ayurveda and nine Homoeopathic dispensaries co-located in the healthcare facilities in the various Islands to provide Ayush services, including Yoga. A 20-bedded Deen Dayal Upadhyaya Ayush Hospital with a Wellness Centre is functional at Kavaratti under NAM. Three Ayushman Bharat – Ayush health and wellness centres started functioning in the islands of Minicoy, Amini, and Androth along with co-located health facilities. The UT has utilized Ayush services in the mitigation and management of COVID-19.

# 3.17.2 Ayush Human Resource

Ayush doctors were provided training for COVID-19 preparedness. All Ayush doctors and paramedics including the supporting staff were engaged in the management of COVID-19 since January 18, 2021. Ayush HR was deployed for surveillance, sample collection, contact tracing, distribution of Ayush medicines, Yoga sessions and counselling, as well as for other initiatives undertaken by the UT.



Figure 3.19: Yoga session in Lakshadweep

## **3.17.3 Interventions and Initiatives**

• Ayurvedic medicines such as AYUSH-64, Sanshamani Vati, Chyavanprash, Ayush Kwath, and Homoeopathic medicines like Arsenicum album-30, Bryonia, Belladonna, Gelsemium were utilized as an immunity booster and preventive



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories measure, and for the treatment of cases without complications. "Aparachitha dhooma choornam" was distributed for fumigation.



Figure 3.20: Distribution of Ayush Medicines amongst Community in Lakshadweep

- Yoga, counselling, and Panchakarma therapies were provided to the needy patients as per the requirement by observing all Covid protocols. Treatment facilities were provided to the post-Covid cases.
- Guidelines and Advisories related to COVID-19 issued by the MoA were circulated to all Ayush practitioners in Lakshadweep. All the directives, guidelines, and advisories issued by the Ministry were adopted and extended to all Ayush healthcare facilities in various islands in connection with the management of COVID-19.
- Awareness classes, Yoga, and Pranayama sessions were conducted for Covid patients at CCCs, quarantine centres, and CFLTCs.
- An awareness campaign for the prevention and management of COVID-19 was conducted in all inhabited islands of Lakshadweep with respect to the role of the Ayush system of medicines for the preservation of health, prevention of diseases, and management of illness in different ways. The services rendered through the Department of Ayush and NAM are well accepted by the public and their faith in the system is maintained.
- Effective IEC activities were conducted by convening meetings at the village and ward level, with participation from public representatives and panchayat functionaries. Timely publication of the role of Ayush system in the UT's local newspaper "Lakshadweep Times" was done for wider public awareness.



# 3.17.4 Digital Platform/Telemedicine

Effective IEC activities were conducted at the grass-root level through various electronic media (All India Radio, WhatsApp, social media, etc.).

# 3.17.5 Issues Occurred or Addressed

Delay in the release of approved grants-in-aid delayed the implementation of various activities such as the procurement of Ayush medicines, logistics, and delay in the payment of monthly remuneration to the HR personnel engaged as per approval and sanction.



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# 3.18 MADHYA PRADESH

#### 3.18.1 Overview and Objectives

Since its outbreak, COVID-19 has emerged as the most dangerous pandemic across the globe. In the absence of effective anti-viral therapy against SARS-CoV-2, and a proven effective clinical approach, the best utilization of traditional medicine was initiated with an objective to mitigate and manage COVID-19 in the State through Ayush intervention.

Keeping in view, the widespread occurrence of COVID-19, the State took the initiative to evaluate the efficacy of Ayurvedic drugs as a preventive measure and as a treatment in suspected cases, for Covid-contacts, as well as for COVID-19 symptomatic and asymptomatic cases. An expert committee was constituted to prepare and submit a report on Ayush formulations that could be utilized as preventive and treatment therapies. The expert committee submitted the report incorporating the detailed modus operandi and Ayurvedic formula named "Arogya Kashayam-20" (AK-20), which was recommended to be used for quarantined and COVID-19 positive (asymptomatic) cases. In accordance with the recommendation, the directorate of Ayush issued an order to administer the AK-20 among quarantined individuals as well as COVID-19 positive and asymptomatic cases in various districts of Madhya Pradesh.

## 3.18.2 Ayush Human Resource and Infrastructure

#### 3.18.2.1 Identified Role of Ayush HR

Ayush professionals were provided online training and were identified as COVID warriors. The responsibilities assigned to them, included the distribution of immune-modulatory drugs across the State, collaborative duties in various screening and treatment setups for the prevention and clinical management of COVID-19 as launched by the State's HFW Department.



Figure 3.21: Ayush Staff involved in various activities at CCCs in Madhya Pradesh



#### 3.18.2.2 Ayush Infrastructure

Pt. Khushilal Sharma Government (Autonomous) Ayurveda College and Hospital, Bhopal was utilized as a CCC as notified by the Govt. of Madhya Pradesh. The institute offered its services for in-patient COVID-I9 cases, with the support system of its diagnostic services inclusive of pathology, biochemistry, and radiology. The canteen supplied a nutritious diet as advised by the State's Task Force.

#### **3.18.3 Interventions and Initiatives**

- State Government of Madhya Pradesh launched the "Jeevan Amrit Yojna", which includes home distribution of Trikatu Churna as a prophylactic medicine at the doorstep. The distribution mechanism was operationalized primarily by the Department of Ayush, through its machinery. The Nagriya Prashashan and Gramin Panchayat departments also supported the distribution. Many social organizations also contributed consistently.
- Joint collaborative efforts with the Department of HFW, Medical Education, and Ayush have shown excellent outcomes with respect to contact-tracing, containment, testing and running the Covid Command and Control Centre, CCCs, quarantine centres as well as in the management of vaccination drives and fever clinics.
- The State conducted studies through the Ayurveda institution as detailed in Table 4.

Sr. No.	Title of the research study	CTRI registration No.	Status of the study
1	A prospective randomized controlled clinical trial to evaluate the efficacy and safety of Guduchi Ghan Vati in the management of COVID-19 infection <sup>32</sup>	CTRI/2020/07/ 026840 Registered on: 27/07/2020.Trial registered prospectively	Completed and publication has been accepted
2	Evaluation of the efficacy of Arogya Kashayam in asymptomatic and mild symptomatic positive cases of COVID-19: A randomized control study <sup>33</sup>	CTRI/2020/06/ 026221 Registered on: 29/06/2020. Trial registered prospectively	Completed; Publication is under process
3	A retrospective analysis of the effect of the intervention of Arogya Kashayam in COVID-19 positive cases in Madhya Pradesh <sup>34</sup>	Ethical approval from IEC Of PTKLSGACI, Bhopal vide Letter no. KIsgaci/IEC /2020/005 dated April 22, 2020	Published

# Table 3.4: Research studies through the Ayurveda Intervention undertaken in Madhya Pradesh

32 http://www.ctri.nic.in/Clinicaltrials/pdf\_generate.php?trialid=45981&EncHid=&modid=&compid=%27,%2745981det%27

33 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8078609/

<sup>34</sup> https://pubmed.ncbi.nlm.nih.gov/33935437/



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Sr. No.	Title of the research study	CTRI registration No.	Status of the study
4	A retrospective analysis of the effect of Arogya Kashayam in contact cases of COVID-19 in Madhya Pradesh	Ethical approval from IEC of PTKLSGACI, Bhopal vide letter no. KIsgaci/IEC /2020/005 dated April 22, 2020	Under submission

Source: State Ayush, Madhya Pradesh

- The national treatment protocol and guidelines for the prevention and management of COVID-19 as issued by Gol greatly benefited Ayush professionals. The guidelines issued by the MoA were very popular and were used widely. The State issued orders and advisories from time-to-time in sync with the advisories issued by the MoA, which resulted in promoting the popularity of Ayurveda during the pandemic.
- The public displayed good acceptance of the preventive Ayush medicines, and treatment protocols.
- Under the "Yog se Nirog" programme, high-end use of IT for training, demonstration, implementation, and data management was done.



Figure 3.22: Ayush staff involved in testing and distribution of Ayush medicines amongst Community in Madhya Pradesh



# 3.18.4 Digital Platform and Telemedicine

The Telemedicine App, AyushQure, was launched to facilitate tele-consultation for the public. The health institutions under the Department of Ayush were linked for wider coverage and seamless activity.



Figure 3.23: AyushQure App, Madhya Pradesh

## 3.18.5 Issues Occurred or Addressed

- Although the Ayush infrastructure and HR were greatly utilized, no separate budget was allocated.
- The services of Ayush paramedics, interns, PG scholars, medical officers and medical teachers were utilized. However, the work of paramedics and technicians was also assigned to Ayush MOs, and PG scholars. Although the work was effectively executed, the work allotment needed review.
- Supply of medicines was done by the Directorate of Ayush in a continuous manner.



# 3.19 MAHARASHTRA

#### 3.19.1 Overview and Objectives

For proper utilization of Ayush in mitigation and management of COVID-19, the task force on Ayush for COVID-19 was constituted, at the State level. Two types of advisories were issued for the prophylaxis and treatment of COVID-19 by the task force. These advisories were implemented in the State at all levels. The State took various initiatives with the following objectives:

- Prevention of COVID-19 and promotion of immunity-boosting measures
- Ayush treatment as an add-on to the standard treatment protocol of COVID-19

# 3.19.2 Ayush Human Resource and Infrastructure

#### 3.19.2.1 Identified Role of Ayush HR

The Ayush HR was assigned duties as nodal officers at CCC, the Covid vaccination centres and fever clinics. Details of Ayush doctors involved in various activities for the mitigation of the COVID 19 pandemic have been mentioned in Table 5.

# Table 3.5: Number of Ayush staff involved in various Covid-related activities in Maharashtra

Surveillance	Contact tracing	Distributions of medicine	Containment of COVID-19 counselling	Clinical management	
264	250	169	325	460	

Source: State Ayush, Maharashtra

#### 3.19.2.2 Ayush Infrastructure

Ayush facilities were utilized in the State for various activities — 182 as CCCs and 144 as quarantine centres.

## 3.19.3 Interventions/Initiatives

- The State level task force on Ayush for COVID-19 published two advisories for the use of Ayush medicines for the prevention and management of COVID-19 and the same were implemented across the State. Ayush medicines, including Ayush Kwath, Chyavanprash, and Arsenicum album-30/1000, Sanshamani Vati, and Mahalaxmivilas Ras were effectively used.
- Yoga therapy was given to all Covid patients.

## 3.19.4 Digital Platform/Telemedicine

• Online training was conducted for Ayush staff related to the management of COVID-19 cases through Ayush therapy. In addition, yoga sessions on were also conducted through the virtual platform.

# 3.20 MANIPUR

# 3.20.1 Overview and Objectives

Manipur is one of the Border States in the north-eastern part of the country. The COVID-19 pandemic has severely affected Manipur. As of January 12, 2022, more than 1,26,156 people have been affected by COVID-19 and more than 2,010 casualties were recorded in the State. The Government of Manipur poured in a lot of efforts to fight the COVID-19 pandemic by utilizing all resources including medical front line warriors. To fight COVID-19 in Manipur, the State Government made effective convergent services of Allopathy and Ayush at the appropriate level with frequent review meetings, analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT), and support and supply chain management. The Ayush Systems provided services in terms of setting up of 100-bedded Integrated Ayush Hospital and Dedicated CCC, management and logistic support of the State common Covid control centre, home isolation team, contribution of service in various screening centres including Imphal International Airport, CCC as well as through active public health initiatives of Ayush. The State has taken various initiatives with the following objectives:

- To save the life of the people
- Protection and prevention from COVID-19
- To take care of asymptomatic, mild and moderate cases of COVID-19 through Ayush system of treatment
- Management of post-Covid patients through Ayush treatment along with Yoga and Naturopathy practices
- To cut short the hospital stay period of patients
- Enhance the immune status of patients
- To reduce the expenditure incurred on treatment

## 3.20.2 Ayush Human Resource and Infrastructure

#### 3.20.2.1 Ayush HR

- i. 09 Ayush doctors were identified as Master Trainers for online capacity building training on COVID-19.
- ii. 53 Ayush doctors, nurses and paramedics were deployed at different hospitals, quarantine centres, and Government testing in the first wave. Further, the State Common Covid Control Room and 1<sup>st</sup> MR Banquet Hall, Manipur were logistically supported by the Directorate of Ayush along with 29 doctors/ staff and paramedics during the second wave.
- Services of Ayush doctors and paramedics were utilized for screening of COVID-19 at the Imphal Airport.



iv. Services of Ayush doctors and paramedics were also utilized for screening and in home-isolation teams.

#### 3.20.2.2 Ayush Infrastructure

One 100-bedded integrated Ayush hospital and dedicated CCC at Keirao, Imphal East supported with life-saving equipment like oxygen, oxygen concentrator, ventilator, pulse oximeter, well-equipped ambulance etc. was dedicated for the Covid treatment.

#### 3.20.3 Interventions and Initiatives

- i. AYUSH immune plus, an Ayurvedic Herbal formulation produced by the State Medicinal Plants Board, Manipur was launched with a mandate to boost immunity of the people. It was distributed to Ayush hospitals, CCCs and to people in home isolation, as well as amongst the general masses.
- ii. AYUSH-64 was given to all the admitted patients (excluding children) and distributed in all the Centres and to those in home isolation. Along with AYUSH-64, patients were also given Ayush Medicine including Arsenicum album-30, Sanshamani Vati, AYUSH Immune Plus, and Yoga therapy.
- iii. Homoeopathy medicine Arsenicum album-30 was also given to all the admitted patients, including children, and also distributed to the masses free of cost, with support from Civil Society Organisations and NGOs, etc. 56,971 phials of Arsenicum album-30 (to approximately 2,27,884 people) were distributed as prophylactic as well as for therapeutic intervention in different places of Manipur in the first and second waves of COVID-19.
- iv. Integration of Ayush system of treatment wherever possible was done in the State. Ayush medicine along with Yoga therapy was encouraged in the management of Covid cases at the Hospital. Allopathic and Ayush doctors were deployed in Ayush Hospitals for the better management of COVID-19 cases.
- v. Regular exercise, Yoga meditation and the use of locally available herbal/ medicinal plants were propagated in the State.
- vi. The State Authority referred patients to 100-bedded integrated Ayush Hospital & Dedicated CCC at Keirao, Imphal East. All the cases were given Ayush medicines along with some vitamin and food supplements. All the cases were studied individually and were given suitable indicated Ayush medicines.

#### State- and Union Territory-Wise Practices



Figure 3.24: Ayush Covid Care Centre, Keirao, Imphal East in Manipur



Figure 3.25: Ayush Ambulance serving the community in Manipur

# 3.20.4 Digital Platform and Telemedicine

The Directorate of Ayush organized various discussions or interactions on the treatment and management of COVID-19 cases through print and electronic media as well as through television channels.



# 3.21 MEGHALAYA

#### 3.21.1 Overview and Objectives

The State has taken several initiatives for the safeguard of the public. The State has widely distributed prophylactic Ayush medicines and utilized Ayush human resources for various Covid-related activities.

## 3.21.2 Ayush Human Resource

Ayush staff were assigned various duties like:

- Screening of travellers coming from other States
- In-charge at CCCs
- Supervision of sample collection and COVID-19 testing for high-risk contacts and for random testing
- Contact-tracing of high-risk cases
- Follow-up of COVID-19 positive patients
- Training imparted by them on BCC (Behaviour Change Communication) at the block, community and village levels, etc.
- Training of health workers (Supervisor, ANM, Vaccinator, ASHA, etc.) on COVID-19 Vaccination. Supervision of COVID-19 vaccination drive at Covid vaccination centres
- Awareness based programmes and activities
- Supervision of health workers appointed for COVID-19
- Distribution of prophylactic medicines

#### **3.21.3 Interventions and Initiatives**

- State has distributed Ayush prophylactic medicines as a preventive measure.
- Ayush OPDs are being utilized for Covid care.
- State widely disseminated advisory and self-care guidelines for the general public.



# 3.22 MIZORAM

## 3.22.1 Overview

The State has utilized the Ayush system for strengthening the fight against Covid. The State has utilized the services of Ayush doctors for mitigation and management of the COVID-19 pandemic. Ayush prophylaxis and immunity boosters medicines were widely distributed. The Ayush advisory on COVID-19 circulated by the MoA was translated into the local language and disseminated as widely as possible for public awareness.

# 3.22.2 Ayush Human Resource and Infrastructure

#### 3.22.2.1 Ayush Human Resource

Since the first wave of COVID-19, more than 80 Ayush doctors volunteered and efficiently performed their duties at different quarantine facilities, screening points, CCC, CCCCs, as well as for sample collection, and contact tracing.

## 3.22.2.2 Ayush infrastructure

The integrated Ayush hospital, Thenzawl, was utilized as a CCC since the outbreak of COVID-19 in Mizoram. Till September 28, 2021, 115 patients were treated at this centre. The patients also practiced Yoga under the guidance of Yoga instructors.

## 3.22.3 Interventions and Initiatives

- Ayush prophylaxis and immunity booster medicines such as Arsenicum album and Chyavanprash were widely distributed across the State.
- Ayush MOs were posted at different District hospitals, CHCs, PHCs, and other health programmes. They diligently offered care for COVID-19 patients and administered Ayush medicines such as Arsenicum album-30, Chyavanprash, AYUSH-64, and Sanshamani Vati.
- Ayush advisories on COVID-19, as circulated by the MoA was translated into the local language and disseminated as widely as possible for public awareness.



#### State- and Union Territory-Wise Practices



Figure 3.26: Distribution of Ayush medicines amongst community in Mizoram



# 3.23 NAGALAND

#### 3.23.1 Overview and Objectives

The State has adopted a proactive approach for training and deployment of Ayush HR and utilization of Ayush Infrastructure as well as implementation of Ayush prophylactic and therapeutic interventions. The majority of the Ayush doctors were under a co-located facility in the State and they were assigned Covid related duties. The State widely spread awareness on the role and benefits of the Ayush systems for COVID-19.

# 3.23.2 Ayush Human Resource and Infrastructure

#### 3.23.2.1 Identified Role of Ayush HR

- One Ayush doctor was deployed in each district to assist the District Surveillance Team for the contact tracing of COVID-19.
- Ayush doctors, staff nurses, and paramedics were trained and deployed in the quarantine facilities and team of COVID-19 related activities.
- Distribution of Ayurvedic and Homoeopathic medicines at quarantine centres, CCCs, regular OPDs, and even during the Poshan Maah following guidelines of the MoA was done.



Figure 3.27: Training of Ayush Staff in Nagaland

#### 3.23.2.2 Ayush Infrastructure

The Integrated Ayush hospitals — Dimapur and Noklak — were utilized as CCCs and the integrated Ayush hospital, Kohima was turned into a Covid-care hospital.



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Figure 3.28: Integrated Ayush hospital, Kohima utilized as CCC in Nagaland

# 3.23.3 Interventions and Initiatives

Immunity booster medicines and few Ayush remedies along with standard treatment were utilized.

# 3.23.4 Digital Platform, Telemedicine and Similar Initiatives

- Video clippings were uploaded on the department website and on YouTube for Covid awareness and immunity.
- Advertisement prints on Ayurveda and Yoga for immunity were disseminated through the local newspapers.
- Radio talks were hosted on the Covid Awareness Campaign and the benefits of Ayush immunity boosters.
- IEC activities related to Covid were conducted in the form of posters, banners with pictures, and messages in the local context, were circulated.
- Talks on Covid awareness campaign and benefits of Ayush immunity boosters in churches, schools, village, and panchayats were conducted.



# 3.24 ODISHA

#### 3.24.1 Overview and Objectives:

The COVID-19 pandemic has caused devastating loss of human life worldwide and it presents an unprecedented challenge to public health. The State undertook the initiative to provide a health promotive and preventive approach through Yoga, Ayurveda, and Homoeopathy for strengthening the immune system against COVID-19 and other diseases.

# 3.24.2 Ayush Human Resource and Infrastructure

#### 3.24.2.1 Identified Role of Ayush HR

Approximately 693 Ayush personnel (Ayurvedic and Homoeopathic medical officers), 93 PG students and interns were engaged periodically in two waves of COVID-19 at CCCs, and quarantine centres. Ayush doctors were deployed at the Chief District Medical and Public Health Offices (CDM and PHOs) of the 30 districts for surveillance, contact tracing, and treatment as and when required.

## 3.24.2.2 Ayush infrastructure

The district administration used the hospital of Gopabandhu Ayurveda Mahavidyalaya, Puri, Government Ayurveda College, Balangir, Biju Patnaik Homoeopathy Medical College and Hospital, Berhampur, Utkalmani Homoeopathic Medical College and Hospital, Rourkela, and Odisha Medical College of Homoeopathy and Research, Sambalpur for Covid related activities/ services.

## 3.24.3 Interventions/Initiatives

- An amount of Rs. 18,00,000 was provided to the Govt. Ayurvedic Pharmacy, Bhubaneswar for the manufacturing and preparation of Sanshamani Vati. After the preparation, these were distributed to Govt. Ayurvedic hospitals and dispensaries.
- The "Mo Beach Yoga" programme was organized at 10 locations of the beach in Puri for COVID-19 cured patients on October 17 and 18, 2020 in coordination with the Collector and District Magistrate of Puri. An amount of Rs.4 lakhs was sanctioned for medicinal kits for 200 participants for the two-day programme. Apart from this, a 7-day awareness Yoga programme was also organized in the morning at the beach. As many as 100 Yoga instructors were empanelled to conduct the awareness Yoga programme at different districts of the State.
- Funds were provided to various DHMOs (District Homoeopathy Medical Officers) for the distribution of Arsenicum album-30 as an immunity booster to the public. The mini-pharmacy attached to the Dr Abhin Chandra Homoeopathic Medical College, Bhubaneswar prepared the required quantity of Arsenicum album-30 for supply to all Homoeopathic hospitals and dispensaries. The Arsenicum album-30 was distributed in most of the districts through various camps in different strategic locations.



# 3.25 PUDUCHERRY

#### 3.25.1 Overview and Objectives

In the UT of Puducherry, the Directorate of Indian System of Medicine and Homoeopathy comprises Ayurveda, Siddha, Homoeopathy, Yoga and Naturopathy units in all the four regions of Puducherry (Puducherry, Karaikal, Mahe, and Yanam), co-located at 39 PHCs, 4 CHCs, 4 DHCs and 3 HWCs, catering to the needs of the public across UT of Puducherry.

As an emergency measure, a new 25-bed hospital for the Indian System of Medicine and Homoeopathy was created at the Indira Gandhi Govt. Arts and Science College, Kadirkamam within 48 hours and the Covid-affected people were treated there. Various initiatives were taken by the UT with the following objectives:

- Prevention of COVID-19 through various Ayush medicines, Yoga and Naturopathy and use of home remedies
- Management of asymptomatic, mild, and moderately symptomatic cases through Ayush interventions
- Rehabilitation of post-Covid patients

#### 3.25.2 Ayush Human Resource

Medical officers were provided online training, organized from January 18 to February 21, 2021, with the support of the MoA. During the COVID-19 pandemic, the medical officers, pharmacists and staff of the Indian Systems of Medicine and Homoeopathy were the frontline warriors and helped in all the activities to tide over the crisis of the pandemic.



Figure 3.29: Distribution of Ayush medicines in Containment zone in Puducheery



# 3.25.3 Interventions and Initiatives

#### 3.25.3.1 Ayurveda

- In Ayurveda centres, patients were motivated to:
  - a. Follow the SMS code: Sanitizing, Masking, and Social distancing.
  - b. Follow preventive measures against COVID-19.
  - c. Medicines like Ayush Kwath sachets, Talisadi tablets, Dasamoola Katutraya Kashaya, Indukanta Kashaya, Dasamoolarista, Vasaristam, Kanchanara Guggulu, Chyavanprash Lehyam, Ashwagandha Lehyam, Dasamoola Rasayanain, Ashwagandaristam were given for the prevention in containment zones.
  - d. Ayurveda medicines like Shanshamani Vati, Tribhuvana Kiriti Ras, Sudharashana Vati, Katutraya Kasayam tablets, Dasamoola Katutraya Kasayam tablets, Indukanta Kasayam tablets, Swasa Kuthara Ras, Talisadi tablets, Dasamoolarista, Vasaristam, Lakshmivilasa Rasam (naradiya), Ashwagandaristam and Ashwagandha tablets were prescribed for asymptomatic, mild, moderate, and even to the high-risk categories of Covid-positive patients.
- An Ayush Covid-care hospital was temporarily established at the Govt. Indira Gandhi Arts and Sciences College, Puducherry to treat Covid-positive cases.
- Ayurveda medical officers were posted at various Allopathic hospitals in the Karaikal, Yanam, and Mahe regions through which medicines like Ayush Kwath sachets and AYUSH-64 tablets were distributed.
- Under "Ayurveda for COVID-19 programme", online and offline camps were conducted in different regions of the UT and a summary of camps and beneficiaries of the programme is mentioned in Table 6.

SI. No.	Region	No. of Camps Conducted			
51. NO.		Online	Offline	Total No. of Beneficiaries	
1	Puducherry Region	1	74	4745	
2	Karaikal Region	-	33	1287	
3	Mahe Region	-	20	890	
4	Yanam Region	-	15	710	
Total		1	142	7632	

#### Table 3.6: Summary of beneficiaries of the camps in Puducherry

Source: UT Ayush, Puducherry

- Guidelines issued by the MoA for the prevention and treatments of Covid were followed across the UT.
- The MOs also motivated the public by issuing pamphlets to follow Ayurveda guidelines to prevent COVID-19.



• Handwritten posters were displayed at the Ayurveda centres denoting the Ayurvedic daily regimen and dietary regimen for the prevention and maintaining the health status during COVID-19.

#### 3.25.3.2 Yoga and Naturopathy

- The yoga practices included Asanas, Pranayamas, Kriyas, breathing exercises, and Yogic Sattvic diet were promoted, which helped in overcoming stress, fear, and anxiety among the general population and also among Covid-positive patients mainly through meditation, Yoga Nidra and relaxing techniques.
- Asymptomatic patients and patients with mild to moderate symptoms were provided Yoga and Naturopathy treatments along with other Ayush medicines.
- Patients with co-morbid conditions and patients with mild and moderate infections of the disease, who were undergoing Allopathy and/or Ayush treatment were benefited with the following practices: modified Yogic Asanas with breathing exercises; postural drainage methods — lying in the left lateral position for 15 minutes followed by lying prone for 30 minutes, and then lying on the right lateral position during various intervals of the day.
- Post-Covid rehabilitation through yoga and naturopathy treatments was adopted in the UT.
- IEC materials regarding the active role of yoga and naturopathy in preventing COVID-19 were distributed to the public visiting the PHCs and CHCs; these were also distributed to the public with the help of ASHA workers going for field visits.

#### 3.25.3.3 SIDDHA

The Directorate of Indian Systems of Medicine and Homoeopathy initiated the distribution of Siddha Medicines to the public in the PHCs, CHCs, and DHs and also to the containment areas and frontline workers.

Population-based studies and prophylactic interventions studies were conducted in the PHC Reddiarpalayam in the UT of Puducherry with a sample of 4000 persons.

Medicines like Kabasura Kudineer, Nilavembu Kudineer, Bramanandha Bairavam, Vasantha Kusumagaram, Adathodai Manapagu, Thalisathi Chooranam, Thalisathi Vadagam, Oma Theneer, Sundai Vatral Chooranam, and Amukurra Chooranam were used in treating Covid patients and post-Covid cases. These medicines were also prescribed as an add-on to the standard care in some patients.

# *3.25.3.4 HOMOEOPATHY*

Homoeopathy doctors in all the units distributed the Homoeopathic medicine Arsenicum album-30 in all the PHCs, sub-centres, CHCs, containment zones, schools, orphanages as well as to temple staff, manufacturing unit staff, and to around 9 lakh people in all the four districts of Puducherry.


IEC pamphlets regarding the prevention and management of COVID-19 with homoeopathic medicines were distributed to the public.



Figure 3.30: Distribution of homeopathic medicine among community in Puducherry



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# 3.26 PUNJAB

#### 3.26.1 Overview and Objectives

The State had taken various initiatives with respect to the prevention, prophylaxis, quarantine, and rehabilitation approach, along with a focus on immunity boosting measures to combat the pandemic. The State Government followed the national protocol for all Covid-related aspects.

## 3.26.2 Ayush Human Resource

Regular and NHM Ayurvedic medical officers were involved in various COVID-19 related duties including those at flu corners, testing, and screening at hospitals and duties at vaccination camps.



Figure 3.31: Ayush staff at CHC, Begowal in Punjab

#### **3.26.3 Interventions and Initiatives**

- The State Government initiated prophylactic interventions in the form of immunity-booster drives and distributed these medicines to the frontline workers, quarantine centres, isolations centres, and Covid patients.
- The State Government also distributed AYUSH-64 through the NGOs.
- Seminars were conducted to create awareness regarding COVID-19, (AYU-SAMVAD).
- The State Government also advised the use of Yoga protocol and promoted the use of Ayush Sanjivani App.



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# 3.27 RAJASTHAN

### 3.27.1 Overview and Objectives

In Rajasthan, the Ayurveda department provided Ayurveda healthcare services through Ayurveda hospitals and dispensaries, wherein, a total 3181 Ayurveda medical officers, 2981 nurses and/or compounders, and 1172 attendants have been posted. The State took various initiatives like distribution of preventive medicines, establishment of Covid helplines and post-Covid care centres, training of HR and facilitation of the Ayush industry for manufacturing preventive medicines and sanitizers.

#### 3.27.2 Ayush Human Resource

- A total number of 5,747 Ayurveda, Unani, and Homoeopathy practitioners, nurses and compounders, and 1,409 students of Ayurveda colleges were given online training related to the management of COVID-19, as conducted by the MoA, so that the services of these trained HR can be utilized as and when needed.
- Services of the Ayurveda MOs, nurses, and compounders were utilized by the HFW department from April 10 to June 16, 2020.
- The Ayush staffs were deployed at post-Covid care centres, for Covid helplines and medicine distribution at quarantine centres, CCCs, and door-to-door medicine dispensing.

## 3.27.3 Intervention and Initiatives

- The Ayurveda department has been distributing Ayush Kwath and Giloy Churna to the public as an immunity booster measure since March 13, 2020. As of December 17, 2021, a total of 96.47 lakh people have been provided Ayush Kwath and Giloy Churna. These medicines were also provided to a total 6,80,611 Covid warriors from the departments of health, education, and women & child development, police, and sanitary workers. Kapurdhara Vati was also distributed to 2,59,982 officers and staff working in the different departments from June 5, 2020 to February 10, 2021.
- The staff working in the Ayurveda department went door-to-door and provided medicines like AYUSH-64, Jwarahara Kashaya, Sanshamani Vati, Anu Taila, and Ashwagandha to a total of 7.70 lakh peoples.
- Ayurveda medicines as an immunity-booster were provided to a total of 29,227 quarantined people up to February 10, 2021.
- Covid patients, at the CCC, Bilwa, Jaipur, were provided Ayush Kwath (33,070 beneficiaries), AYUSH-64 (596 beneficiaries) and Yoga sessions (5,689 beneficiaries).



- Post-Covid centres were established at every District headquarter for providing medicines for post-Covid complications and/or diseases, for suggestions related to Yoga practice, exercise, usage of Rasayan (rejuvenation measures) and daily regimen. A total of 22,344 people benefited from this activity.
- The advisories issued by the MoA for boosting immunity and for preventing COVID-19 were propagated among the masses in the State through all platforms. These included consumption of Ayush Kwath, Chyavanprash, and practicing nasal instillation of coconut oil or sesame oil.
- Keeping a note of the increased demand for hand sanitizers and Ayush Kwath, 100 private Ayurveda drug manufacturers were sanctioned provisional licences to produce these medicines in the State.

## 3.27.4 Digital Platform and Telemedicine

The department established a Helpline Centre at the District headquarter, to provide consultation for the prevention and treatment of COVID-19. Qualified medical officers provided consultation service at these centres. The Ayurveda department propagated information related to the activities undertaken by the State for Covid, through YouTube and Facebook.



# 3.28 SIKKIM

#### 3.28.1 Overview and Objectives

In Sikkim, various activities were undertaken under NAM during the first and second wave of COVID-19 as per the guidelines received from the MoA for prevention and to boost the immunity of people. These activities included lifestyle modifications, adaptation of Yoga in one's daily life along with the consumption of Ayush immunity boosters. Ayush HR and infrastructure were utilized during the pandemic for Covid care. The key objective was to acquaint the people with valuable information about the strength of various Ayush-based immunity boosters for enhancing individual immunity for the prevention of the disease and to reduce disease-related stress through Yoga. It was also considered important to bring a behavioural change towards immunity enhancing steps and to promote the use of traditional home-based medicines to enhance immunity.

## 3.28.2 Ayush Human Resource and Infrastructure

#### 3.28.2.1 Identified Role of Ayush HR

Around 17 Ayush doctors and more than 25 Ayush staff members were deployed for various COVID-19 duties at:

- COVID ward at STNM multi-speciality hospital, Sochakgang, Gangtok
- Various CCCs
- Quarantine centres
- Flu clinics at districts and PHCs
- Screening centres of STNM
- Check posts at Melli and Rangpo
- COVID-19 vaccination centres as a supervisor

#### 3.28.2.2 Ayush Infrastructure

- A 50-bedded Ayush hospital at Kyongsa, Gyalshing, West Sikkim was fully converted into an isolation centre for COVID-19 patients from March 2020 to April 2021.
- Ayush co-located facility at District Hospital Mangan, North Sikkim was converted into a CCC.
- A 10-bedded Ayush Hospital, STNM, Sochakgang was utilized for vaccination for COVID-19 from February 2021 to September 30, 2021.





Figure 3.32: Ayush hospitals and clinics functioning as CCC and flu clinic in Sikkim

## 3.28.3 Interventions/Interventions

- Ayush immunity booster medicines were freely distributed at various CCCs and through the OPDs. More than 40,000 individuals received the Ayush Immunity boosters until March 2021.
- Under the MoA guidelines, Ayush immunity boosters were utilized, and Ayush-64 tablets were procured and sent to all districts for distribution to COVID-19 patients as an adjunct to the Allopathic treatment in mild to moderate cases.
- Messages of CAB were disseminated during a Jan Andolan. Covid-appropriate behaviour campaigns and pledges were promoted by all staff members along with the doctors under Ayush.
- Guidelines issued by the MoA were shared with all Ayush practitioners for the prevention and management of COVID-19.

## 3.28.4 Digital Platform and Telemedicine

- Various Covid related IEC activities were undertaken such as:
  - a. **Radio programme:** Jingles through RED FM, All India Radio (AIR) India, for one month.
  - b. **Composite programme:** Awareness regarding COVID-19 and its prevention through Ayush activities was conducted by doctors of Ayurveda, and Yoga and Naturopathy.
  - c. Live phone-in programme hosted through AIR.
  - d. Messages on alternate days in English and Nepali languages were given through local newspapers continuously for three weeks.
  - e. Animated clips and videos on the Ayurveda practices of making Kadha and the use of various spices in one's daily life were made and featured on social media. They were amplified through the Sikkim chronicles, Samvad Television and the Information & Public Relations (IPR) department.
  - f. Video messages of Ayush for immunity were given by the SPO, Ayush and Ayurveda doctors through Summit Times (social media).



# 3.29 TAMIL NADU

#### 3.29.1 Overview and Objectives

The time-tested traditional knowledge practices of the Ayush system of medicine has been utilized in the state for the management of the COVID-19 pandemic. All Ayush practitioners were advised to follow the guidelines issued by the State Government of Tamil Nadu and the Directorate of Indian Medicine, in accordance with the advisories issued by MoA from time to time. During the first wave of COVID-19, 29,501 Covidpositive patients received treatment in 36 AYUSH CCCs and as many as 28,809 Covid-positive patients received treatment in 79 AYUSH CCCs during the second wave. Across Tamil Nadu, Kabasura Kudineer was distributed in containment zones, home quarantines, isolation wards, and CCCs. During the COVID-19 second wave, an exclusive Siddha Covid war-room (Unified Command Center) was created in the Directorate of Indian Medicine and Homoeopathy, Government of Tamil Nadu, Chennai. The State has taken various initiatives to prevent, mitigate, and manage COVID-19 through the Ayush system of medicine, predominantly Siddha-based treatment including:

- i. Prophylaxis treatment of the non-infected general population during the pandemic
- ii. Self-care Siddha treatment in COVID-19 asymptomatic or pre-symptomatic and positive individuals
- iii. Exclusive Siddha treatment for Covid-positive individuals with a mild infection, without any complications
- iv. Post-Covid care for fever, and for convalescent individuals

#### 3.29.2 Ayush Human Resource and Infrastructure

#### 3.29.2.1 Identified Role of Ayush HR

- Corporation of Chennai in collaboration with the Department of Indian Medicine appointed 15 Siddha doctors as liaison officers in each zone to monitor the Covid related activities.
- Ayush doctors were engaged in fever camps in all districts. They were part of the COVID-19 counselling and clinical management teams in the districts.
- Ayush health workers prepared and distributed the KSK concoction and concoction powder to frontline workers. They also distributed KSK in containment zones.
- AMOs and PG doctors were deputed to monitor the distribution of KSK in 200 CCCs and containment zones.
- Two doctors from each district were trained as master trainers through the training given by the MoA via a webinar related to the management of COVID-19. Furthermore, they trained all AMOs, PG Scholars and students in the month of April 2020.



#### 3.29.2.2 Ayush Infrastructure

- During the first wave of COVID-19, 36 Ayush CCCs including 33 Siddha CCCs, one Homoeopathy and two Yoga & Naturopathy CCCs were operationalized across Tamil Nadu.
- 79 Ayush CCCs, including 64 Siddha centres, three Ayurveda centres, one Unani, one Homoeopathy, and 10 Yoga & Naturopathy centres, were operationalized across Tamil Nadu during the second wave.



Figure 3.33: Ayush staff on round in Ayush CCC in Tamil Nadu



Figure 3.34: Patient receiving medicines after discharge in Ayush CCC in Tamil Nadu



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#### 3.29.3 Interventions and Initiatives

- Government of Tamil Nadu launched the Aarogyam Special Scheme on April 24, 2020, of Ayush interventions for COVID-19 and Kabasura Kudineer (KSK) has been indicated as a preventive concoction.
- KSK has been prepared in AMMA UNAVAGAM for public distribution in containment zones. 1,78,43,773 individuals in Chennai benefited from KSK. In other districts, 11,08,875 people in home quarantine and 20,52,892 people in containment zones were benefited from KSK and Nilavembu kudineer.
- A detailed SOP was prepared by the Head of State Siddha COVID Coordinator team and the same was adopted in all Siddha CCCs across the State.
- During the first wave, 29,501 Covid-positive patients received treatment in 36 AYUSH CCCs including 33 Siddha CCCs. During the second wave, 28,809 Covid-positive patients received treatment in 79 AYUSH CCCs including 64 Siddha CCCs across the State. Among these, 26,778 Covid patients were treated in Siddha COVID-19 Care Centres in the first wave and 23,587 patients in the second wave.



• Post-Covid Siddha OPDs were made functional in the State.

Figure 3.35: Post Covid Siddha OPD in Tamil Nadu

• Public was educated through awareness drives on easy homemade remedies. Simple herbal hand wash preparations, homemade herbal tea preparations, and healthy diet modifications were advised to the general public.



## 3.29.4 Digital Platform and Telemedicine

- Trained doctors from the Government Siddha Medical College, Arumbakkam in association with the Directorate of Public Health Services provided telemedicine services to patients regarding healthcare guidance and related queries.
- During the second wave of the COVID-19 an exclusive Siddha Covid War Room (Unified Command Centre) was created in the Directorate of Indian Medicine and Homoeopathy, Government of Tamil Nadu, Chennai. It worked as an integrated platform to monitor all 64 Siddha CCCs in all districts. It also facilitated Siddha telemedicine services to the general public.

## 3.29.5 Issues Occurred or Addressed

The State ensured the supply of medicines like Kabasura Kudineer, natural Immunity boosters, oils, other medicines and equipments like steam inhalers, etc. to all Siddha CCCs.



# 3.30 TELANGANA

#### 3.30.1 Overview and Objectives

Department of Ayush, Government of Telangana, has acted quickly and participated in activities like surveillance, tracing COVID-19 cases, strategies for minimizing COVID-19 spread, IEC development for COVID-19, and developed State-specific Ayush COVID-19 preventive and management protocols. In addition, the State ensured quick preparation and distribution of preventive medicines and converted Ayush teaching hospitals to quarantine centres, and level-1 isolation centres. The Department of Ayush took an active part in implementing Ayush protocols of prevention and treatment for Mucormycosis infection.

#### 3.30.2 Ayush Human Resource and Infrastructure

#### 3.30.2.1 Identified Role of Ayush HR

- Surveillance and contact tracing: 461 Ayush HR (206 Ayush medical officers (NHM) and 255 Ayush pharmacists) were utilized for surveillance and contact tracing throughout Telangana. Further, contact tracing, fever, infection survey and shifting of infected cases to nearby quarantine or isolation centres was also done.
- **COVID-19 testing:** 120 HR (lab assistants, nursing orderly and Data Entry Operators) were utilized for sample collections, shifting samples to labs and for data management.
- **IEC development and training related to hospital protocols:** 16 Ayush doctors participated in IEC development. 1,126 Ayush doctors got trained on the virtual platform related to hospital protocols. 1,094 Ayush staffs members were posted in Ayush quarantine/isolation centres and also provided training.
- **Telemedicine:** 80 Ayush doctors and 50 Pharmacists participated in telemedicine services for day-to-day health status monitoring of home isolated COVID-19 cases.
- Quarantine/Isolation facility: 464 doctors with 602 supporting staff provided services in 4 Ayush teaching hospitals, which were converted into quarantine/ Isolation Level-1 centre.
- Services of Ayush doctors (443) from NHM and other dispensaries, and 1,200 supporting staff were utilized in COVID-19 by district authorities for various activities.

#### 3.30.2.2 Ayush Infrastructure

• **Quarantine/Isolation facility:** 4 Ayush teaching hospitals were converted into quarantine/Isolation Level-1 centre offering 965 beds services round the clock.



• 4 Ayush teaching hospital facilities are being utilized as Covid testing sample collection centres.

## 3.30.3 Interventions and Initiatives

- Covid Raksha Kits were developed and distributed, including 20,000 Ayurveda kits containing Chyavanaprash lehyam, AYUSH-64 Tablet /Haritaki Tablet, Sanshamani Vati, Jeevanadhara liquid and Janthugna Dhoopana, to various frontline workers like police, doctors, nurses, health department personnel and others on request.
- Similarly, Homoeopathy kits consisting Arsenicum Album were distributed to approximately 3,25,001 individuals including frontline health workers, school staff/ children, as well as in the community.
- Mucormycosis care:
  - i. **Ayurveda:** The Government of Telangana initiated an integrated clinical study for the treatment of black fungus through Ayurveda and allopathy at two facilities on 137 patients.
  - ii. **Homoeopathy:** Following the government protocols, preventive kits were distributed to identified patients with risk factors on request.
  - iii. Unani: Unani medicines were also advised for the management of COVID-19 and Mucormycosis.
- Modules on Yogasana, Pranayama, Kriyas, naturopathy treatments, diet and daily routine, were developed by the Department of Ayush and implemented at quarantine/isolation centres. These modules were widely circulated via social media, television, and Radio programmes.
- Apart from social media engagement, a door to door awareness program on preventive measures was also rolled out. Information propagation was done through IEC, via social media and door-to-door services regarding preventive measures.
- Department of Ayush, Government of Telangana followed all the guidelines issued by the MoA, Gol.
- State has duly sanctioned the permission to Ayush drug pharmacies to manufacture Ayush Kwath tablets and herbal hand sanitizers.
- Ayush industry extended its support to the State by providing Chyavanprash Leyham and Sanshamani Vati.

## 3.30.4 Digital Platform and Telemedicine

• Virtual training was provided to all Ayush practitioners on hospital preparedness and Ayush protocols.



- Many awareness programmes based on Ayush guidelines for prevention, mitigation and management of COVID-19 was largely propagated on mass media and social media.
- Department of Ayush used telemedicine to reach out to home isolated patients to guide them appropriately on calls.



# **3.31 TRIPURA**

## **3.31.1 Overview and Objectives**

The State Government took various initiatives including assigning duties to Ayush MOs at CCCs in all districts and distributing AYUSH-64 and Arsenicum album-30 to the community as well as ensuring active participation of Ayush MOs at the PHC and CHC levels for Covid vaccination.

## 3.31.2 Ayush Human Resource and Infrastructure

## 3.31.2.1 Identified Role of Ayush HR

- The maximum number of Ayush MOs were posted at different PHCs, CHCs, SDHs, and DHs. They performed their duties at the IPD of CCCs for seven days followed by seven-day quarantine.
- 24x7 duties at the Emergency Response Support System (ERSS), screening points, and such other assigned places.





Figure 3.36: Ayush Staff involved in various activities in Tripura

 Ayush MOs participated in work related to Covid vaccination at the PHC and CHC levels.

## 3.31.2.2 Ayush Infrastructure

The Chandrapur Integrated Ayush Hospital, Gomati District was converted into a CCC.

## 3.31.3 Interventions and Initiatives

 The State promoted healthy living practices along with Ayurveda and Homoeopathic medicines and Yoga practices for Covid and post-Covid situations.



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- Ayush medicines were used as an adjuvant, in the COVID-19 cases, especially in asymptomatic to moderate cases. AYUSH-64 and Arsenicum album-30 were distributed amongst the community.
- Guidelines framed by the MoA were delivered to all levels from the State HQ through television spots, flex posters, and Yoga sessions in 442 health and wellness centres under the NHM across the State to promote awareness in people regarding Yoga practices for post-Covid self-care.
- The State utilized and adopted guidelines as well as advisories issued by the MoA.

## 3.31.4 Issues Occurred or Addressed

- One Ayush Programme Management Unit at the district level was felt necessary.
- More numbers of Ayush MOs and CHOs at Ayush facilities and more health and wellness centres were felt necessary.



# 3.32 UTTARAKHAND

#### 3.32.1 Overview and Objectives

In Uttarakhand, apart from providing full cooperation to the State health department, the Ayush department ran various initiatives for the management and prevention of COVID-19 through Ayush services, including distribution of immunity-boosting medicines, managing home isolation through the Covid helpdesk, post-Covid helpdesk, tele-consultation, and the Ayush Rath operation. During the peak of the Covid, the objectives of the Ayush department were to reduce the panic among the people, provide alternative Covid-management solutions through Ayush, generate faith towards Ayush in the public, and promote Ayush services.

## 3.32.2 Ayush Human Resource and Infrastructure

### 3.32.2.1 Identified Role of Ayush HR

During the spread of COVID-19, all Ayush field staff were seconded to the health department. They were assigned duties for surveillance, and contact tracing under the Integrated Disease Surveillance Programme (IDSP) teams. Ayush staffs were also part of the home isolation management teams in the districts, where they distributed medicine kits to the home-isolated patients. Ayush staff members also took care of contact tracing in containment zones. Ayush doctors managed the home-isolated, quarantined, and ill patients admitted in the CCCs. In a few districts, Ayush staff was also utilized for sample collection. The State Ayush Department, doctors, and the paramedical staff participated in each activity organized by the MoA.

#### 3.32.2.2 Ayush Infrastructure

All three campuses of Uttarakhand Ayurveda University were designated as CCCs by the district administration. Additionally, a floor of a 50-bed Ayush hospital under construction was also taken over by the district administration for Covid sampling in Haldwani (District Nainital).

## 3.32.3 Interventions and Initiatives

- The State Government approved the Ayush Raksha Kit for Covid prevention consisting Sanshamani Vati, Ashwagandha Vati, and a Kwath comprising Mulethi, Vasa, Giloy, Tulsi, and Trikatu, for 15 days. It was distributed to the frontline workers and the public as well as to the willing asymptomatic, mild, or moderately symptomatic home-isolated patients. Additionally, kits were distributed in CCCs in a few districts as an adjunct therapy, along with AYUSH-64. The Ayush Raksha Kit was in very high demand during the peak of the COVID-19 spread.
- The State Ayush department established a Covid helpdesk in each district, where Ayush doctors ran a short survey of home-isolated Covid patients.



Till September 30, 2021, the Ayush helpdesk had made 1,58,651 calls and each response was documented digitally. Home-isolated COVID-19 patients noticed and expressed satisfaction that the Ayush doctors' personal teleconsultations helped in reducing panic and fear. Before the Ayush Covid desk was established patients were unable to contact doctors directly, which generated a lot of panic and misinformation. Ayush doctors cleared a lot of misconceptions regarding COVID-19 and provided mental reassurance and support. This initiative generated more faith in the public towards Ayush, especially Ayurveda and Yoga.

- Apart from that, a survey-cum-tele-consultation was also provided to post-Covid patients. On May 5, 2021, a post-Covid helpdesk was created and 1,63,639 calls were received up to September 30, 2021. Out of these, responses of 83,299 post-Covid patients were digitally documented.
- Ayush Rath were operated in every district headquarter for the distribution and publicity of the Ayush Raksha Kit and AYUSH-64.
- Self-care Ayush guidelines were also provided to the public as per the MoA protocol. Pamphlets were distributed to the public along with making public announcements through Ayush Rath.
- Guidelines for Ayush practitioners for the prevention and management of COVID-19 as issued by the MoA were circulated among Government Ayurvedic medical officers and the same were adopted for tele-consultation.
- Licenses for the manufacture of Ayush Kwath, and other Ayush-based immunity boosters were issued on a priority basis. All guidelines issued by the MoA related to licensing of various formulations including sanitizers, were adopted immediately.

## 3.32.4 Digital Platform/Telemedicine

#### 3.32.4.1 State-wide Ayush Helpline Number

The Ayurvedic and Unani Services Department also launched a State-wide Ayush helpline number #9711-60-40-80 for providing free Ayurveda tele-consultation to the public during the second wave of the COVID-19 pandemic. The number was advertised by the department and two to three Ayurveda doctors, including specialists, were deputed in each district for the tele-consultation.

## 3.32.4.2 State Covid Ayush Desk

The Directorate of Ayurvedic and Unani Services, Uttarakhand established the Covid Ayush Desk on April 30, 2021 owing to the increasing number of COVID-19 cases. In each district, district-level teams were constituted with 4 to 12 Ayush MOs headed by a district nodal officer, for providing the National Clinical Management Protocol Ayush-based tele-consultation to COVID-19 patients. A centralized Ayush desk was also established at the Directorate for training, monitoring, data collection, and reporting.



The strategy adopted was as follows:

i.	A list of positive patients was shared daily by the State Health Directorate (State Covid Control Centre) with the State Ayush desk.
ii.	The State Ayush desk divided the list district-wise and forwarded it to all district Ayush desks for tele-consultation.
iii.	The district Ayush desk nodal officer further divided the list among the Ayush tele-consultants (Ayush doctors).
iv.	The tele-consultants called all the patients allotted to them (60-150) and asked them if they were willing to listen/follow the Ayush Covid-care protocol.
ν.	The tele-consultants counselled and guided the interested home- isolated patients and advised them to avoid panic; they assured the patients that the Ayush department is with them.
vi.	After assessment and evaluation, the consulting doctor gave a prescription based on the patient's symptoms. The tele-consultants also provided details of the nearest Ayush hospitals, where the patient's relative or attendant could reach out for medicines and get Ayush Raksha Kit, and AYUSH-64.
vii.	If the patient's attendants were unable to visit the nearby hospitals, the patient's address was mapped online, which was then shared with the mobile Ayush Rath team for home delivery of the medicines and kit.
viii.	During each call, the tele-consultant recorded or documented the patient's responses.
ix.	At the end of the day, the State Ayush helpdesk compiled all the data and/or responses and prepared a daily report based on the tele- consultation and shared it with the Government.
х.	The data of all the patients who were willing to take Ayush interventions — the Ayush Raksha Kit and AYUSH-64 — was compiled district-wise on the same day by the State Ayush desk and was shared with the district mobile teams, the Ayush Rath teams, and the Kit-dispensing centres (Arogya Kendra) for the distribution of medicines the next day.
xi.	Up to September 30, 2021, total 1,58,651 calls were made by the Ayush desk, and each response was documented digitally. Out of the total number of cases, 80,028 were home-isolated COVID-19 patients and they received consultation for Ayush treatment.



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#### 3.32.4.3 Post-Covid desk

To manage the post-Covid complications through Ayush and to follow-up on patients who were given tele-consultation during the COVID-19 pandemic, the post-Covid desk was set up in every district from May 2021, where Ayurveda tele-consultants communicated with the post-Covid patients to ask follow-up questions, and suggest Ayurveda and Yoga interventions for their symptoms, followed by digital reporting of their responses and inputs. All the data was compiled and a report was generated in a similar way. Up to September 30, 2021, as many as 1,63,639 follow-up calls were made. Out of these 83,299 responses of post-Covid patients were documented digitally.

## 3.32.5 Issues Occurred or Addressed

- As the State health department is the nodal department for the implementation of various Covid guidelines, there were constraints in the implementation of Ayush-related guidelines.
- Ayush HR was seconded to the health department during the pandemic and was utilized in the management of the spread of COVID-19 as per their demand. This led to the shutdown of various Ayurvedic hospitals and dispensaries in the State. In fact, the Ayush department's own HR was not available for Ayush-related activities for Covid management in some districts.
- Due to the lack of a budget, the Ayush department was not able to purchase medicines in the required amount for Covid management and for other purposes.



# 3.33 UTTAR PRADESH

## 3.33.1 Overview and Objectives

In Uttar Pradesh, apart from providing full cooperation to the State health department, the Ayush department ran various initiatives for the management and prevention of Covid through Ayush services, including the distribution of immunity-boosting medicines. During the peak of the COVID-19 second wave, home isolation was managed through the Covid helpdesk, post-Covid helpdesk, and tele-consultation. The State took various initiatives with the following objectives:

- Reduce panic in the public through counselling.
- Provide alternative Covid management solutions through Ayush.
- Generate faith in the public towards Ayush.
- Promote Ayush services.

## 3.33.2 Ayush Human Resource and Infrastructure

## 3.33.2.1 Identified Role of Ayush HR

- i. **Training of HR:** Total 6,386 Ayush doctors and paramedical staff were trained, and they were assigned duties at L1 and L2 hospitals, with RR teams, screening of COVID-19 patients at railway stations, and bus stations in all districts, since March 2020. They distributed Ayush drugs for the prevention of COVID-19 and reached out to the home-isolated and home-quarantined COVID-19 patients.
- ii. During the spread of COVID-19, all Ayush field staff was seconded to the health department. They were assigned duties like surveillance and contact tracing with the IDSP teams. Ayush staffs were also part of the home-isolation management team in various districts, where they distributed medicine kits to the home-isolated patients. Ayush staff also conducted contact tracing in containment zones. Ayush doctors managed home-isolated, quarantined, and COVID-19 patients admitted in CCCs. In a few districts, the Ayush staff were also assigned for sample collection.
- iii. Ayush doctors provided tele-consultation to home-isolated patients.

## 3.33.2.2 Ayush Infrastructure

Various Ayush institutions of Uttar Pradesh were utilized as CCCs by the district administration.





Figure 3.37: Covid ward at Government Ayurvedic College & Hospitals, Varanasi and oxygen plant installed at the Institute.

## 3.33.3 Interventions and Initiatives

The State Government approved the Ayush Raksha Kit (Ayuraksha Kit), Homoeopathic and Unani kits for the prevention of COVID-19. These were distributed to frontline workers, home-isolated patients, and the public. The Ayuraksha Kit included Sanshamani Vati, Chyavanprash, Ayush Kwath, Anu Taila, and AYUSH-64. The Homoeopathic Kit included Arsenicum album-30, Bryonia alba-30, Rhus Toxicodendron-30, Eupatorium perfoliatum-30. The Unani Kit includes Sharbat-e-Unnab, Habb-e-bhukhar, Tirq-e-Nazla, Arke-e-Azeeb, Habb-e-Hindi-Zeeqi, and Habb-e-Karanjwa. The Ayuraksha Kit and Arsenicum album-30 were also in very high demand during the peak of the COVID-19 second wave. These were distributed both for the prevention and for the home-isolated asymptomatic, mild, or moderately symptomatic patients, to willing patients. Patients in quarantine were also provided the Ayuraksha Kit and Arsenicum album-30. • Yoga practice with Yoga protocol was conducted through the virtual medium at Yoga Wellness Centres (YWCs).

### Availability of Ayush Drugs

• The network of 3,934 Ayush dispensaries and 19 Ayush medical colleges and associated hospitals have been utilized for distributing Ayush drugs for the prevention of COVID-19 and to the home-isolated and home-quarantined COVID-19 patients in every nook and corner of the State as per the MoA guidelines. The list of beneficiaries is detailed in Table 7.

Facilities	Medicine name	Beneficiary (through the Department of Biotechnology [DBT], total patients)
Ayurveda	AYUSH-64, Sanshamani Vati, Agastya Haritaki, Anu Taila, Ayush Kwath	2,01,40,384
Unani	Sharbatte-Unnab, Habbe-bhukhar, Tiryake Nazla, Arke-e-Azeeb, Arke- e-Asgandh, Habb-e-Hindi-Zeeqi, Habb-e-Karanjwa	27,00,753
Homoeopathy	Arsenicum album-30, Bryonia alba-30, Rhus toxicodendron-30, Eupatorium perfoliatum-30	1,09,88,104
	TOTAL	3,38,29,241

#### Table 3.7: Number of beneficiaries of Ayush medicines in Uttar Pradesh

Source: State Ayush, Uttar Pradesh

- A daily routine programme (both dietary and lifestyle advice) was recommended, to prevent COVID-19. The routine prescribed in Ayush was issued based on the geographical conditions of Uttar Pradesh.
- After establishing the Covid desk, Ayush doctors provided tele-consultation to every home-isolated patient, which helped in reducing panic.
- Self-care Ayush guidelines were provided to the public as per the MoA protocol. Pamphlets were distributed supported by public announcements through Ayush LED vans.
- Guidelines for Ayush practitioners for the prevention and management of COVID-19, as issued by the Gol, were circulated among all Government Ayush practitioners and the same was adopted to provide tele-consultation.
- All guidelines issued by the MoA related to licensing for the manufacture of various formulations, including sanitizers, were adopted immediately.
- Awareness fairs and camps were conducted by Ayush hospitals and colleges during Poshan Maah and during the COVID-19 pandemic and especially in the second wave.



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#### 3.33.4 Digital Platform and Telemedicine

- **Development of Ayush Kavach Mobile App:** The State developed Ayush Kavach Mobile App and is operational since May 2020, for the prevention and management of COVID-19 pandemic. After the Aarogya Setu App, this App has been one of the most downloaded App, with approximately two million users. The following activities are carried out by this App:
  - a. Awareness about the prevention and management of COVID-19.
  - b. Patients can directly contact specialized Ayush doctors for medical consultation through this App. More than 26,000 consultations were provided till October 22, 2021.



- c. Registration of the Covid vaccine was also made possible on the App.
- d. Live yoga sessions were telecasted every morning at 8 a.m. for patients and public for boosting their immunity.
- e. Ayush experts' live programme, AYU-SAMVAD was telecasted every evening for the prevention of COVID-19 and other general diseases.
- The Uttar Pradesh Government established integrated Covid command and control centres in all districts, headed by district nodal officers.
- Ayush doctors as tele-consultants provided counselling and guidance to interested home-isolated patients. They advised patients to avoid panic and assured them that the Ayush department is with them.
- Tele-consultants also provided the details of the nearest Ayush dispensaries, where relatives or attendants of Covid patients could collect medicines like Ayush Kwath, AYUSH-64, Agastya Haritaki, and Anu Taila (nasal drops) and the Homoeopathic medicine Arsenicum album-30. If the patient's attendant was unable to visit the hospital dispensaries, then the address was mapped online or via a phone call and home-delivery of medicines was facilitated. After each consultation, the patient's response was documented and the follow-ups were done by the tele-consultant.
- Awareness campaigns were conducted through social media platforms like Facebook and Twitter, as well as via LED vans.

Figure 3.38: Ayush Kavach App Dashboard



# 3.34 WEST BENGAL

## 3.34.1 Overview and Objectives

Following the guidelines issued by the MoA for combating the COVID-19 pandemic, the West Bengal Ayush division under the H&FW department of West Bengal took several initiatives in this regard. With a set-up of 18 Ayush medical colleges and hospitals, 844 Ayush dispensaries, 44 Ayush specialty wings, and clinics directly under its control and 1,178 gram panchayat OPDs, the department utilized its substantial resources effectively and judiciously.

## 3.34.2 Ayush Human Resource and Infrastructure

## 3.34.2.1 Identified Role of Ayush HR

By April 2020, more than 2,000 Ayush personnel were trained online regarding COVID-19 prevention, control, and management and by August 2020, more than 1,100 Ayush doctors had completed training modules on the iGOT platform and the Ayush Sanjivani app. Ayush HR was deployed in a variety of roles like:

- 1. Admission cell for Covid patients at the State headquarter
- 2. Duty in Covid designated hospitals, safe homes, and quarantine centres
- 3. Contact-tracing of Covid positive patients
- 4. Telemedicine through Ayush system
- 5. Attending patients in fever clinics
- 6. Screening and counselling of out-station students, migrant workers, and travellers
- 7. Control room charges at district and block levels
- 8. Rapid response team members
- 9. Liaison with the general administration and for inter-departmental coordination at the district level
- 10. Training, database compilation, and coordination at the district level

During the second wave of COVID-19, in addition to their normal OPD duties, services of the Ayush personnel were mainly utilized for admission cell of Covid patients at the State headquarters, in Covid safe homes, for tele-medicine through the Ayush system, and being in-charge of control rooms at the district and block levels.

## 3.34.2.2 Ayush Infrastructure

The full infrastructure of two integrated Ayush hospitals, one at Tapshikhata in Alipur Duar district and another at Khasjungle mouza in Paschim Medinipur district, was utilized as COVID-19 hospitals for treating Covid-affected patients, maintaining standard Covid-protocol.



Details of the Ayush infrastructure utilized are provided in Table 8.

Stream	Educational Institutions	Dispensaries Including CHCs & DHs	Speciality Wings and Clinics	Gram Panchayat OPD
Ayurveda	5	296	26	200
Homoeopathy	12	545	18	978
Unani	1	3	-	-
Yoga	-	In Ayush Wellness Clinics	-	-

**Table 3.8:** Details of the Ayush infrastructure utilized in West Bengal

Source: State Ayush, West Bengal

## 3.34.3 Interventions and Initiatives

- For prevention and immune modulation, Ayush Kwath and Arsenicum album-30 (a homoeopathic preparation) were distributed among the masses through Ayush dispensaries and educational institutes. Special camps in this regard were organized in different areas at the request of the authorities. Total Ayush Kwath beneficiaries were 1,00,340 and Arsenicum album beneficiaries were 6,88,900.
- Physical demonstration, banners, and handbills on the proper use of masks, hand-hygiene methods and, cough etiquettes, etc. were put up in almost all Ayush setups. Total 6700 flex/banners and 4,500 Posters were commissioned and 3,45,000 handbills were widely distributed from dispensaries and hospital OPDs.
- Yoga demonstrations on prevention, recovery, and mitigation of Covidrelated stress were conducted in Ayush grams, Ayush wellness centres as well as during various celebrations and health-related days all over the State.
- 2,562 public health outreach camps were organized and 1,75,488 patients benefited.

## 3.34.4 Digital Platform and Telemedicine

- Campaigning on "Covid-appropriate behaviour" in the form of jingles and cartoons, specific to an Ayush-oriented approach, were being aired on television channels regularly. Faculties of Government Ayush institutions also participated in health talk shows on various television channels.
- Telemedicine services through the Ayush system were provided in the State during the second wave of COVID-19. Total beneficiaries were 9,960.
- Social platforms like WhatsApp groups, college websites, Facebook, and Twitter pages were utilized for dissemination of COVID-19 related information.



CHAPTER

# Conclusion and Way Forward

The MoA, GoI has played an active role in strengthening the efforts spearheaded by MoHFW for the mitigation and management of COVID-19 since its inception in January 2020 in India. The MoA has issued several guidelines, advisories, memorandums, protocols, and collaborated with other line ministries, State and UT Governments for the prevention and management of COVID-19 and post-Covid cases, and addressing complications. The Ayush HR was identified as Covid warriors and they were ensured appropriate training. MoA has nudged States/UTs for utilization of Ayush HR, infrastructure, digital platforms, and tele-medicine, and disseminated necessary directions to State Ayush drugs licensing authorities, as well as framed research protocols for facilitating research activities related to COVID-19.

Various States and UTs have adopted guidelines issued by the MoA and implemented them in their States as per the feasibility, while many have also done innovations. Some States have adopted their State-specific policies and launched various programmes for the prevention and management of COVID-19 and post-COVID-19 cases.

As the healthcare system was overwhelmed during the pandemic, Ayush HR and infrastructure was substantially used by the States to mitigate COVID-19. Ayush preventive medicines were distributed by the State Governments for the safeguard of the general public and Covid warriors. Ayush medicines have also been used as an add-on therapy to standard care as well as standalone therapy in asymptomatic, mild to moderate symptomatic Covid cases in several States. Various preventive measures, such as the use of prophylactic medicines, dietary and lifestyle regimens, Yoga practice, nasal instillation of medicated oil, and so on, were widely propagated by the States through awareness campaigns and digital platforms. The general public, quarantined and home isolated Covid cases were provided support, guidance, counseling, and consultation through tele-consultation and helpline numbers. Some of the States have developed their own Ayush mobile-based App for the facilitation of tele-medicine and dissemination of preventive advisories like self-care measures, yoga videos, and so on. All States used Ayush personnel in a variety of duties, ranging from surveillance to postings at CCCs and hospitals. States facilitated the Ayush industry to ensure uninterrupted supply of Ayush medicine during COVID-19 pandemic. Some of the States have also initiated Ayush mobile van services for providing doorstep services to the public. Few States launched their State-specific programmes for prevention and



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories management of cases as well as established Ayush CCCs, CHCCs, Post-Covid clinics, and fever/ flu clinics. Sharing of these practices provides States and UTs with the opportunity to learn from one another, and to equip themselves against Covid.

Ayush departments from various States and UTs have also lent their full cooperation to the health department and worked in cooperation, thus strengthening the fight against COVID-19. However, there were some constraints faced by the Ayush departments in some States and UTs, such as inadequate Ayush staff, insufficient funds, statutory restrictions for treating COVID-19 patients through Ayush intervention, and lack of autonomy for taking initiatives through Ayush interventions. In addition, few States did not have independent Ayush facilities or infrastructure.

There is a need to revisit the State policies to further strengthen the traditional healthcare systems in the country. In view of the rising demand for Ayush modalities and therapeutics, the limitations of statutory regulations towards Ayush systems need to be relooked. There should be a proper mechanism for the inclusion of Ayush systems in such kinds of crises from the initial phase. The Ministry of Ayush should devise mechanisms for centralized data collection and real-time monitoring with the States and UTs. It is evident that the Ayush system has a country-wide network and is playing a very important role in the mitigation of COVID-19. Evidence-based Ayush interventions can strengthen India's fight against COVID-19. Ayush preventive measures play a vitally important role in maintaining the well-being of people; various treatment modalities support the existing standard treatment protocols and help in preventing and managing Post-Covid complications. The integration of Ayush services with the contemporary system can play a vital role in strengthening India's fight against COVID-19 and similar crises in the future.



# ANNEXURE-I: MAJOR GUIDELINES, ADVISORIES, NOTIFICATIONS, AND PROTOCOLS ISSUED BY THE MOA, GOI

Category	Major guidelines, advisories, notifications, and protocols issued by the MoA, GoI		
	Ayurveda preventive measures for self-care during the COVID-19 pandemic.		
	• Self-care guidelines for prevention and immunity with special reference to respiratory health dated March 30, 2020.		
	• Telemedicine practices guidelines for Ayurveda, Siddha, Unani and Homoeopathy practitioners dated April 7, 2020, and April 10, 2020.		
	• Guidelines for registered practitioners of respective systems of Ayush to help uniformly in the management of COVID-19 pandemic.		
	Post-Covid Management Protocol dated September 13, 2020.		
	<ul> <li>National Clinical Management Protocol based on Ayurveda and Yoga for the management of COVID-19 dated October 6, 2020.</li> </ul>		
	<ul> <li>Guidelines for Ayurveda, Unani, Homoeopathy, and Siddha Practitioners for COVID-19 patients in home isolation dated April 26, 2021, April 28, 2021, and April 29, 2021.</li> </ul>		
Related to self- care, prevention,	Advisory for Ayush practitioners on ethical practices during COVID-19     dated April 28, 2021.		
and management of COVID-19 and Post-Covid cases/	<ul> <li>Directions for Ayush fraternity/physicians to prescribe Ayush-64 and Kabasura Kudineer to Asymptomatic, Mild and Moderate COVID-19 patients in Home Isolation dated May 5, 2021.</li> </ul>		
complications.	<ul> <li>Information for Homoeopathy practitioners for Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis dated May 27, 2021.</li> </ul>		
	<ul> <li>Home-care guidelines and advisory for Ayush practitioners about prophylactic care in children dated June 10, 2021.</li> </ul>		
	<ul> <li>Information for Ayurveda Practitioners for Prophylactic, Symptomatic Management of Suspected and Diagnosed cases of Mucormycosis dated June 18, 2021.</li> </ul>		
	Yoga protocol for the psychosocial rehabilitation of COVID-19 patients (CCRYN, NIMHANS, and SVYASA.		
	Campaign bulletins on "AYUSH for Immunity".		
	<ul> <li>Ayush preventive measures for self-care during COVID-19 pandemic (revised time to time).</li> </ul>		
	• Ayush recommendations for the public on holistic health and well-being "Preventive measures and care during COVID19 and long COVID-19"		



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Category	Major guidelines, advisories, notifications, and protocols issued by the MoA, Gol
Research on COVID-19 related notification and protocols	<ul> <li>Gazette notification dated April 21, 2020, for defining the conditions for undertaking the research on COVID-19 to generate evidence through Ayush systems of Ayurveda, Siddha, Unani, and Homoeopathy.</li> <li>Guidelines for AYUSH Clinical Studies in COVID-19 dated May 2, 2020.</li> </ul>
Memorandum/ Guidelines related to Ayush Industry	<ul> <li>Memorandum for expediting the process for grant of approval/license/ renewal of license for manufacturing of ASU immunity-boosting healthcare products and sanitizers dated April 4, 2020.</li> <li>Memorandum to expedite the process of the licensing and approval of applications for the manufacturing of AYUSH-64 dated April 29, 2021.</li> </ul>

Source: Ministry of Ayush



# ANNEXURE-II: STATES/UTs UNIQUE INITIATIVES

All 34 States and UTs, who have shared the information related to Ayush-based practices for mitigation and management of COVID-19, have implemented and disseminated the GoI advisories, guidelines, notifications, and protocols as per the feasibility. Apart from GoI guidelines, States/UTs have also taken some unique initiatives as listed below:

#### **State-specific Unique Initiatives**

#### **Bihar:**

- Ayush Tele-consultation App to accelerate tele-consultation services
- Post-Covid cases management through General OPDs and IPDs

#### Chhattisgarh:

Distribution of Rog Pratirodhak Kadha through Ayush dispensaries

#### Delhi:

- Adjuvant Ayush treatment was provided at various Allopathic Covid Hospitals
- Dietary and Self-care Measures implemented for Covid patients at various dedicated Allopathic Covid Hospitals
- Establishment of Ayush Post-Covid Centres

#### Goa:

- Establishment of Ayush Post-Covid Clinics
- Fresh appointment of Ayush Medical Officers on contractual basis for Covid duties at CCCs
- Yoga OPDs were also established to provide specific postural and breathing advice for specific conditions
- Re-appropriation of NAM funds for the urgent procurement of Ayurvedic and Homoeopathic prophylactic medicine

#### **Gujarat**:

- Integration of AYUSH-64 in treatment protocol in 15,312 Community CCCs under the campaign: "My Village, Corona Free Village"
- Operationalization of Dhanwantari and Sanjeevani Rath
- Telephonic guidance through helpline Number #104 related to Ayush preventive and treatment measures related to COVID-19
- COVID-19-related Ayush Health Lecture Series

#### Haryana:

- The State launched Ayush Kwath with the scheme name "Jan Arogya Kawach scheme"
- Telemedicine facility through tollfree number #1075 for guidance related to Ayush medicines and consultation

#### **Himachal Pradesh:**

 Ayush Department was designated as a secondary agency for Emergency Support Functions including Public Health and Medical Preparedness and assigned same functions as Primar agency (HFW Department)



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#### **State-specific Unique Initiatives**

- Ayush Ghar Dwar Programme under the theme "Happy Himachal Swarnim Himachal" for home isolated COVID-19 positive patients
- Ayush Quick Response Teams
- Utilization of Ayush staff in "Active Case Finding Campaign"

#### Jammu and Kashmir:

- Arogya Sampark, Public Health Outreach Program
- Arogya Sampark Dashboard for real-time tracking of COVID-19 related efforts of Ayush J&K
- Inter-sectoral convergence with other line departments, banks, NGOs, and social
  organizations for outreach activities and Ayush immunity booster medicines distribution
- Constitution of Block Level Ayush Teams
- Ayush Immunity Booster Kits

#### Jharkhand:

Tele-consultancy through Helpline No. #104

#### Karnataka:

- Ayush staff and PG scholars/ interns were posted to manage "Apthamitra Sahayavani App" and helpline phone number #14410 for Covid related consultation
- State specific Ayurveda, Unani, and Homoeopathy guidelines

#### Kerala:

- State Ayush Covid Response Cell (SACRC)
- Ayur Raksha Clinics
- Post-Covid management through Siddha Hospitals
- Swasthyam, Sukh Ayushyam, Amrutham, Bheshajam, and Punarjani Programmes for prevention, quarantined cases, management of Covid, and Post-Covid cases
- SAVE Campaign (S for SMS, sanitation, mask and social distancing, A for Ayurveda, V for vaccination, and E for exercise, Yoga) was initiated

#### Madhya Pradesh:

- Formation of Ayush State's Task-Force and Expert Committee
- Arogya Kashayam-20 was recommended for quarantined individuals and COVID-19 positive and asymptomatic cases
- "Yoga se Nirog" programme was implemented with high-end use of IT for training, demonstration, implementation, and data management
- "Jeevan Amrit Yojana", which includes distribution of Trikatu Churna as a prophylactic medicine at the doorstep
- AyushQure App

#### Maharashtra:

- Formation of State's Ayush Task-Force
- State advisories for use of Ayush medicines, for prevention and management of COVID-19

#### Manipur:

• AYUSH immune plus, an Ayurvedic Herbal formulation produced by the State Medicinal Plants Board, Manipur, was launched with a mandate to improve the immunity of the people

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#### **State-specific Unique Initiatives**

#### Odisha:

- Mo Beach Yoga programme for COVID-19 cured patients
- Empanelment of 100 Yoga instructors for the Yoga programme

#### **Puducherry:**

- Establishment of temporary Ayush Covid-care hospital
- Post-Covid cases rehabilitation through Ayush intervention

#### **Rajasthan:**

- Establishment of Covid helpline and Post-Covid Centres
- Establishment of Helpline Centre at District Headquarters

#### Sikkim:

 Composite programme was launched for awareness regarding COVID-19 and its prevention through Ayush activities

#### Tamil Nadu:

- Establishment of Ayurveda, Unani, Siddha, and Homoeopathy CCCs
- Siddha Covid War room (Unified Command Center)
- Arogyam Special Scheme of Ayush interventions for COVID-19

#### **Telangana:**

- State-specific Ayush COVID-19 preventive and management protocols
- Ayush Covid Raksha Kits were developed and distributed

#### Tripura:

Deployment of Ayush MOs for the Emergency Response Support System

#### Uttarakhand:

- Covid Helpdesk
- Post-Covid helpdesk to manage the post-Covid complications through Ayush intervention and to follow-up on patients who were provided tele-consultation during the COVID-19 pandemic
- Ayush Raksha Kit
- Operationalization of Ayush Rath

#### **Uttar Pradesh:**

- Ayush Raksha Kit
- Covid Helpdesk
- Ayush Kavach Mobile App
- Integrated Covid Command and Control Centre

Source: Information shared by the States/UTs



# ANNEXURE-III: DISTRIBUTION OF PROPHYLACTIC MEDICINES BY STATES/UTS

S. No	State/UT	Distribution of Ayush based Prophylactic medicines	Details of Beneficiaries/doses/ Units distributed
1	Andaman & Nicobar Islands	Ayurvedic medicines	1,18,181 beneficiaries
		Arsenicum album-30	23,433 beneficiaries
	Andhra Pradesh	Arsenicum album	34,83,750 doses.
		Sanshamani Vati	5,95,000 doses.
2		Chyavanprash	1,07,695 units.
		Agastya Haritaki Rasayan	47,481 units
3	Arunachal Pradesh	Ayush prophylaxis medicine	Distributed through all Ayush health facilities
4	Assam	Immunity-boosting medicines.	Distributed to frontline workers and the public.
5	Bihar	Ayush Kadha and Joshanda	Distributed through the Ayush institutes and Ayush Health facilities.
		Arsenicum album-30	9,000 beneficiaries
6	Chhattisgarh	Rog Pratirodhak Kadha	Distributed through Ayush dispensaries.
7	D&N and D&D	Arsenicum album-30	Distributed to the masses
/		Ayush-Kadha	Door-to-door distribution
8	Delhi	Sanshamani Vati	1,00,000 beneficiaries
0		Arsenicum album-30	1,00,000 beneficialies
9	Goa	Ayush prophylactic medicines	Distribution in various organizations and to the public.
10	Gujarat	Amrut Peya Ukala (Dashamula Kwatha 20 ml, Pathyadi Kwatha 20 ml, Trikatu Churna 2 gm), one-day prepared dose	13,53,00,000 doses
		Sanshamani Vati (7-day dose)	1,18,00,000 doses
		Arsenicum album-30 (4-day dose)	7,06,00,000 doses
11	Haryana	Ayurvedic immunity-boosting medicines	26,72,000 beneficiaries (public) and 12,06,000 beneficiaries (Containment zones)
12	Himachal Pradesh	Ayush Kadha and	7,80,084 packets of Kadha distributed to frontline Covid warriors
		Arsenicum album-30	Arsenicum album-30 distributed to the sanitary workers of the urban local body



#### Annexures

S. No	State/UT	Distribution of Ayush based Prophylactic medicines	Details of Beneficiaries/doses/ Units distributed
17	13 Jammu & Kashmir	Ayush Kwath	2,89,000 units
15		Ayush-64	1,92,000 units
14	Jharkhand	Arsenicum Album-30 and Ayush Kwath	Distributed among people in quarantine centres and to health workers
15	Karnataka	Immunity-boosting Ayush drugs	3,77,871 beneficiaries (frontline workers)
		Ayush medicines	58,959 beneficiaries (CCCs)
	16 Kerala	Ayush prophylactic medicines	8,09,756 beneficiaries (quarantined persons)
16			15,48,128 beneficiaries (Public < 60 years of age)
10			8,19,167 beneficiaries (Public > 60 years of age)
		Homoeopathy Immunity Booster medicines	02,00,00,000 beneficiaries
17	Lakshadweep	Ayush prophylactic medicines	Distributed amongst community
18	Madhya Pradesh	Ayurveda prophylactic medicines	Distributed doorstep throughout the State
19	Manipur	Arsenicum album-30	2,27,884 beneficiaries
19		AYUSH immune plus	Distribute amongst general masses.
20	Meghalaya	Ayush prophylactic medicines	Distributed amongst community
21	Mizoram	Ayush prophylactic medicines like Arsenicum album and Chyavanprash	Distributed across the State
22	Odisha	Ayush prophylactic medicines	Distributed across the State
23	Puducherry	Ayurveda prophylactic medicines	Distributed in Containment Zones and to public
		Arsenicum album-30	9,00,000 beneficiaries
24	Punjab	Ayush prophylactic medicines	Distributed to the frontline workers, quarantine and isolations centres
		Ayush Kwath and Giloy Churna	96,47,000 beneficiaries (Public) and 6,80,611 beneficiaries (corona warriors)
		Kapurdhara Vati	2,59,982 beneficiaries
25	Rajasthan	AYUSH-64, Jwarahara Kashaya, Sanshamani Vati, Anu Taila, and Ashwagandha	7,70,000 beneficiaries
		Ayurveda medicines for boosting immunity	29,227 beneficiaries (quarantined people)



Mitigation and Management of COVID-19: Compendium of Ayush-Based Practices from Indian States and Union Territories Annexures

#### Annexures

S. No	State/UT	Distribution of Ayush based Prophylactic medicines	Details of Beneficiaries/doses/ Units distributed
26	Sikkim	Ayush immunity booster medicines	40,000 beneficiaries
27	Tamil Nadu	Kabasura Kudineer (KSK) and Nilavembu Kudineer	1,78,43,773 beneficiaries in Chennai 11,08,875 beneficiaries in home quarantine and 20,52,892 beneficiaries in containment zones
00	Telangana	Ayurveda kits	20,000 beneficiaries.
28		Homoeopathy kits	3,25,001 beneficiaries.
29	Tripura	AYUSH-64 and Arsenicum album-30	Distributed amongst community
30	Uttarakhand	Ayush Raksha Kit	Distributed to the frontline workers, home-isolated patients, and the public.
31	Uttar Pradesh	Ayush Raksha Kit, Homoeopathic and Unani kits	3,38,29,241 Beneficiaries
70	West Bengal	Ayush Kwath	1,00,340 Beneficiaries
32		Arsenicum album	6,88,900 Beneficiaries

Source: Details shared by the States/UTs





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