

CENTRAL AYURVEDA RESEARCH INSTITUTE  
BENGALURU

Annual Progress Report 2021-22

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## I. ADMINISTRATIVE REPORT

### 1. Staff pattern for the year-2021-22 (01.04.2021 to 31.03.2022)

Sl. No	Name of the sanctioned post	No. of posts Sanctioned	Name & Designation of the persons working against post	No. of Posts Vacant	Sex M/F	Whether SC/ST OBC	Remarks
1.	Assistant Director (Ay.)	01	Dr. Sulochana Bhat AD (Ay.) In-charge	-	F	Neither	-
2.	Research Officer (Ay.)	06	Dr. Sanjay Kumar Giri, RO (Ay.)	-	M	OBC	-
			Dr. Shashidhar H. Doddamani, RO (Ay.)		M	OBC	-
			Dr. Shubhashree M.N., RO (Ay.)		F	Neither	-
			Dr. Raghavendra Naik, RO (Ay.)		M	ST	Temporarily posted to BIS, New Delhi for six months from 22-11-2021
			Dr. Bhavya B.M, RO(Ay.)		F	SC	-
			Dr. Rajendra Kumar, RO(Ay.)		M	Neither	-
3.	Research Officer (Path.-Medical)	01	Dr. Anchan Vidyashree Vittal, RO (Path.)	-	-	OBC	-
4.	Research Officer (Bio-Chem.)	01	Vacant	01	-	-	-
5.	Research Officer (P'cognosy)	01	Vacant	01	-	-	-
6.	Research Officer (Bot.)	01	Dr. V. Rama Rao, RO (Bot.)	-	M	SC	-
7.	Assistant Research Officer (Chem.)	01	Vacant	01	-	-	-
8.	Assistant Research Officer (P'cognosy)	01	Vacant	01	-	-	-
9.	Research Assistant (Bot.)	02	Smt. Nazneen, RA(Bot.)	-1	F	OBC	-
			Ms. R.Bhavana, RA(Bot.)		F	Neither	-
			Smt. Ritu Sinha, RA (Bot.)		F	Neither	Reported duty on 12-04-2021 on promotion from LT(Tissue Culture) to RA(Bot.)

10.	Research Assistant(Chem.)	02	Sri. Suresh kumar, RA (chem.)	01		OBC	-
11.	Sister-in-charge	01	Vacant	01	-	-	-
12.	Staff Nurse	03	Vacant	03	-	-	-
13.	Assistant	01	Vacant	01	-	-	-
14.	UDC	03	Vacant	03	-	-	-
15.	Stenographer Grade – I	01	Vacant	01	-	-	-
16.	Social Worker	01	Vacant	01	-	-	-
17.	Field Collector	01	Vacant	01	-	-	-
18.	Pharmacist Grade I	02	Sri. Niloy Banerjee, Pharmacist	01	M	Neither	-
19.	Lab Technician	04	Smt. G. Neetha, MLT	02	F	OBC	-
			Smt. K. H. Hemavathi, MLT		F	Neither	-
20.	Lab Assistant	01	Sri. A. Sathish, Jr. MLT	-	M	SC	-
21.	LDC	03	Ms. Jyothi.G, LDC	02	F	ST	-
22.	Lab Attendant	04	Sri. Delvin George Lab Attendant	03	M	Neither	-
23.	Driver	01	Sri. H Yathish Kumar, Driver	-	M	ST	-
Multi Task Staff (MTS) category							
24.	Attendant (Survey)	01	Vacant	01	-	-	-
25.	Cook	02	Vacant	02	-	-	-
26.	Field Attendant	02	Vacant	02	-	-	-
27.	Ward Ayah	03	Vacant	03	-	-	-
28.	Chowkidar	03	Vacant	03	-	-	-
29.	Kitchen Servant	01	Vacant	01	-	-	-
30.	Peon	03	Sri. J. Santhosh Trainee (MTS)	02	M	Neither	-
31.	Safaiwala	03	Sri. H. G. Gangarangaiah (MTS) Safaiwala	02	M	Neither	-
32.	Ward Boy	03	Vacant	03	-	-	-
	Total	64	22+1* (Filled)	43	-	-	-

\* Ms. Sonam Chandhok, Assistant Research Officer (Clinical Psychology) (Category-Neither) is deployed though the post does not exist. Reported duty on 04.06.2021.

#Services for the following categories obtained on Direct/ contract basis (Outsourcing)

i. Office Assistant :

1. Sri. M Janardanan
2. Sri. M Girijavallabhan

(Directly engaged as they are ex- employees of the institute)

ii. Office Assistant(Hindi): Smt. Rashmi Kulkarni

iii. Office Assistant:

1. Sri. Girish. C
2. Sri. Chandranatha R.S.

iv. House keeping staff(MTA):

1. Smt. Soumya M.
2. Smt. Mala .V
3. Sri. Raghavendra G

v. MTA:

1. Sri. Nagaraju D.S
2. Sri Sampath Kumar. M
3. Sri. Sridhar Y
4. Sri. Gangadhar (from 07-07-2021)

vi. MTA (Chowkidar):

1. Sri. Harish M.G
2. Sri. Hiranya Borah
3. Sri. Sri. Ananta Moran
4. Sri. Kumar B G

## 2. No. of staff according to group as on 31.03.2022

Sl. No.	Group	General	SC	ST	OBC	Others	Total	Whether roster maintained or not
1.	A	3	2	1	3	-	9	Appointments made by HQ
2.	B	5	1	-	3	-	9	
3.	C	3	-	2	-	-	5	Being maintained by Institute
Total		11	3	3	6	-	23	

## 3. Expenditure

Sl. No.	Components	S.T. Category	Others	Total
1.	Male component	17,26,203.00	1,16,42,323.00	1,33,68,526.00
2.	Female component	13,08,516.00	69,42,743.00	82,51,259.00
Total		30,34,719.00	1,85,85,066.00	2,16,19,785.00

#### **4. Brief reports on the Institute including infrastructure**

Central Ayurveda Research Institute, under Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, has been functioning in Bengaluru since 1971. CARI is consisting of Hospital Block with Out Patient Department (OPD), Panchakarma, Yoga, Marma, Laboratory, Pharmacy, provision for 28-bedded In Patient Department (IPD), space for Operation Theatre and other services. The Admin Block consists of Office, Library, Store, Seminar Hall, Meeting Hall, Food Laboratory, Microbiology, Pharmacognosy, Chemistry, Botany sections.

Since inception, the institute has been actively participating in achieving targets according to the allotted programs. The institute has been implementing national schemes. The institute has 453 scientific publications and abstracts, 9 monographs, 8 book reviews, 1146 presentations and participations and has got 3 gold medals, 3 best research papers and incentives for two best publications. The reference library hosts 1992 books, important scientific journals and CCRAS publications for sale. During the reporting year, scientists from CARI have published 18 research articles in national and international journals and 08 are in pipeline. Officers participated in 257 seminars, webinars, conferences, meetings and hands on trainings.

About 3380 medicinal plants' samplings produced under National Medicinal Plants Board (NMPB) grant-in-aid project "Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants" were distributed for free of cost to the public, students, teachers and farmers under 'AYUSH AAPKEDWAR' programme.

Presently the institute is rendering clinical services through two Out Patient Departments (OPDs), one at Clinical Research Unit (CRU), Balepete and another at CARI campus at Kanakapura Road. The institute provides primary health care to patients at outpatient level with dispensing of free medicines. The facilities include preventive and curative medical care, laboratory investigations (routine haematological, biochemical and pathological) Panchakarma treatment & Marma. Since inception, clinical research projects on Kuposhana (Malnutrition), Arsha (Haemorrhoids), Manodwega (Anxiety neurosis), Tamakashwasa (Bronchial Asthma), VyanabalaVaishamy (Hypertension), Pandu (Iron deficiency Anemia) have been completed. Further, collection of information about claims of prevention and treatment of Vector Borne Diseases, flu like illness and pharmacovigilance studies on ayurvedic medicines have been completed. Intramural clinical research projects

(IMCRP) on Rasayana (Aswagandhavalehya and Brahmarasayana in geriatrics), Kashtartava (Dysmenorrhoea), Sthaulya (Obesity), Osteoarthritis Knee, Rasayana effect of Chyavanaprasha, Osteoporosis, Bronchial Asthma and Diabetes Mellitus and A collaborative study of AYUSH QOL-2C in Breast cancer have been completed.

During the reporting period, the CRU has completed Research Projects viz. A randomized placebo controlled prospective phase-2 clinical study of an ayurvedic coded drug 'AYUSH D' on glycaemic control in Prediabetic subjects; A randomized placebo controlled phase-2 clinical study of an ayurvedic coded drug 'AYUSH D' in the management of type 2-diabetes mellitus as add on therapy to metformin; Prospective open labelled observational study to document the potential safety issues and prescription trends in selected Rasaushadhis; An open label clinical trial to evaluate clinical efficacy and safety of AYUSH AGT in Dandruff (Darunaka); A randomised placebo controlled, double blind clinical trial to evaluate the effect of trikatu in Subclinical Hypothyroidism; Clinical evaluation of vidangachurna and vyoshadiguggulu in the management of Medoroga (Obesity) are ongoing under clinical research projects in the Institute. Clinical evaluation of lekhaniyaganakashayaand arogyavardhinigutika in the management of Medoroga (Obesity); Efficacy and Safety of ayurveda formulation 'Trikatu' in Dyslipidemia-A prospective randomized double blind placebo controlled trial are yet to be initiated.

CARI is monitoring Multi Centric/Collaborative Clinical Research Projects (MCCR)-viz: A double blind double dummy prospective randomized controlled research project on classical Ayurveda Management versus Methotrexate in Rheumatoid Arthritis (AMRA Study); Validation and Reliability testing of diagnostic methods in Ayurveda; Evaluation of AYUSH GMH in subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD)-A double blind randomized controlled clinical study; Evaluation of hepato protective activity of PTK as an add on therapy in the patients of Tuberculosis on ATT – A double blind randomized control clinical study; Evaluating the efficacy of ayurvedic intervention as add on to conventional treatment and explore the interaction of Epigenetics, Neuro/gut biomarkers and Neuroimaging in Pediatric ADHD (Attention Deficit Hyperactivity Disorder); Systems biology approach to delineate molecular signatures of Prakriti in healthy humans; Evaluating the efficacy of Ayurveda therapies as add-on to optimized conventional management of Parkinson's disease: assessment of clinical, neurophysiological, neuroimmune and neuroimaging outcomes; and Double blind randomized placebo controlled multicentric clinical trial of AYUSH M-3 in the management of Migraine.

The Survey of Medicinal Plant Unit completed two IMR projects viz. Compendium on ayurveda dietetics with reference to oil seeds, and Development of micro forest of medicinal plants by using miyawaki method of plantation. However, growth observation of the plants cultivated under the project is continuing till June 2022. As per the sanctioned IMR project, Anthology of survey research outcomes of Medico Ethno Botanical Survey (MEBS) about 275 plant photographs were documented through 03 MEBS tours in Bagalkot-Raichur, Vijayapura and Kolar districts during the year 2021-22. National Medicinal Plants Board grant-in-aid project entitled, Establishment of nursery for cultivation, conservation and sustainable utilization of medicinal plants is continuing.

After shifting to the new building in 2019, Drug Standardization Research Unit (DSRU) has been upgraded with purchase of equipment like High Performance Thin Layer Chromatography (HPTLC) under CoE and work has been initiated on pharmacognostical study including Thin Layer Chromatography (TLC), physico-chemical and powder microscopy analysis in the DSRU. Proposal for upgradation of DSRU by procuring basic and necessary instruments and by filling the vacant positions in the DSRU was prepared and communicated with CCRAS Hqrs.

Besides, the Institute has conducted outreach activities Tribal Health Care Research Project (THCRP) and Ayurveda Mobile Health Care Project- SCSP (Scheduled Caste Sub Plan) with public health orientation. The National Pharmacovigilance Program is continuing under Central Sector Scheme.

The Institute is recognized as Centre of Excellence for research and clinical services in Madhumeha (Diabetes Mellitus) by Ministry of AYUSH. The total fund sanctioned is Rs.7,24,80,400/- for a duration of three years of which Rs.2,88,00,000/- was released as first instalment in March 2021. The scheme got initiated in April 2021. An extension of 1 year was sanctioned to reach the first year targets due to COVID-19 pandemic.

Under the CoE scheme, a specialized OPD for patients of Madhumeha has been made functional from 22<sup>nd</sup> July 2021. The patients are being provided with free consultation, medicines, laboratory investigations, yoga classes and lifestyle recommendations. The specialized OPD has catered to 617 diabetic patients (380 Male & 237 Female) and 1445 follow-up visits (918 Male & 527 Female) in this year. 345 patients have had free laboratory investigations under the scheme.

Seven Diabetes camps were conducted at different places around CARI hospital. 3 training programmes were conducted for general public to raise awareness about Diabetes, importance of diet and Yoga in Diabetes. Another training programme was conducted for students from Sushruta Ayurvedic Medical College, Bengaluru regarding Research Methodology, Biostatistics and Comprehensive management of Diabetes Mellitus which was attended by 46 students of final year BAMS.

Four formulations have been shortlisted based on literature compilation and expert opinion, manufactured and quality control analysis completed. Preclinical and clinical study protocols were prepared. Pre-clinical studies will be conducted with potential collaborators. Memorandum of Understanding (MoU) has been signed with Indian Institute of Science (IISc), Bengaluru. Networking with other organisations for technical collaborations is in progress under CoE scheme.

Azadi Ka Amrit Mahotsav (AKAM) Campaign was initiated by Ministry of AYUSH, Govt. of India in view of 75<sup>th</sup> year of independence of India. CARI Bengaluru launched the free distribution of Ayurvedic prophylactic medicines like SamshamanaVati, Ayush 64, Ashwagandha Ghana Vati&Ayuraksha kit along with health advisory materials to general public. The Prophylactic medicines were widely distributed to OPD patients, public, schools and Ayurvedic colleges. The awareness health camps and webinar series were also conducted under this campaign.

Steps have been taken to obtain accreditation from the National Accreditation Board for Testing and Calibration Laboratories (NABL) and National Accreditation Board for Hospitals & Healthcare Providers (NABH). The necessary lab equipment have been procured, installed and lab test procedures are in process. External and Internal Quality control has been initiated. The process of documentation is in progress.

In addition, the Institute has organized various programs such as International Yoga Day, AzadiKaAmritMahotsav (AKAM) campaign, Science Week 2022, Webinar series and AYUSH Apke Dwar under AKAM, four Rajbhasha Hindi Workshops, Indian International Science Festival 2021, National AYUSH programmes like Ayurveda day, PoshanaMaah, Poshana Pakhwada, Swacchatapakhwada, Vigilance awareness week and workshops organized on NAMASTE Portal and Research proposal writing for grant. The Institute has organized workshops on NAMASTE Portal and Research proposal writing for grant to AYUSH doctors from various Institutes.



Since inception the Clinical Research Unit has served 3,66,532 patients. During the reporting period 22003 patients (13838 at CARI Kanakpura Road and 8165 at Clinical Section Balepete) have been benefited. As a part of special medical services, 6039 geriatric patients, 741 patients with flu like illness were treated. OPD based Panchakarma treatment was provided to 2877 patients including 1708 male and 1169 female. During the reporting period, under Tribal Health Care Research Project (THCRP), 6027 tribal population have been surveyed and 2592 patients were treated. During the visits, 11 folklore claims were documented and validated; total 3983 Haemoglobin (hb%) tests and 3367 Random Blood Sugar (RBS) tests were done during 114 visits in 6 villages.

Under Ayurveda Mobile Health Care Project- SCSP (Scheduled Caste Sub Plan), total 5940 population have been surveyed and 1741 patients were treated in selected 5 villages and 7485 investigations conducted during the reporting year 2021-22.

**5. Resources generated during the year from OPD/DSRU/SMPU/Sale of Council's Publication/Library membership fee etc.**

Sl. No.	Resources generated	Amount. (in thousands)
1.	Sale of Council's Pub./Books/CDs	1,500
2.	Service charges includes Library membership fee, Authentication, Chemical analysis etc.	58,000
3.	OPD Registration fee	65,260
4.	Lab investigation charges	1,19,349
5.	Panchakarma charges	88,512
6.	Miscellaneous (Tender Processing Fee & etc.,)	15,600
7.	Sale of unserviceable items & etc,	4,810
8.	Interest received Institute savings bank account	3,51,771
	<b>Total</b>	<b>7,04,802</b>

**6. Details of the budgetary provision of the Institute during reporting period (2021-22)**

Scheme	B.E. 2021-22 (in thousands)	Funds received (in thousands)	Actual expenditure (in thousands)
Pay & allowances	2,63,15,000	2,64,17,099	2,64,17,149
TA	2,30,000	2,30,000	2,29,800
Contingency:			
Wages	2,50,000	2,50,000	2,49,741
Office expenses	28,16,000	28,15,804	27,67,296
Rent Rates Tax	70,000	64,196	64,196
Other admin expenses	92,000	92,000	91,343
Advertisement	16,000	16,000	15,989
Professional service	50,00,000	50,00,000	49,99,747
Research activities	16,66,000	16,66,000	16,65,814
Seminar & conference mela	1,28,000	1,28,053	1,25,720
Swachhta Action Plan	1,50,000	1,50,000	1,50,000
AMHCP – SCSP	30,64,000	30,64,000	30,58,411
ARK –SCSP	8,76,000	8,75,720	5,44,968
Tribal Area Sub Plan- THCRP	49,52,000	49,52,000	49,49,558
ARK-TSP	16,38,000	16,38,000	13,16,556
Total	4,72,63,000	4,73,58,872	4,66,46,288

## 7. Institute Committees

### 7.1. Scientific Advisory Committee for proposed Centre of Excellence in Madhumeha:

Sl.No	Name & designation	Specialization
1.	Dr. S Srikanta, Medical Director, Samatvam Endocrinology Diabetes Center, 313, 17 <sup>th</sup> Main, 4 <sup>th</sup> T Block East, Jayanagar, Bangalore-560011	Endocrinology &Diabetology
2.	Dr. Jayanthi, Dean, Faculty of Medicine & Professor & HOD of Pharmacology, Bangalore Medical College & Research Institute, Fort, Krishna Rajendra Rd, Bengaluru-02	Pharmacology
3.	Dr. Raveendra, Professor, Dept. of Diabetology & Endocrinology, Bangalore Medical College & Research Institute, Fort, Krishna Rajendra Rd, Bengaluru-02	Endocrinology
4.	Dr. Yogesh S Shouche, Scientist G, National Centre for Microbial Resource, Department of Biotechnology, Govt. of India, Central Tower, Sai Trinity building, Pashan, Pune- 21	Diabetology
5.	Dr. Ravishankar B, Pharmacologist, Research Head, Sri Sri College of Ayurvedic Science and Research, Bengaluru	Microbiology
6.	Dr. Kishore Kumar R, Professor of Ayurveda, Center for Integrative Medicine and Research, NIMHANS, Bengaluru	Ayurveda & Clinical Research
7.	Dr. Supriya Bhalerao, Associate Professor, Interactive Research School for Health Affairs (IRSHA), Bharati Vidyapeeth, Pune	Ayurveda & Research
8.	Dr. Sridhar BN, Former Incharge, CARI, No.132, 5 <sup>th</sup> cross, Vijayasree layout, Mailsandra, R. Viniketan post, Bengaluru-560059	Ayurveda & Dietetics
9.	Dr.Radhika M S, Scientist E & HOD, Department of Dietetics, ICMR-NIN Near Tarnaka flyover, Jamai-Osmania PO, Hyderabad-500 007	
10.	Dr.G.Bhanuprakash Reddy, Scientist-G & HoD, Biochemistry Division, ICMR-NIN, Near Tarnaka flyover, Jamai-Osmania PO, Hyderabad-500 007	Food Biochemistry
11.	Dr.N.Samarasimha Reddy, Scientist-E, Clinical Epidemiology Division, ICMR-NIN, Near Tarnaka flyover, Jamai-Osmania PO, Hyderabad-500 007	Clinical Epidemiology
12.	Dr. N. Girish, Professor, Dept. of Epidemiology, National Institute of Mental Health and Neuro Sciences(NIMHANS), Hosur Road, Bengaluru	Epidemiology
13.	Dr. K.P.Suresh, Sr. Scientist (Biostatistics), National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), PB 6450, Yelahanka, Bengaluru	Biostatistics
14.	Dr.Ashok B K, Sr. Research Scientist, R&D, Natural Products Innovation, Himalaya Drug Company, Makali, Bengaluru -562123	Drug development

7.2. Institute Ethical Committee:

Sl.No.	Name with Contact no.	IEC status
1.	Dr. B A Venkatesh, Prof & HOD, Dept. Of PG Studies in Shalakyta Tantra, Sri Kalabyraveshwara Ayurvedic Medical College, Vijayanagar, Bengaluru e-mail: drbavenkatesh@gmail.com	Chairman and Ayurvedic Scientist
2.	Dr. P.M. SatyamurthyHebbar, Medical Officer, Govt. Ayurvedic Dispensary, Mukkodlu, Bengaluru (U) Dist. e-mail: drhebbar.satya29g@gmail.com	Member (Clinician/ Ayurvedic Scientist)
3.	Dr. Vikram S., Prof. & Head. Dept. of Rasashastra&Bhaishajya Kalpana, Sri Sri College of Ay. Sciences and Research, Bengaluru-560082 e-mail: drvikramayur@gmail.com	Member (Rasashastra Scientist)
4.	Dr. (Prof.) Geetha, Prof. & Head, Dept.of Pharmacology, Bangalore Medical College and Research Institute, Fort, K.R. Road, Bangalore – 560002 e-mail: geetha25bcmri@gmail.com	Modern Scientist (Clinical Pharmacologist)
5.	Smt. Swayamprabha, Advocate, 241, I Flr, Nandi Mansion, Aralegudi compound, Cottonpet road, Bengaluru e-mail: swayamprabha.hc@gmail.com	Member (Legal Expert)
6.	Mrs. Rama Venkatesh, Sri Sri Ravi Shankar VidyaMandir Trust, Bengaluru e-mail: rama.venkatesh@ssrvn.org	Member (Social Scientist)
7.	Mr. G.Venkatesh, 170, Agara Colony, Thataguni (PO), Kanakapura road, Bengaluru-560082. e-mail: comgvenkatesh@gmail.com	Community Representative
8.	Dr. Sulochana Bhat, Asst. Director Incharge, CARI, Bengaluru	Member Secretary

7.3. Committee for prevention of Sexual Harassment of women in work place:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. M.N. Shubhashree, RO (S-2)	Chairman
2.	Dr. S.H. Doddanani, RO (S-3)	Member
3.	Dr. Tejaswini, R.O (Ay.)	Member
4.	Smt. Hemavathi K.H, L.T. (Path.)	Member
5.	Ms. Jyothi G, LDC	Member Secretary

7.4. Official Language Implementation Committee (OLIC):

Sl. No.	Name & Designation	Status in Committee
1.	Dr. SulochanaBhat, AD In-charge	Chairman
2.	Dr. S K Giri, RO (S-3)	Raja Bhasha Officer
3.	Dr. S.H. Doddanani, RO (S-3)	Member
4.	Dr. RaghavendraNaik, RO (Ay.)	Member
5.	Smt. G Neetha, L.T. (Path.)	Member
6.	Smt. Rashmi Kulkarni K., Hindi Assistant	Hindi Assistant

7.5. Purchase Committee:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. S.H. Doddamani, RO (S-3)	Chairman
2.	Dr. M.N. Shubhashree, RO (S-2)	Member
3.	Dr. V. Rama Rao, RO (Bot.)	Member
4.	Dr. Anchan Vidyashree Vittal	Member
5.	Shri. M. Girijavallabhan	Supporting staff

7.6. Inspection cum Physical Verification Committee:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. V. Rama Rao, RO (Bot.)	Chairman
2.	Dr. Raghavendra Naik, RO (Ay.)	Member
3.	Dr. Bhavya B.M., RO (Ay.)	Member

7.7. Technical Co-Ordination Committee:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. S.H. Doddamani, RO (S-3) Ay.	Chairman
2.	Dr. M.N. Shubhashree, RO (S-2) Ay.	Member
3.	Dr. V. Rama Rao, RO (S-2) Bot.	Member

7.8. Swachhata Committee:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. Sulochana Bhat, A.D. In-charge	Chairman
2.	Dr. S H Doddamani, RO (S-3) Ay.	Member
3.	Dr. Raghavendra Naik, RO (Ay.)	Member
4.	Dr. Bhavya B.M, RO (Ay.)	Member

7.9. Grievance Redressal Committee:

Sl. No.	Name & Designation	Status in Committee
1.	Dr. S.H. Doddamani, R.O (S-2).	Chairman
2.	Dr. V. Rama Rao, RO (S-2) Bot.	Member
3.	Dr. Raghavendra Naik, RO (Ay.)	Member

7.10. Data Safety and Monitoring Board (DSMB) for AYUSH D projects:

Sl.No	Name and affiliation	Specialty	Affiliation and address	Status
1	Dr. P K Satyanarayana MD (Medicine)	Physician	Dr. 7 Maiya Multispeciality Hospital Jayanagar 1 <sup>st</sup> Block, Ashoka Pillar Bengaluru Contact: 9448162002	Chairman
2	Dr. Umesh Chikkana, MD (Ay.) Kayachikitsa	Ayurveda Expert	Reader, Dept. Of Kaya Chikitsa Sri Sri College of Ayurvedic Science and Research, Udayapura Post, Kanakapura Road, Bangalore -82 Contact: 09844145295; 080-28432322	Member
3	Dr. Srikumar M.Sc., Ph.D. (Pharmacology)	Pharmacologist	Assistant Professor, Department of Neurophysiology, National Institute of Mental Health and Neurosciences	Member

			(NIMHANS), Hosur Road, Bangalore. Contact: 09945068034 e-mail: srikumar_bn@yahoo.com	
4	Dr.K.P.Suresh Ph.D. (Biostatistics)	Biostatistician	Sr. Scientist, National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) PB6450 Yelahanka, Bangalore-064 Contact: 9341321900 /080-28390183	Member
5	Sh.Madhusudhan Adiga, BA.,LLB,	Advocate	14/3, 1 <sup>st</sup> floor, Rastrotthana Parishat annexe building, Nrupatunga Road, Bengaluru 560001 Contact: 9945583661 e-mail: madhusudhan.adiga@gmail.com	Member

#### 7.11. Data Safety and Monitoring Board (DSMB) for AMRA:

Sl. No.	Name and affiliation	Status in Committee
1.	Dr. Sridhar B N, MD (Ay.)	Chairman
2.	Dr. Manjappa C N, MS (Ortho)	Member
3.	Dr. Srikumar, M.Sc , Ph.D. (Pharmacology)	Member
4.	Dr.K.P.Suresh, Ph.D (Biostatistics)	Member
5.	Sh.Madhusudhan Adiga, BA.,LLB,	Member
6.	Dr. Sulochana Bhat, AD In-charge, CARI	Member Secretary

#### 7.12.Data Safety and Monitoring Board (DSMB) for ADHD:

Sl. No.	Name and affiliation	Status in Committee
1.	Dr. Saraswathi S., Assistant Professor	Chairman
2.	Dr. Gopal Krishna, Professor and HOD in PG studies in Kayachikitsa	Member
3.	Dr. Srikumar, M.Sc , Ph.D. (Pharmacology)	Member
4.	Dr.K.P.Suresh, Ph.D (Biostatistics)	Member
5.	Sh.MadhusudhanAdiga, BA.,LLB,	Member
6.	Dr. SulochanaBhat, AD In-charge, CARI	Member Secretary

#### 7.13.Condemnation Committee:

Sl. No.	Name and affiliation	Status in Committee
1.	Dr. Sanjay Kumar Giri, RO (Ay.)	Chairman
2.	Dr. Raghavendra Naik, RO (Ay.)	Member
3.	Dr. Bhavya B.M., RO (Ay.)	Member
4.	Shri. M. Girijavallabhan	Supporting staff

#### 7.14. e-Office Committee:

Sl. No.	Name and affiliation	Status in Committee
1.	Dr. Raghavendra Naik, RO (Ay.)/ Dr. Rajendra Kumar, RO (Ay.)	Chairman
2.	Smt. Jyothi G., LDC	Member
3.	Sh. Delvin George, Lab. Attendant	Member

7.15. Scrutinizing Medical Reimbursement Claim Bills Committee:

Sl. No.	Name and affiliation	Status
1.	Dr. M.N. Shubhashree, RO (S-2) Ay.	Chairman
2.	Dr. Bhavya B.M, RO (Ay.)	Member
3.	Ms. Jyothi G, LDC	Member
4.	Shri. M. Girijavallabhan	Supporting staff for providing documents

7.16. Media Management Committee:

Sl. No.	Name and affiliation	Status
1.	Dr. M.N. Shubhashree, RO (S-2) Ay.	Chairman
2.	Ms. Sonam Chandhok, ARO, Cli. Psy.	Member
3.	Sh. Delvin George, Lab Attendant	Member

7.17. Committee for Evaluation & Assessment of Adverse Drug Reactions & Serious Adverse Events:

Sl.No.	Name and affiliation of the Committee members	Role	Position
1.	Dr. B N Sridhar, Retd. Assistant Director (S-4), In-charge, CARI. No.132,5 <sup>th</sup> cross, Vijayashree Layout, Mylasandra, Bengaluru-560059 Contact: 8971533551 e-mail : drbnsridhar@gmail.com	Ayurveda Clinical Research Specialist and Senior Ayurveda Physician	Chairman
2.	Dr. S Srikanta, Senior Endocrinologist, Samatvam Endocrinology Diabetes Center, Jnana Sanjeevini Medical Center and Diabetes Hospital, Bangalore, No-2, 1 <sup>st</sup> A cross, Marenahalli, JP nagar 2 <sup>nd</sup> phase, Bengaluru – 560 078 Contact: 9738346680, samatvam@gmail.com	Senior Endocrinologist	Member
3.	Dr. Kavitha Muniraj, Samatvam Endocrinology Diabetes Center, Jnana Sanjeevini Medical Center and Diabetes Hospital, Bangalore, No-2, 1 <sup>st</sup> A cross, Marenahalli, JP nagar 2 <sup>nd</sup> phase, Bengaluru – 560 078, Contact: 9738346680	Clinical Research Specialist in Endocrinology and Diabetes medicine	Member
4.	Dr. Ahalya Sharma, Principal, Govt Ayurvedic Medical College, Dhanwantari Road, Bangalore Contact: 9845458563, ahalyasharma@yahoo.com	Senior Ayurveda Expert	Member
5.	Dr. Kavitha, Professor, Department of Pharmacology, Bangalore Medical College and Research Institute, Fort K R Road, Bangalore-002 Contact:9480260003, kavisrihari@yahoo.com	Clinical Pharmacologist	Member
6.	Dr. Bharathi, Medical Officer AYUSH Government Central Pharmacy, Ashoka Pillar, Jayanagar Bangalore-011 Contact:09845643372,	Ayurveda Pharmacologist	Member
7.	Dr. Sulochana Bhat, Assistant Director, In-charge, CARI, Bangalore Contact:9968053646 e-mail: sulochana.bhat@gov.in	Member Secretary	

## II. TECHNICAL REPORT

### 1. Programs allotted and completed during the reporting period

Sl.No.	Name of the program	New Program		Remarks
		Annual Target	Status	
<b>CLINICALSECTION</b>				
<b>Intramural Clinical Research Projects –Ongoing</b>				
1.	Clinical Evaluation of Vidangachurna and VyoshadiGuggulu in the Management of Medoroga (Obesity) under Annual action plan 2018-19	50	Ongoing	Total enrolled: 22 Total completed: 05 Drop Outs: 00 Continuing: 17 ADR- Nil
2.	A Randomized, Placebo-controlled, Double-blind Clinical Trial to Evaluate the Effect of Trikatu in Subclinical Hypothyroidism	90	Ongoing	Total enrolled: 03 Total completed: 00 Drop Outs: 00 Continuing: 03 ADR- Nil
<b>Intramural Clinical Research Projects –Completed</b>				
1.	A prospective Open labeled Observational study to document the potential safety issues and prescription trends in selected Rasaushadhi's in CCRAS-OPD's across India	110	Completed	Total enrolled: 110 Total completed: 98 Drop outs: 12 ADR- Nil
2.	An open label clinical trial to evaluate clinical efficacy and safety of Ayush AGT in Dandruff (Darunaka)	50	Completed	Total enrolled: 50 Total completed: 45 Drop outs: 05
<b>Collaborative Clinical Research Projects –Ongoing</b>				
1.	Evaluation of Hepatoprotective activity of PTK as an add on therapy in the patients of Tuberculosis on ATT - A Double Blind Randomized control clinical study	150	Ongoing	Total enrolled: 07 Total completed: 00 Drop Outs: 1 Continuing: 06 ADR- Nil
2.	Evaluating the efficacy of ayurvedic intervention as add on to conventional treatment and explore the interaction of epigenetics, neuro/gut biomarkers and neuroimaging in pediatric ADHD (attention deficit hyperactivity disorder).	160	Ongoing	Total enrolled: 09 Total completed: 00 Drop Outs: 00 Continuing: 09 ADR- Nil
<b>Collaborative Clinical Research Projects – Completed</b>				



1.	A randomised Placebo Controlled Prospective Phase-2 Clinical Study of an Ayurvedic coded drug 'AYUSH D' on Glycemic control in Prediabetic Subjects	264	Ongoing	Total enrolled: 174 Total completed: -117 Drop outs: 55 Continuing: 03 ADRs: Nil Complications: SAE 1
	RARIMD Bengaluru	66	Ongoing	Total enrolled: 65 Total completed: -57 Drop outs: 08 ADRs: Nil Complications: SAE 1
	AIIMS New Delhi	66	Ongoing	Total enrolled: 11 Total completed: 06 Drop outs: 02 Continuing: 03 ADRs: Nil Complications: Nil
	RA Podar AMC Mumbai	66	Ongoing	Total enrolled: 33 Total completed: 13 Drop outs: 20 ADRs: Nil Complications: Nil
	KAHER's BMK AyurvedMahavidyalayaBelgavi	66	Ongoing	Total enrolled: 66 Total completed: 41 Drop outs: 25 ADRs: Nil Complications: Nil
2.	A Randomized Placebo Controlled Phase -2 Clinical Study of an Ayurvedic Coded Drug 'AYUSH D' in the Management of Type 2-Diabetes Mellitus as add on Therapy to Metformin.	264	Ongoing	Total enrolled: 229 Total completed: 168 Drop outs: 54 Continuing: 07 ADRs: Nil Complications: Nil
	RARIMD Bengaluru	66	Ongoing	Total enrolled: 66 Total completed: 54 Drop outs: 12 ADRs: Nil Complications: SAE 1
	AIIMS New Delhi	66	Ongoing	Total enrolled: 66 Total completed: 53 Drop outs: 06 Continuing: 07 ADRs: Nil Complications: SAE 2

	RA Podar AMC Mumbai	66	Ongoing	Total enrolled: 54 Total completed: 28 Drop outs: 26 Continuing: 0 ADRs: Nil Complications: Nil
	Rajiv Gandhi Govt. PG Ayurveda College, Paprola, Kangra, Himachal Pradesh	66	Ongoing	Total enrolled: 43 Total completed: 33 Drop outs: 10 Continuing: ADRs: Nil Complications: Nil
<b>Tribal Sub Plan Programme</b>				
1	Tribal Health Care Research Programme (THCRP)	Number of tours- 114 Population- 6027 LHTs- 11	Completed	Villages visited: 06 Population covered: 6027 (ST: 5252) Patients treated: 2592 LHT claims: 11 Total Visits: 114 Investigations conducted: 7350
2	A Prophylactic Community Based Study to Assess the impact of Ayu Raksha Kit in COVID-19	2640	Completed	Villages visited: 6 Target: 2640 Grp A: (Intervention) 2400 Grp B (Control group): 240 Enrolled: 2640 Completed: 2545 Drop outs: 95 ADR: 12
3	A Prospective Community based Study for the evaluation of DhatriLoha in the Management of Anaemia (Pandu)	35	Completed	Villages visited: 6 Target: 35 4Enrolled: 35 Completed: 32 Drop outs: 03
4	A Prospective Community based Study for the evaluation of Yogaraja Guggulu, AshwagandhaChurna & NarayanaTaila in the Management of Osteoarthritis Knee (Janugata Sandhivata)	35	Completed	Villages visited: 6 Target: 35 Enrolled: 35 Completed: 33 Drop outs: 02
5	Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India- a descriptive,	70	Completed	Villages visited: 6 Target: 70 Grp A: (Intervention): 35 Grp B (Control group): 35

	cross sectional, Epidemiological study			Enrolled: 70 Completed: 70 Drop outs: 00
<b>Scheduled Caste Sub Plan</b>				
1	Ayurveda Mobile Health Care Project- SCSP (Scheduled Caste Sub Plan)	Number of tours- 158 Population- 5940	Completed	Villages visited: 5 Population covered: 5940 Patients treated: 1741 Follow up: 1848 Investigations conducted: 7485 Screening of NCD Anaemia: 2597 Malnutrition: 344 Diabetes Mellitus: 2170 Hypertension: 4481
2	A prospective community based study for the evaluation of PunarnavadiMandura in Anemia (Pandu)	50	Completed	Villages visited: 5 Target: 50 Enrolled: 50 Completed: 41 Drop outs: 09
3	Effectiveness of Ayurveda based diet and lifestyle advocacy on health related quality of life in Schedule Caste population in India- a community based, cluster randomized controlled study	70	Completed	Villages visited: 5 Target: 70 Enrolled: 70 Completed: 70 Drop outs: 00 Intervention group: 35 Control group: 35
4	A prophylactic community based study to assess the impact of Ayuraksha kit in COVID-19	693	Completed	Villages visited: 10 Target: 693 Enrolled: 693 Completed: 693 Drop outs: 00 Intervention group: 630 Control group: 63
<b>Projects funded under Govt. of India grant-in-aid scheme</b>				
1.	Centre of Excellence for Research & Clinical Services in Madhumeha (Diabetes Mellitus)	-	Ongoing	Camps (Diabetes): 07 Camps (Yoga): 01 OPD patients treated: 2062 Lab investigations: 345 Training programmes conducted (public): 03 Training programmes conducted (Ayurveda students): 01 No. of formulations for preclinical studies: 04 MOU's signed: 01 (IISc)

2.	National Pharmacovigilance Program	-	Ongoing	Total misleading advertisements reported: 105 ADR reported: 1 CME conducted /awareness program conducted: 1 Participation in CME as resource persons: 3 Participation in the training program: Articles published: 2 & 2 submitted for publication
3.	NMPB Project on Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants	-	Ongoing	4100 samplings belonging to Panasa, Nimba, Aragvatha, Karanja, Asoka, Kovidara, Gambari produced and distributed to public;150 saplings are under cultivation

#### Projects Monitored by CARI

1.	Validation and Reliability testing of Diagnostic Methods in Ayurveda in Kasa, Shwasa and Jwara, Participating Centre:S.D.M College of Ayurveda & Hospital, Hassan	Kasa-30 Shwasa- 30 Jwara-30 Grahani-30 Pandur- 30 Prameha-30	Ongoing	Enrolled: Kasa: 30; Shwasa: 30; Jwara: 30; Grahani: 30; Prameha: 30; Pandu: 30 Completed:Kasa: 30; Shwasa: 30; Jwara: 30; Grahani: 30; Pandu: 30; Prameha: 24
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#### Medicinal Plants Research projects

1.	Development of micro forest of medicinal plants by using Miyawaki method of plantation	Cultivation of native plant species to restore and maintain green cover	Completed	About 1560 native plant species cultivated in an area of about 3000 sq.ft. by using Miyawaki method of plantation
2.	Anthology of Survey Research outcomes of Medico Ethno Botanical Survey (MEBS)	Compilation of district wise monographs of survey data	Ongoing	Three Medico Ethno Botanical survey tours conducted in the Bagalkot, Raichur, Vijayapura, Kolar

## 2. Research articles published in reputed journals

### a. International Journal

Sl. No.	Author(s) Name	Title of Paper/ Article	Name of the Journal/ Magazine etc.	Date of Publication/ Communication	Remarks
1.	Sanjay Kumar Giri Sanghamitra Patnaik Pavithra S Doddamani SH	Geriatric care – An integral approach	EJBPS – European Journal of Biomedical and Pharmaceutical Sciences, 8(5):118-122	April 2021	Published
2.	Shubhashree MN	Food for thought or thought about food	Int J Complement Alt Med. 2021;14(2):94–95	April 2021	Published
3.	Shantha TR Prathapa Reddy M Rama Rao V Shiddamallayya N Sulochana Bhat	Pharmacognostical Standardization of stem bark of Saptachakra- <i>Salacia chinensis</i> L.	World Journal of Pharmacy and Pharmaceutical Sciences, 10(5):1173-1181	April 2021	Published
4.	Rajendra Kumar Ashok Kumar Narinder Singh P Hemantha Kumar	Review Article on Ashmari w.s.r to Ashmari	International Research Journal of Ayurveda & Yoga, 4(5):199-206	May 2021	Published
5.	Rajendra Kumar Ashok Kumar Gaurav Bilwal Narinder Singh P Hemantha Kumar	Review Article on Experimental Rat Models for Renal Stone Disease	International Journal of Applied Ayurved Research, 5(2): 79-89	June 2021	Published
6.	Anchan VV	Letter to the editor- ‘Greenish colour of single donor apheresis platelet- is it bad? A tricky decision in the resource constraint situation’	Transfusion Clinique et Biologique	November 2021	Published
7.	Rabinarayan Acharya Raghavendra Naik Sourav Rang Chitragad A Jani Galib Sudipt Rath	The Knowledge, attitude, and practice among Ayurvedic scholars and trainees towards pharmacovigilance: a questionnaire-based survey in Gujarat, India	Journal of Pharmacovigilance and Drug Research 3(1): 26-38	March 2022	Published

8.	Shubhashree MN Chandini C Rajendra Paliwal Raghavendra Naik Sulochana Bhat	Contemporary view of arishta lakshanas: Prognosis based on ominous signs	International Journal of Complementary & Alternative Medicine, 2022;15(2):108-114	March 2022	Published
9.	Sanjay Kumar Giri	Study on Safety and Efficacy of Snehapana-A Scientific Approach	International Journal of Ayurveda and Pharmaceutical Chemistry, 16(2):1-9	10 <sup>th</sup> March 2022	Published
10.	Sonam Chandhok Shubhashree MN Chandini C	Relevance of Charaka's Principles for Psychological Well-being during the Covid Pandemic	International journal of Yoga – Philosophy, Psychology and parapsychology	January 2022	Communicated
11.	Bhavya BM Shubhashree MN Doddamani SH	An Ayurvedic Understanding on Applications of Yogic Prana Mudra in Relation with Prana Vayu as a Supportive Measure during Coronavirus Disease 2019 Pandemic	Asian Pacific Journal of Health Sciences	February 2022	Communicated

b. National Journal

Sl. No.	Author(s) Name	Title of Paper/Article	Name of the Journal/ Magazine etc.	Date of Publication/ Communication	Remarks
1.	Bhavya BM Doddamani SH Shubhashree MN Bharali BK	A Case Report on the Management of Palmo-Plantar Psoriasis in Ayurveda	Annals of Ayurvedic Medicine Vol-10 Issue-1, 2021: 55-64	Jan.- March 2021	Published
2.	Bhavya BM Doddamani SH Rajendra Kumar	Management strategies and critical appraisal of age-related macular degeneration (AMD): A systematic review	J Res Ayurvedic Sci 2021;5:69-79	April-June 2021	Published
3.	Raghavendra Naik Shubhashree MN Chandini C Sulochana Bhat	Labeling Guidelines as per Drug And Cosmetic Act, 1940- A study to Evaluate Ayurveda Product Labels for their Compliance	AYUHOME 2021;7:75-9	August 2021	Published
4.	Doddamani SH Shubhashree MN	Ayurvedic management of subacute thyroiditis:	Ayurveda Case Rep 2021;4:68-72	August 2021	Published

	Rinky Thakur Raghavendra Naik	A case report			
5.	Raghavendra Naik Shubhashree MN Chandini C Sulochana Bhat	Labeling Guidelines as per Drug And Cosmetic Act, 1940- A study to Evaluate Ayurveda Product Labels for their Compliance	AYUHOME 2020; 7:75-9	August 2021	Published
6.	RaghavendraNaik Shubhashree MN Chandini C Sulochana Bhat	Knowledge, Attitude and Practice of Ayurveda Pharmacists toward Pharmacovigilance and Adverse Drug Reaction Reporting: A Cross Sectional Study	Journal of Indian System of Medicine, 2021; 9:181-6	September 2021	Published
7.	Anchan V V	Cytomorphological study of peritoneal fluid in suspected cases of malignancy	IP Archives of Cytology and Histopathology Research 2021; 6(3):206-213	September 2021	Published
8.	Rinky Thakur Raghavendra Naik Mythrey RC Sulochana Bhat	Ayurveda perspectives and research updates on factors influencing the immunity: A review	Journal of Indian system of Medicine 2021;9:21-7	September 2021	Published
9.	Raghavendra Naik Shubhashree MN Chandini C Sulochana Bhat	Knowledge, attitude, and practice of Ayurveda pharmacists toward pharmacovigilance and adverse drug reaction reporting: a cross-sectional study	Journal of Indian system of Medicine 2021;9:181-6	September 2021	Published
10.	Veera Mahesh Rama Rao V Suseela L	Avian diversity of Jangareddigudem town, Andhra Pradesh, India with reference to their threats	Indian Journal of Applied & Pure Biology	January 2022	Published
11.	Rabinarayan Acharya Raghavendra Naik Sourav Rang Chitrangad A. Jani R. Galib	Knowledge, attitude and practice towards pharmacovigilance among ayurveda physicians and teachers of Gujarat State: A cross sectional study	Journal of Family Medicine and Primary Care 2022; 11: 623-32.	21 <sup>st</sup> February 2022	Published
12.	Bhavya BM Doddamani SH Shubhashree MN	An Overview on Ayurvedic Remedies in Overcoming Communicable Illnesses and Its Contemporary Relevance W.S.R COVID-19	Rivista Medicine, 2022(1), 149-152	February 2022	Published
13.	Balakrishnan P Srivastava AK Bhavya BM Jadhav N	Clinical Evaluation Of Ayush PE Eye Drops In The Management Of Acute Allergic Conjunctivitis: An	OSF preprint <a href="https://doi.org/10.31219/osf.io/j9a6t">https://doi.org/10.31219/osf.io/j9a6t</a> .	19 <sup>th</sup> February 2022	Published

	Goel S Khanduri S Raghavendra Naik	Open Label Single Arm Prospective Multicenter Study			
14.	Raghavendra Naik Rabinarayan Acharya	Geo-botanical indicators for presence of Groundwater- An Insight from Vrikshayurveda	Souvenir-National seminar on Medicinal plants Aurangabad	March 2022	Published

c. Articles published in Proceedings of Conference/Seminar/Webinar/Workshop etc.  
(International & National level)

Sl. No.	Author(s) Name	Title of Paper/ Article	Name of the Journal/ Magazine etc.	Date of Publication/ Communication	Remarks
1.	Sulochana Bhat Rajendra Kumar	Sustainable Development Goal-3 and its implications to Indian health care system: a cross sectional study	26 <sup>th</sup> National Seminar on Ayurveda for Accomplishment of Sustainable Development Goal- 3 (SDG-3), New Delhi	April 2021	Published

d. Other publications

Sl. no	Title of the Books/Booklets/ Chapter/Technical reports/ Monographs	Contribution	Publisher with year of publication (Month & Year)
1.	Compendium of selected essays on pharmacovigilance “Way ahead for the better execution of the Pharmacovigilance program”	Shubhashree MN	IPvC, ITRA, Jamnagar, March 2021 ISBN Number: 978-81-954330-5-6Page no.76-78
2.	Medicinal plants: Biodiversity, Sustainable Utilization and Conservation (Chapter, page no.285) Hitherto Unexplored Aspects of Medicinal Plants from Ayurveda and Vrikshayurveda	Shubhashree MN Rama Rao V Doddamani SH Amit Kumar Dixit	Springer Nature Singapore Pvt Ltd, May 2021
3.	A Pharmaco-Clinical Study for Evaluation of Shilajatu for Preventive and Curative Management of Ashmari w.s.r. to Urolithiasis by	Ph.D. Thesis submitted to Dr. SR Rajasthan Ayurveda University, Jodhpur Rajasthan by Dr. Rajendra Kumar	July 2021
4.	Ayurveda and Conventional Medicine Cross Referral Approach for Select Disease Conditions	Sulochana Bhat Rajendra Kumar Dr. Anchan V V	Book by CCRAS, New Delhi Published in November 2021 ISBN:978-81-954096-6-2
5.	Compendium of important cereals mentioned in Ayurveda	Project investigator- Dr. Rama Rao V	CCRAS, New Delhi 2021



e. Research/ professional abstracts published/presented at International/National seminars/workshop/meetings etc: Nil

### 3. Training/Seminar/Conference/Workshop organized by the Institute

Sl. No.	Participants Name	Name of the Workshop/ Seminar	Date	Remarks
1.	All staff of CARI	Inauguration of International Yoga Day Countdown and Online class on common yoga protocol	21/05/2021 to 21/06/2021	Participated
2.	All staff of CARI	Introduction to Yoga and its relevance in day to day practice – Inauguration of IDY 2021	22/05/2021	Participated
3.	All staff of CARI	International Day of Yoga 2021 webinar series “Yoga for stress management.”	03/06/2021	Participated
4.	All staff of CARI	World Environment Day	05/06/2021	Participated
5.	All staff of CARI	7 <sup>th</sup> International Day of Yoga 2021	21/06/2021	Participated
6.	सभीकर्मचारी	हिंदीकार्यशाला	25/06/2021	भागलिया
7.	All staff of CARI	Azadi ka Amrit Mahotsav Webinar on “Contribution of Ayurveda during COVID -19 Pandemic”	30/06/2021	Participated
8.	All officers of CARI	Poshana Maah Programme- Distributing Medicinal Plants and health tips to child and pregnant women in various schools, anganawadis, gram panchayats and hospitals	01/09/2021 to 30/09/2021	Distributed medicinal plants and conducted plantation program
9.	Rama Rao V Nazneen Bhavana R	Cultivation and distribution of medicinal plants organized at CHC, Kaggalipura, Govt School and Agara	07/09/2021	Planted and distributed medicinal plants under Poshan Maha
10.	सभीकर्मचारी	हिंदीपखवाड़ाकाउद्घाटन 14सितंबरसे 28सितंबर 2021	14/09/2021	भागलिया
11.	सभीकर्मचारी	हिंदीकार्यशाला	18/09/2021	भागलिया
12.	All staff of CARI	Hindi Pakwada	14/09/2021 to 28/09/2021	Participated
13.	i)Giri SK ii)All staff of CARI	हिंदीपखवाड़ाकासमापनसमारोह	28/09/2021	i)स्वागतभाषणऔरसंक्षिप्तविवरण ii)भागलिया
14.	Sulochana Bhat Srinibash Sahoo Ramana GV	Poshana Maha Programme at NIMHANS	29/09/2021	Participated

15.	All staff of CARI	Swachhata Pakhwada	16/10/2021 to 31/10/2021	Contributed
16.	Giri SK Venkateshwarlu Umesh B Bharathi M	Distribution of face mask to patients on Occasion of Azadi Ka Amrit Mahotsav	18/10/2021	Participated
17.	All staff of CARI	Vigilance Awareness Week	26/10/2021 to 01/11/2021	Took Integrity pledge and participated in the activities organized
18.	All staff of CARI	Guest lecture on bio-waste management on the occasion of Swachhata Pakhwada	28/10/2021	Lecture delivered by Mr. Pradeep A J
19.	Bhavya BM	Lecture on 'Nutritional Benefits' on the occasion of Ayurveda Day and on 'Personal Hygiene' on the occasion of Swachhata Pakhwada	29/10/2021	Delivered guest lecture at Kagganahalli Govt. High School
20.	Rama Rao V	Lecture on 'Use of Medicinal Plants'	29/10/2021	Delivered guest lecture at Kagganahalli Govt. High School
21.	Sonam Chandhok	Lecture on "Vigilance and role of students in making India corruption free"	29/10/2021	On the occasion of 'Vigilance Awareness week' at Kagganahalli Govt. High School
22.	All staff of CARI	Guest lecture on 'Importance of Vigilance Awareness' by Shri. C. Shashikanth	01/11/2021	Participated
23.	All staff of CARI and RARIM&MMR	Dr. S. Sachhidanand and Shri. Ramanatha PB addressed during Ayurveda Day	02/11/2021	Participated
24.	Rama Rao V Bhavana R Ritu Sinha	Ayurveda Day	02/11/2021	Participated in celebration of Ayurveda Day and distributed plants
25.	Rama Rao V Bhavana R Ritu Sinha	Review meeting of MPR- MEBS focus group of CCRAS	29/11/2021	Presented MEBS- Anthology project work progress & concept notes
26.	Thejaswini C Anchan VV Rajendra Kumar	AYUSH food festival competition	08/12/2021	Organized
27.	Thejaswini C Anchan VV Rajendra Kumar	Fruits & Vegetables carving competition	10/12/2021	Organized
28.	Rama Rao V Bhavana R Ritu Sinha	Free medicinal plant distribution to Students of Kaggalipura Government school	16/12/2021	62 Medicinal plant saplings distributed under AYUSH APKE DWAR program
29.	Ritu Sinha Bhavana R	Free medicinal plant distribution to Students of Kaggalipura Government school	18/12/2021	167 Medicinal plant saplings distributed under AYUSH APKE DWAR program

30.	Thejaswini C Anchan VV	Quiz competition for school children	18/12/2021	Organized
31.	Ritu Sinha Bhavana R	Free medicinal plant distribution to Students of Government school Kagganahalli	21/12/2021	62 Medicinal plant saplings distributed under AYUSH APKE DWAR program
32.	Thejaswini C Anchan VV	Quiz competition for school children	21/12/2021	Organizer
33.	सभीकर्मचारी	हिंदीकार्यशाला	24/12/2021	भागलिया
34.	All staff of CARI	Ayurmedha national level quiz competition	28/12/2021	Attended
35.	All staff of CARI	Brainstorming Webinar on “Scientific Exploration of Potentials of AYUSH Ahara a Focus on Global Positioning, Marketing and Branding”	28/12/2021	Conducted and Participated
36.	All staff of CARI	Webinar on “Parampara 2021-Traditional Foods and their Role in Nutrition”	30/12/2021	Conducted and Participated
37.	Thejaswini C Anchan VV ShubhashreeMN	Awareness program & distribution of fruits and nutritional dry fruit bars to Government school children(HIV infected) at Thataguni	31/12/2021	Organized
38.	All staff of CARI	Surya Namaskar	14/01/2022	Participated
39.	Ritu Sinha Bhavana R	Distribution medicinal plant to the common public	18/01/2022	245 Medicinal plant saplings distributed under AYUSH APKE DWAR program
40.	All officers of CARI	Attended IEC Meeting on the Protocol for AyuRaksha Kit for SCSP, THCRP and Medoroga	24/01/2022	Participated
41.	Ritu Sinha Bhavana R	Distribution of medicinal plants to common public	31/01/2022	310 Medicinal plant saplings distributed under AYUSH APKE DWAR program
42.	All staff of CARI and RARIM&MMR	Webinar on “Interpretation of Investigations for Diagnosis of COVID-19” presented by Dr. Tejasvi Krishnamurthy, Associate Prof. Dept. of Pathology, KIMS, Bengaluru	04/02/2022	Participated
43.	All staff of CARI and RARI &MMR	Webinar on “Prevention of Covid 19 in the context of Janapadadhwanasa” presented by Dr. Asha Rani K, Assistant Prof. Dept. of Kayachikitsa, Sushruta AMC&H, Bengaluru	11/02/2022	Participated

44.	Nazneen Ritu Sinha Bhavana R	Distribution of medicinal plant to the common public	18/02/2022	405 Medicinal plant saplings distributed under AYUSH APKE DWAR program
45.	All staff of CARI and RARIM&MMR	Webinar on “Covid 19 Preventive Initiatives through Ayurveda” presented by Dr. P. Sudhakar Reddy, Prof. Dept. of Swasthavritta, JSS Ayurveda Medical College, Mysore	18/02/2022	Participated
46.	All staff of CARI and RARIM&MMR	Webinar on ‘Science and Traditional Medicine in India’ presented by Dr. B.A.Venkatesh, Dept. of Shalakyas, SKAMC, Bengaluru	26/02/2022	Participated
47.	i)Raghavendra Naik ii)Sonam Chandhok iii) All staff of CARI and RARIM&MMR	Webinar on ‘Initiatives of CCRAS and Ministry of AYUSH for Prevention and Management of COVID-19’ under AKAM	26/02/2022	i)Delivered a lecture as resource person ii) As moderator iii) Participated
48.	Rama Rao V Ritu Sinha Bhavana R	Distribution of medicinal plant to the common public	28/02/2022	310 Medicinal plant saplings distributed under AYUSH APKE DWAR program
49.	सभीकर्मचारी	हिंदीकार्यशाला	11/03/2022	भागलिया
50.	All staffs of CARI and RARIM& MMR	Importance of mental health in COVID-19 Pandemic	14/03/2022	Participated
51.	All staffs of CARI and RARIM& MMR	Contribution of CARI Bengaluru in prevention of COVID-19	15/03/2022	Participated
52.	All staffs of CARI and RARIM& MMR	National Workshop on “Research Proposal Writing for Grant”	22/03/2022& 23/03/2022	Attended as participants.
53.	All staffs of CARI and RARIM& MMR	Sensitization programme for sustainable maintenance of NAMSTE Portal	24/03/2022 & 25/03/2022	Attended as Trainee
54.	Rama Rao V Nazneen Ritu Sinha Bhavana R	Distribution of medicinal plant to the common public	26/03/2022	Medicinal plant saplings distributed under AYUSH APKE DWAR program
55.	Rama Rao V Nazneen Ritu Sinha Bhavana R	Distribution of medicinal plant to the common public	31/03/2022	Medicinal plant saplings distributed under AYUSH APKE DWAR program

**4. Seminar/Webinar/Conference/Workshop/Training/Symposium attended/participated by the Staff/Officers of the Institute**

Sl. no	Participants Name	Name of the Workshop/ Seminar	Organizers	Date of Participation	Remarks
1.	Shubhashree MN	PFMS EAT module on boarding workshop	M/O Heath and Family Welfare and Ministry of AYUSH	09/04/2021	Participated
2.	Shubhashree MN	Agni assessment training	CCRAS, New Delhi	09/04/2021	Participated
3.	Shubhashree MN	National webinar on scientific writing – Dr. Supriya Bhalerao	G.J. Patel Ayurveda Studies And Research	01/05/2021	Attended
4.	Shubhashree MN	National Webinar on Pharmacovigilance and medical ethics in Ayurveda	S.R.C.Ayurveda College, Chikli, Maharashtra	18/05/2021	Attended
5.	All staff of CARI	National Webinar on Pharmacovigilance	SMBT Ayurveda College and Hospital, Dhamangaon, Nashik	24/05/2021	Participated
6.	Shubhashree MN Raghavendra Naik	Workshop on case report writing	AYUSH Center of Excellence, Savitribai Phule Pune University	26/05/2021	Participated
7.	Giri SK Doddamani SH Raghavendra Naik	Webinar on Pharmacovigilance	GAMC, Bengaluru	29/05/2021	Participated
8.	Shubhashree MN	Webinar on Diabetes and Covid 19	Science first team,BMC and research institute 1992 batch	30/05/2021	Attended
9.	Anchan V V	NABL training programme on Quality Management Systems and Internal Audit in Medical Labs	360 Health education and Learning Protocols and National Board for Quality Promotion	02/06/2021 to 05/06/2021	Participated
10.	All staff of CARI	International Day of Yoga 2021 webinar series “Yoga for stress management”	CARI, Bengaluru	03/06/2021	Attended
11.	Doddamani SH	Webinar series “Chikitsa Subhodha” on “Research updates	D.G.M. Ayurvedic Medical College, Hospital, PG	10/06/2021	As resource person delivered lecture

		on Covid-19”	studies and Research Centre, Gadag		
12.	Srinibash Sahoo Raghavendra Naik	Training programme for AMHCP (SCSP) & THCRP	CCRAS, New Delhi	14/06/2021	Attended
13.	Giri SK Shubhashree MN Raghavendra Naik	National Webinar on “Awareness Programme on Pharmacovigilance for ASU & H Drugs”	Peripheral Pharmacovigilance Centre (PPvC), CARI, Ministry of AYUSH.	18/06/2021	Attended
14.	Shubhashree MN	Ayush Samridhi – National Webinar Ayurveda Best & safest for geriatric care	Independent Research Ethics Society & Zandu, Ayush Darpan Found.	21/06/2021	Attended
15.	Shubhashree MN	Webinar on “Sickness to Wellness through AYUSH System”	PHD Chamber, AYUSH Committee	24/06/2021	Attended
16.	I) सभी अधिकारियों और कर्मचारियों II) सुलोचना भट्ट III) गिरि ए. सके	हिंदी कार्यशाला – राजभाषा प्रादेशिक भाषाओं में पूरक होने के लिए सुझाव	केन्द्रीय आयुर्वेद अनुसंधान संस्थान, बेंगलुरु	25/06/2021	I) भाग लिया II) अध्यक्षीय भाषण III) स्वागत भाषण
17.	Shubhashree MN	Webinar: Azadi ka Amrit Mahotsava	CARI, Patiala	26/06/2021	Attended
18.	All staff of CARI	Webinar: Azadi ka Amrit Mahotsav “Contribution of Ayurveda during COVID -19 Pandemic”	CARI, Bengaluru	30/06/2021	Attended
19.	Rama Rao V Shubhashree MN Nazneen Bhavana R Suresh Kumar	Training program on “Medicinal Plant Research Training-I	CCRAS, New Delhi	01/07/2021	Participated and delivered a talk on ‘Herbrium collection and processing”
20.	Anchan V V	Quality Management System and Internal Auditor Training Course as per ISO 15189 : 2012	Quality & Accreditation Institute (QAI)	12/07/2021 to 18/07/2021	Participated
21.	Shubhashree MN	Webinar on Innovation & Entrepreneurship in AYUSH sector-	Ph.D. chamber	15/07/2021	Attended

		Role of Industry and Govt. of India.			
22.	Shubhashree MN	International webinar on Ayurvedic pulmonology	Immanuel Arasar Ayurveda Medical College, Kanyakumari, Tamil Nadu	15/07/2021	Attended
23.	Anchan V V Neetha G Hemavathi KH	AMR Masterclass Webinar on Diagnosing Co-infections in COVID-19 : Lessons learnt and preparatory strategies from AIIMS, Delhi	BD India	16/07/2021	Participated
24.	Anchan V V Neetha G Hemavathi KH	Webinar on “Bug tales – Case presentation series”	BD India and Society of Clinical Microbiologists, Mumbai	24/07/2021	Participated
25.	Anchan V V Neetha G Hemavathi KH	CUBE ASPIRE 2021, Virtual Haematology Symposium	Mindray India and BLK Super Speciality Hospital	24/07/2021 & 25/07/2021	Participated
26.	Anchan V V Neetha G Hemavathi KH	AMR Masterclass Webinar on “Managing Paediatric Sepsis”	BD India	28/07/2021	Participated
27.	Rama Rao V Srinibash Sahoo Shubhashree MN Nazneen Bhavana R Suresh Kumar	Attended online Training Programme on “Medicinal Plant Research-II (Pharmacognosy)”	CCRAS, New Delhi, CARI, Kolkata and CSMCARI, Chennai	30/07/2021	Participated
28.	Anchan V V Neetha G Hemavathi KH	Webinar on role of diagnostic lab in supporting Antimicrobial Stewardship	BD India in association with ISCCM Vizag chapter	31/07/2021	Participated
29.	Shubhashree MN Rajendra Paliwal	Webinar on "AYUSH for India: Vision & Strategy"	PHD Chamber of Commerce And Industry	12/08/2021	Participated
30.	i)Raghavendra Naik ii)All staff of CARI	Webinar on Pharmocovigilance for Practitioners Topic : “Drug And Magic Remedies Act Legal Issues”	Pharmacovigilance Centre, GAMC, Bengaluru	16/08/2021	i)Chief speaker ii)Participated
31.	Anchan V V	Webinar on	BD, India	18/08/2021	Participated

	Neetha G Hemavathi KH	“Diagnosis and Management of Gram Negative MDROs : Interactive Pediatrics cases”			
32.	Shubhashree MN Rajendra Kumar	Webinar on Pharmacokinetics and Pharmacodynamics of Ayurveda	PHD Chamber of Commerce And Industry	19/08/2021	Participated
33.	Anchan V V	Annual State Virtual Conference of IACKC - IAC KCCON 2021	SDM College of Medical Sciences and Hospital, Dharwad	21/08/2021 & 22/08/2021	Participated
34.	Shubhashree MN Rajendra Kumar	Webinar on Domestic and International trade in AYUSH medicine: Issues & Challenges	PHD Chamber of Commerce And Industry	26/08/2021	Participated
35.	Anchan V V Neetha G Hemavathi. KH	Webinar on “Laboratory Management in COVID Era : Lessons for Lifetime”	BD, India	26/08/2021	Participated
36.	Rama Rao V Shubhashree MN Rajendra Kumar Bhavana R	Training program on Methods of Documentation of LHT and Ethno Medical Practices	CCRAS, New Delhi	16/09/2021	Participated
37.	Sonam Chandhok	Virtual National Seminar on "Research and Data Analysis"	Dept. of Applied Psychology, Ramanujan College, University of Delhi	25/09/2021 to 26/09/2021	Participated
38.	Giri SK राजभाषा अधिकारी	हिंदी कार्यशाला विषय - हिंदी दिवस का महत्व।	CARI, Bengaluru	28/09/2021	स्वागत भाषण और हिंदी पखवाड़ा का संक्षिप्त विवरण
39.	Giri SK	हिंदी कार्यशाला	TOLIC (नराकास) ISRO Satellite centre, Bengaluru	28/09/2021	भाग लिया
40.	Shubhashree MN Rajendra Kumar	National Webinar on Pharmacovigilance for AYUSH	KAHER's Shri B M K Ayurved Mahavidyalaya and Hospital(018),	28/09/2021	Participated



			Shahpur Belagavi, Karnataka		
41.	Anchan V V	48 <sup>th</sup> Annual Conference of KCIAPM, KAPCON 2021	Karnataka Chapter of Indian Association of Pathologists and Microbiologists	01/10/2021 to 03/10/2021	Participated
42.	All officers of CARI	Training program through VC on submission of data in Google Form Sheet for distribution of Medicine / IEC to the Patients / Public in connection with AKAM-75	CCRAS Headquarters	08/10/2021	Participated
43.	Giri SK Umesh. B Neetha G	Webinar on “Ayurveda for Nutrition” during Ayurveda Day	RARI, Ahmedabad	28/10/2021	Participated
44.	Rama Rao V Bhavana R Ritu Sinha	Training Programme on LHT Documentation	CCRAS New Delhi	09/12/2021	Participated
45.	Doddamani SH	Mega Science Technology and Industry Expo. India International Science Festival 2021	Min. of Science and Technology, Ministry of Earth Science, Govt. of Goa, NCPOR, Vijnana Bharati	10/12/2021 to 13/12/2021	Participated
46.	Giri SK	One day Seminar (Sangosthri) on occasion of vishwa Hindi Divas	CCARS, New Delhi	10/01/2022	Participated as Rajabhasa Adhikari
47.	Srinibash Sahoo Bhavya BM Thejaswini C	Training on Research Integrity and Publication Ethics	Savithribai Phule University, Pune	18/01/2022 to 21/01/2022	Participated
48.	Shubhashree MN	Webinar on ‘Building Higher Immunity through Ayurveda for Omicron Variant’	MIN. of AYUSH	20/01/2022	Participated
49.	Shubhashree MN Thejaswini C	Training: Upgraded version of AHMIS	Ministry of AYUSH	25/01/2022	Participated
50.	Suresh Kumar	Interpretation of HPTLC Data in Food Analysis	ANCHROM Pvt. Ltd., Mumbai	09/02/2022	Attended
51.	Sonam Chandhok	Webinar on	Elsevier-Scopus	11/02/2022	Participated

		‘Accelerate your research using Elsevier’s Scopus’	and University of Delhi		
52.	Suresh Kumar	Extractable and leachable study of Phthalates in pharmaceutical products and biomonitoring of phthalates by HPTLC Versus LC-MS/MS	ANCHROM Pvt. Ltd., Mumbai	19/02/2022	Attended
53.	Doddamani.SH Shubhashree MN Raghavendra Naik Bhavya BM Sonam Chandhok Rajendra Kumar	Training Program on Good Clinical Practices organized under AMRA project through video conferencing	AVP Research Foundation India, Coimbatore	21/02/2022	Participated
54.	Giri SK, Doddamani SH, Shubhashree MN Rama Rao V	Training Programme on “Research Integrity and Publication Ethics” through VC	Center for Publication Ethics, Savitribai Phule Pune University, Pune	22/02/2022 to 25/02/2022	Participated
55.	All officers of CARI and RARIM&MMR	Post budget webinar on “Strengthening Telemedicine and IT Service for inclusive and Equitable healthcare delivery” address by H’ble PM of India	Ministry of AYUSH, New Delhi.	26/02/2022	Attended
56.	Doddamani SH Shubhashree MN	AMRA Investigators training programme by Dr. David Furst	AVP Research Foundation, Coimbatore	07/03/2022 to 09/03/2022	Participated as Delegates
57.	Rajendra Kumar Sonam Chandhok	A short Term Training Programme on “Research Integrity and Publication Ethics” through VC	Center for Publication Ethics, Savitribai Phule Pune University	08/03/2022 to 11/03/2022	Participated
58.	Suresh Kumar	HPTLC Pharma Data Analysis	ANCHROM Pvt. Ltd., Mumbai	09/03/2022	Attended
59.	Suresh Kumar	Basic strategies for Phyto-chemical Investigation using HPTLC	ANCHROM Pvt. Ltd., Mumbai	19/03/2022	Attended

Meetings / Campaigns/ lectures/ other program attended/participated by the Staff / Officers of the Institute

Sl. no.	Participants Name	Name of the meeting/ program	Organizers	Date of Participation	Remarks
1.	Rama Rao V Nazneen Bhavana R	Technical Review meeting	CCRAS, New Delhi	19/04/2021	Attended the meeting and provided inputs on IMR projects
2.	Rama Rao V Nazneen Bhavana R	Technical Review meeting	CCRAS, New Delhi	27/04/2021	Attended the meeting and provided inputs on IMR projects
3.	All staff of CARI	“Nationwide distribution campaign of AYUSH-64”	CARI, Bengaluru	11/05/2021	Attended
4.	All officers of CARI	Doctors orientation meeting on AYUSH-64 campaign	CARI, Bengaluru	19/05/2021	Attended
5.	All staff of CARI	Inauguration of International Yoga Day Countdown and Online class on common yoga protocol	CARI, Bengaluru	21/05/2021 to 21/06/2021	Participated
6.	i)Shubhashree MN ii)All staff of CARI	Introduction to Yoga and its relevance in day to day practice – Inauguration of IDY 2021	CARI, Bengaluru	22/05/2021	i)Delivered Welcome Address ii)Participated
7.	Shubhashree MN	Role of Ayurvedic medicine in combating Covid-19	Resident welfare Association, North Bengaluru	23/05/2021	Presented
8.	Shubhashree MN	CME of ayurvedic management of viral diseases	Ayurveda Network	23/05/2021	Participated
9.	All staff of CARI	Online class on Common Yoga Protocol	CARI, Bengaluru	24/05/2021 25/05/2021	Participated
10.	All staff of CARI	Online classes for Yoga Demonstration	CARI, Bengaluru	26/05/2021	Participated
11.	Shubhashree MN	Awareness programme regarding the role of Ayush 64 in Covid 19	BNI Nakshatra Chapter-Network of NGOs & Entrepreneurs	25/05/2021	Presented
12.	Shubhashree MN	Awareness programme regarding the role of Ayush 64 in Covid 19	Sewa Bharathi – Sanjaya nagar Wing, Bengaluru	26/05/2021	Presented
13.	Shubhashree MN	Reporting Covid 19	Ayush Centre of	26/05/2021	Attended

		Clinical practice outcomes	excellence, Savitribhai Phule, Pune University with AIIA etc.		
14.	Giri SK Doddmani SH Shubhashree MN	Pharmacovigilance meeting with IPvC and NPvC	IPGTRA, Jamnagar	27/05/2021	Attended
15.	Shubhashree MN	Pharmacovigilance in Ayurveda- A Clinical perspective	Govt Ayurveda Medical College, Bangalore	29/05/2021	As a Chief Speaker
16.	Rama Rao V Nazneen Bhavana R	World Environment Day	CARI, Bengaluru	05/06/2021	Organized a plantation program at CARI
17.	Shubhashree MN	Post Covid-19 management	Science first BMC 92	06/06/2021	Attended
18.	Shubhashree MN	International Virtual Convention: Ayurveda and Research Advancement on Covid-19 – A positive outgrowth	Ayurveda College, Coimbatore	17/06/2021 to 21/06/2021	Attended
19.	i)Shubhashree MN ii)All staff of CARI	7 <sup>th</sup> International Day of Yoga 2021	CARI, Bengaluru	21/06/2021	i)As a Moderator ii)Attended
20.	i)Shubhashree MN ii)Doddamani SH Raghavendra Naik	Clinical research updates of Rasayana Chikitsa in the present scenario	Charaka Jayanthi organized by Agnivesha Academy	27/06/2021	i) Delivered lecture ii)Attended
21.	Sulochana Bhat Giri SK Doddamani SH Srinibash Sahoo Shubhashree MN Raghavendra Naik Thejaswini	IEC meeting for AMHCP (SCSP) & THCRP	CARI, Bengaluru	28/06/2021	Attended
22.	Shubhashree MN Raghavendra Naik	Madhumanthana – Avasthanusara chikitsa in Prameha by Prof. Muralidhara Sharma	SKAMC, Dept of Ph.D. studies	30/06/2021	Attended
23.	Shubhashree MN	Prevention of Covid 3 <sup>rd</sup> wave	RSS Hoysala praanth, Doctors meet	04/07/2021	Attended
24.	Shubhashree MN	Post Covid management	Dhootapapeshwar Ltd	10/07/2021	Attended
25.	Shubhashree MN	Paediatric clinical experience sharing w,s,r to Covid -19	Vaidyaratnam Oushdhashaala private limited	11/07/2021	Attended

26.	Shubhashree MN	Prevention of Covid 3 <sup>rd</sup> wave	RSS Hoysala praanth, Doctors meet	11/07/2021	As resource person presented
27.	All officers of CARI	Technical meeting by DG with Research Officers	CCRAS, New Delhi	13/07/2021	Participated
28.	Giri SK Ramana GV Doddamani SH Srinibash Sahoo Shubhashree MN Raghavendra Naik Thejaswini C	A meeting on issues related to Ayush 64 through VC	CCRAS, New Delhi	14/07/2021	Participated
29.	Shubhashree MN	Awareness Program on NABH AYUSH Entry Level Standards	Ministry of AYUSH and National Institute of Ayurveda, Jaipur	15/07/2021	Attended
30.	Shubhashree MN	IEC meeting	Sri Sri Ayurveda Medical College, Bengaluru	19/07/2021 , 20/07/2021 and 22/07/2021	Attended
31.	Shubhashree MN	Pharmacovigilance awareness programme	Bharatiya Vidyapeetha, Pune	29/07/2021	Attended
32.	Sonam Chandhok	Online course on 'Depression and CBT'	Dept. of Mental Health and Behavioural Sciences, Fortis Healthcare Ltd.	04/08/2021 & 05/08/2021	Participated
33.	All staff of CARI	Azadi Ka Amrut Mahotsav - Promotion of Ayurveda and its role in the current COVID-19 Pandemic situation.	CARI, Kolkata and CCRAS, New Delhi.	07/08/2021	Participated
34.	Sonam Chandhok	Online course on 'Anxiety disorders'	Dept. of Mental Health and Behavioural Sciences, Fortis Healthcare Ltd.	11/08/2021 & 12/08/2021	Participated
35.	Giri SK	First (Narakas) Tolic Meeting	ISRO Satellite centre, Bengaluru	17/08/2021	Participated
36.	Sonam Chandhok	Online course on Addictive disorders	Dept. of Mental Health and Behavioural Sciences, Fortis Healthcare Ltd.	18/08/2021 & 19/08/2021	Participated

37.	Giri SK Rajendra Kumar	Large scale distribution of Ayush prophylactic medicine and Guidelines under Azadi Ka Amrit Mahotsav	CCRAS, New Delhi	19/08/2021	Participated
38.	Giri SK Rajendra Kumar	Azadi ka amrut mahotsav, V C meeting Inagural event on 2 <sup>nd</sup> Sep 2021	CCRAS, New Delhi	25/08/2021	Participated
39.	Ms Sonam Chandhok	Two days online course on Basic Counselling Skills	Dept. of Mental Health and Behavioural Sciences, Fortis Healthcare Ltd.	25/08/2021 & 26/08/2021	Participated
40.	Shubhashree MN Rajendra Kumar	“AyushSuraksha-2021”	National Institute of Homoeopathy Intermediary Pharmacovigilance Centre, Kolkata	26/08/2021 & 27/08/2021	Participated
41.	i)Shubhashree MN Raghavendra Naik ii) All staff of CARI	AYUSH SURAKSHA- Pharmacovigilance Awareness Programme	Peripheral Pharmacovigilance Centre, CARI, Bengaluru	30/08/2021	i)Presented on Pharmacovigilance ii) Participated
42.	All staff of CARI	Poshana Maah Programme- Distributing Medicinal Plants and health tips to child and pregnant women in various schools, anganawadis, gram panchayats and hospitals	CARI, Bengaluru	01/09/2021 to 30/09/2021	Conducted
43.	Rama Rao V Nazneen Bhavana R	Cultivation and distribution of medicinal plants under Poshan Mah orgzained at CHC, Kaggalipura, Govt School and Agara	CARI, Bengaluru	07/09/2021	Planted and distributed medicinal plants
44.	All staff of CARI	Hindi Pakhwada	CARI, Bengaluru	14/09/2021 to 28/09/2021	Participated
45.	All officers of CARI	AKAM and Poshana Maah	CCRAS Headquarters, New Delhi	16/09/2021	Participated
46.	Shubhashree MN	Intersystem Dialogue on India-specific Guidelines for	Kasturba Health Society -Medical Research Centre	16/09/2021	Participated

		Management of Polycystic Ovarian Syndrome (PCOS): Perspective of Siddha System of Medicine	NIRRH,ICMR		
47.	Shubhashree MN Rajendra Kumar	COE meeting	CARI, Bengaluru	22/09/2021	Participated
48.	Shubhashree MN Rajendra Kumar	Towards a workable form of protection for traditional knowledge as Intel property; selected technical and process challenge	Guest lecture by Dr. Wendland, TKDL, WIPO, Geneva	22/09/2021	Participated
49.	Shubhashree MN Ms Sonam Chandhok	National level essay writing competition on "Pharmacovigilance for ASU & H Drugs; Present Scenario and Future prospects"	Intermediary Pharmacovigilance Centre for Ayurveda (IPvC), ITRA, Jamnagar	24/09/2021	Participated
50.	Shubhashree MN Srinibash Sahoo Rajendra Kumar	COE for Madhumeha meeting	CARI, Bengaluru	27/09/2021	Participated
51.	Shubhashree MN	Clinical application of Ahara Vargas as per classical Ayurveda literature	Sri Sri Ayurveda Medical College and Hospital	27/09/2021	Given guest lecture on the topic
52.	i)Raghavendra Naik ii)Shubhashree MN Sonam Chandhok	Clinical Research Protocol writing	KVG Ayurveda Medical College and Hospital, Sullia	28/09/2021	i)Guest speaker ii)Participated
53.	Rama Rao V	Meeting of Coordinator, and Co-Cordinators of Cultivation, Pharmacognosy, Medico-Ethnobotanical Survey and Microbiology	CARI, Guwahati	30/09/2021	Participated and presented in brief about projects related to Medico-Ethnobotanical Survey at CCRAS Institutions
54.	Rajendra Kumar	Meeting Focus Group (Rheumatoid Arthritis & Musculoskeletal Disorders)	Focus Group Coordinator	30/09/2021	Attended
55.	Rajendra Kumar	Meeting Focus Group (Urinary Disorders & Gout)	Focus Group Coordinator	11/10/2021	Attended
56.	Rama Rao V	Research Advisory Meeting	Karnataka Forest Department,	12/10/2021	Presented IMR-MEBS

			Bengaluru		project for permission
57.	Rajendra Kumar	Certificate Course on Marma Chikitsa (CCMC)	NARIP, Cheruthuruthy, Kerala	20/10/2021 to 18/11/2021	Participated
58.	All staff of CARI	Web lecture on PIDPI for vigilance awareness	CCRAS, New Delhi	27/10/2021	Participated
59.	Ms. Sonam Chandhok	Lecture on 'Vigilance and role of students in making India corruption free' at Kagganahalli Govt. High School	CARI, Bengaluru	29/10/2021	Delivered guest lecture
60.	Doddamani SH	Panel Discussion on Virechana	All India Panchakarma Teachers and Specialists Association	31/10/2021	Delivered Keynote Address
61.	Rama Rao V	Mega Health Camp	Gandhadanaadu JanapadaVedika, Bengaluru	10/11/2021	Distributed plants saplings under AYUSH AapkeDwar
62.	Rajendra Kumar Ms Sonam Chandhok Bhavya BM	Quiz competition on RajBhasa Hindi and General knowledge on the occasion of Viswa Hindi Divas	NARAKAS, Bengaluru	11/11/2021	Participated
63.	सुरेशकुमार	ऑनलाइनमाध्यमसे "सोशलमिडियाकाउपयोगअ भिशापहैंयावरदान" निबंधलेखनप्रतियोगिता	नगरराजभाषाकार्यान्वयनसमिति (1) बेंगलुरुद्वाराआयोजित	16/11/2021	प्रतिभागीकेरूपमें
64.	सुरेशकुमार	ऑनलाइनमाध्यमसे "भ्रष्टाचारएवंइसकाउन्मूलन" भाषणप्रतियोगिता	नगरराजभाषाकार्यान्वयनसमिति (1) बेंगलुरुद्वाराआयोजित	18/11/2021	प्रतिभागीकेरूपमें
65.	Shubhashree MN	A panel discussion on Ayurveda for Nutrition (Virtual)	Himalaya Wellness Centre	19/11/2021	Participated as a panellist
66.	Bhavya BM	Shalakyia Focus Group Discussion on the topic 'Finalising concept note related to Shalakyia'	CCRAS, Shalakyia Group	20/11/2021	Participated
67.	Rama Rao V Bhavana R	Review meeting of CCRAS-MPR-	RARI, Pune	23/11/2021	Presented the MEBS-



	Ritu Sinha	Cultivation focus group			Cultivation project work progress
68.	शशिधरदोड्डमणि सुरेशकुमार	ऑनलाइनमाध्यमसेकविता पाठप्रतियोगिता	नगरराजभाषाका र्यान्वयनसमिति(1) बेंगलुरुद्वाराआयोजि त	24/11/2021	प्रतिभागीकेरूप में
69.	Raghavendra Naik	Guest lecture on topic “Career opportunities and scope in Research after BAMS” during Dravya Deepika 2021- National level Webinar	DBAET's SBG Ayurvedic Medical College & Hospital Belagavi	08/12/2021	Delivered guest lecture
70.	Thejaswini C Rajendra Kumar	VC meeting on Development of Ayush Foods/ Ayush Aahar through Research & Development and their branding & popularization	CCRAS, New Delhi	10/12/2021	Attended
71.	Thejaswini C Rajendra Kumar	Meeting regarding Annual Action Plan 2022-23 AMHCP RCH (SCSP)	CCRAS, New Delhi	22/12/2021	Attended
72.	All staff of CARI	Ayurmedha national level quiz compitation	CCRAS, Bengaluru with SDM college of Ayurveda Udupi	28/12/2021	Attended
73.	Bhavya BM	Shalakyia Focus Group Discussion through Google meet on the topic ‘Finalizing concept note related to Shalakyia w.s.r Migraine’	CCRAS, Shalakyia Group	29/12/2021	Participated
74.	Raghavendra Naik	FAD-26, AYUSH sectional committee meeting	BIS Secretariat NEW Delhi	30/12/2021	Participated
75.	Thejaswini C Anchan VV Shubhashree MN Rajendra Kumar	Awareness program & distribution of fruits and nutritional dry fruit bars to Government school children (HIV infected) at Thataguni	CARI, Bengaluru	31/12/2021	Organized
76.	Rajendra Kumar	Meeting Focus Group (Rheumatoid Arthritis & Musculoskeletal Disorders)	Focus Group	31/12/2021	Attended
77.	Thejaswini C	Virtual meeting to	CCRAS, Hqrs	13/01/2022	Attended

	Rajendra Kumar	discuss with the concerned Peripheral Institutes about the study on AyuRaksha Kit through Outreach Activity			
78.	Shubhashree MN	Clinical Research in AYUSH	SR Academy of excellence	16/01/2022	Participated
79.	Giri SK	Quiz competition on Raj Bhasa at Feral Language and General knowledge on the occasion of Viswa Hindi Divas	TOLIC , Bengaluru	16/01/2022	Participated as Rajabhasa Adhikari
80.	Giri SK	Distribution of Samshamanivati and Ayush-64 for prophylaxis and management of Covid-19	CCARS, AKAM, New Delhi.	18/01/2022	Participated
81.	Bhavya BM	Concept Note on 'Exploring the Association between Prakriti and Prevalence of Diabetic Retinopathy based on Ayurvedic Prakriti Assessment Scale in General Population" in Shalakyia Focus Group Discussion	CCRAS, Shalakyia Group	18/01/2022	Participated and Presented Concept Note
82.	Shubhashree MN	Update on status of AMRA	CCRAS Headquarters	24/01/2022	Participated
83.	Rama Rao V Nazneen Ritu Sinha Bhavana R	Review meeting on work progress of IMR projects	CCRAS New Delhi	25/01/2022	Participated and presented work progress of various IMR projects
84.	Giri SK	Discussion of Research proposal	CCRAS, Mental Health Research Group	28/01/2022	Participated as Focus group
85.	Shubhashree MN	Controversial Ayurvedic herbs	Vishwa Ayurveda Parishad	30/01/2022	Participated
86.	Giri SK Srinibash Sahoo Rajendra Kumar	VC meeting for discussing and planning to organize "Sensitization and capacity building programme for	CCRAS Headquarters, New Delhi	01/02/2022	Attended

		NAMASTE Portal”			
87.	Raghavendra Naik	1 <sup>st</sup> Meeting of FAD 26 Panel 1	BIS, New Delhi	03/02/2022	Participated as an expert
88.	Rama Rao V Nazneen Ritu Sinha Bhavana R	MPR Meeting- New project proposals presentation	MPR Section, CCRAS Hqs.	07/02/2022 & 08/02/2022	Attended
89.	Raghavendra Naik	In-Vitro Diagnostic Medical Devices: Standardization and Regulation	Bureau of Indian Standards New Delhi	09/02/2022	Participated
90.	Shubhashree MN	Presented on ‘Research designs in clinical research’	S.K. academy of Excellence, Bangalore	12/02/2022	Presented
91.	Raghavendra Naik	One World One Health	Forum on Indian Traditional Medicine	16/02/2022	Participated
92.	Bhavya BM	Revised Agni Assessment tool sensitization programme being developed into a web application	CCRAS Headquarters, New Delhi	17/02/2022	Participated through VC
93.	Doddamani SH Rajendra Kumar	Ayu Raksha Kit Project Camp at HD Kote	CARI Bengaluru	14/02/2022 to 19/02/2022	Organized and conducted
94.	Raghavendra Naik	2 <sup>nd</sup> Meeting of FAD 26 Panel 1	BIS, New Delhi	28/02/2022	Participated as an expert
95.	Bhavya BM	Presented on “Exploring the Association between Prakriti and Prevalence of Diabetic Retinopathy based on Ayurvedic Prakriti Assessment Scale in General Population”	CCRAS Shalaky Group	28/02/2022	Presented concept note
96.	Shubhashree MN	Kempegowda Institute of Medical Sciences, Bengaluru	Bengaluru	18/03/2022	Delivered guest lecture
97.	Rama Rao V Nazneen Ritu Sinha Bhavana R	MPR Meeting- New project proposals presentation	MPR Section, CCRAS Hqs.	29/03/2022	Attended

5. Organized Arogya/Mela/Exhibition/Camp/Others: Nil

6. Participated Arogya/Mela/Exhibition/Camp/others:

1.	Sulochana Bhat SH Doddamani	Mega Science Technology and Industry Expo.India	Ministry of Science and Technology, Ministry of Earth	10/12/2021 to 13/12/2021	Participated
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		International Science Festival 2021	Science, Govt.of Goa, NCPOR, Vinjana Bharati		
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**PART-A**  
**CLINICAL RESEARCH**

**Brief progress Report of allotted programmes as per format**

**i. Clinical Research (Brief resume of the clinical research carried out since inception)**

**1. Kuposhana (Malnutrition):**

- a. Title of the project: Clinical evaluation of herbal formulations in the management of Kuposhana (Malnutrition)
- b. Year and month of starting the study: 28<sup>th</sup> February 1996
- c. Year and month of ending study: November 1996
- d. Principal drugs taken for clinical evaluation / trial and supporting therapy.
- e. Group I: 1. Ashwagandha Churna (A), 2. ShatavariChurna (S), 3. Amalaki Churna (A)  
Group II: 1. Ashwagandha lehya
- f. Duration of the treatment: 3 weeks
- g. Diagnosis and response of the therapy based on Ayurvedic & modern parameters or both.
- h. Results of the cases completed (Criteria for assessment)

DrugGroup	Good Response	Fair Response	Poor Response	No Response	LAMA	Total
ASA churna	9	0	0	0	1	10
AshwagandhavaLehya	9	0	0	0	1	10
Total	18	0	0	0	2	20

**2. Arsha (Hemorrhoids)**

- a. Title of the project: Clinical evaluation of herbo-mineral preparations in the management of Arsha (Haemorrhoids)
- b. Year and month of starting the study: 13-10-2000
- c. Year and month of ending the study: October 2007
- d. Principal drugs taken for clinical evaluation / trial supporting therapy.

Group	Trial drugs	Dose
I.	KankayanaVati	500 mg thrice a day
	TriphalaChurna	5 gm at Bed time
	KasisadiTaila	2 ml before defecation (applied externally)
II.	Kravyadi Rasa	500 mg thrice a day
	TriphalaChurna	5 mg at Bed time
	KasisadiTaila	2 ml before defecation (applied externally)

- e. Duration of the treatment-21 days
- f. Number of groups and number of cases under each group (year wise details together with study design is to be furnished).

Year of study	Group I	Group II	Total patients
2000-2001	10	2	12
2001-2002	25	16	41
2002-2003	19	18	37
2003-2004	13	11	24
2004-2005	21	10	31
2005-2006	14	11	25

2006-2007	11	7	18
2007-2008	7	10	17
Total	120	85	205

g. Results of the cases completed (indicate relief assessment criteria under each group).

Drug Group	Good Response	Fair Response	Poor Response	No Response	LAMA	Total
Group I	33	42	5	5	35	120
Group II	11	23	9	4	38	85
Total	44	65	14	9	73	205

### 3. Manodvega(Anxiety neurosis):

- Title of the project: Clinical evaluation of Brahmi Vachaghanavati in the management of Manodvega (Anxiety neurosis)
- Year and month of starting the study: January, 2001
- Year and month of closure of the study: October, 2007
- Principal drugs for clinical evaluation/ trial supporting therapy: Brahmi-Vachaghanavati
- Duration of the treatment: 6 weeks
- Diagnosis and therapy response based on Ayurveda& modern parameters or both.
- Number of groups and number of cases under each group (year wise details together with study design is to be furnished)

Year wise group-I study

2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Total
02	13	25	10	10	10	12	05	87

Study was conducted in a single group. It was planned to study 10 cases every year and to conduct open trial without standard or placebo.

- Results of the cases completed (indicate relief assessment criteria under each group)

Drug Group	Good Response	Fair Response	Poor Response	No Response	LAMA	Total
Group I Brahmi Vacha Ghana vati	35	44	8	-	-	87

### 4. Tamaka Swasa (Bronchial asthma)

- Title of the project: Evaluation of Shamana therapy and ShodanaChikitsa in the management of TamakaSwasa (Bronchial asthma)
- Year and month of starting the study: 1993 to 1994
- Year and month of ending the study : October 2007
- Principal drugs taken for clinical evaluation / trial and supporting therapy.  
Group –I: Vardhamana pippali ksheera paka with Sameera Pannaga Rasa  
Group –II: Shirishatwakkwatha  
Group –III: Shodana therapy followed by Shirishatwakquatha
- Duration of the treatment- 6 weeks
- Number of groups and number of cases under each group (year wise details):

Patients were studied in 3 groups.

Group I - Vardhamanapippliksheerapaka, along with sameerapannaga rasa.

Group II - Shirishatwakkwatha.

Group III - Shodana followed by Shirishatwakquatha

In each group 5 patients were studied. It was an open trial so no standard or placebo was used.

S.No.	Year	Group I	Group II	Group III	Total
1.	1993-1994	5	5	nil	10
2.	2000-2001	1	7	nil	8
3	2001-2002	1	13	11	25
4	2002-2003	-	10	12	22
5	2003-2004	Nil	8	1	9
6	2004-2005	Nil	8	nil	8
7	2005-2006	Nil	12	nil	12
8	2006-2007		8		8
9	2007-2008	Nil	6	nil	6
	Total	7	77	24	108

g. Results of the cases completed (indicate relief assessment criteria under each group).

SN	Drug Group	Good Resp	Fair Resp	Poor Resp.	No Resp.	Death	LAMA	Total
1.	VardamanaPippaliKsheerapaka, Sameerapannaga rasa	2	3	-	1	-	1	7
2.	Shirishatwakkwatha	32	20	10	6	nil	9	77
3	Shodhana followed by shamana	21	3	nil	nil	nil	nil	24
	Total	55	26	10	7		10	108

### 5. Vyanabalavaishamya (Hypertension)

a. Title of the project: Clinical evaluation of herbal and herbomineral formulations in the management of Vyanabalavaishamya (Hypertension)

b. Year and month of starting the study: January, 2000

c. Year and month of ending study: October, 2007

d. Principal drugs, taken for clinical evaluation / trial and supporting therapy.

Group	Drugs	Dose
Group I	Vacha, Brahmi, Arjuna, Jatamansi	3gms x TDS
Group II	Chandraprabhavati Swetha Parpati Punarnava Mandura	500mg 500mg 500mg x TDS

e. Duration of treatment: 6 weeks

f. Diagnosis and response of therapy based on Ayurveda and modern parameter or both.

Diagnosis and response to therapy was assessed as per C.C.R.A.S proforma

g. Number of group and number of cases under each group (Year wise details together with study design is to be furnished)

The study was conducted in two groups and it was proposed to study 10 patients every year in each group. The study was open trial and no placebo or standard was used.

Year of study	Group I	Group II	Total patients studied
2000-2001	11	2	13
2001-2002	14	11	25
2002-2003	8	10	18
2003-2004	12	9	21
2004-2005	11	1	12
2005-2006	12	5	17
2006-2007	11	11	22
2007-2008	7	1	8
Total	86	50	136

h. Results of the cases completed (indicate relief assessment criteria under each group)

Drug Group	Good Resp.	Fair Resp.	Poor Resp.	No Resp.	LAMA	Total
Group I: Arjuna Vachadi Yoga	21	25	15	5	20	86
Group II: ChandraPrabhadi yoga	13	13	12	6	6	50
Total	34	38	27	11	26	136

## 6. Iron Deficiency Anaemia

- Title of the project: A Multicentric Open Clinical Trial on Dhatri Louha in Iron Deficiency Anaemia
- Year and month of starting the study : December, 2007
- Year and month of ending study : December, 2008
- Principal drugs, for clinical evaluation / trial and supporting therapy: Dhatri Louha.
- Duration of treatment : 45 days
- Diagnosis and response of therapy based on Ayurveda and modern parameters or both
- Number of group and number of cases under each group: One group with 40 cases for one year duration. It was an open label, multicentric trial; no placebo/standard was used.
- Name of Investigators (with details of the study period conducted by each of them)

Principal investigator	Co- investigator
Dr.K.Gopakumar	Dr. B.N. Sridhar
Dr. B.N.Sridhar	Dr. G.Venkateshwarlu
	Dr. H. Pushpalatha

- Summary of the project
  - Screened : 115
  - Completed : 28
  - Drop outs : 03 (1 case showed drug reaction)
- Over all clinical assessment (Objective)
  - Improved : 20 {improved Hb%, but morphology did not change}
  - No change : Nil
  - Deteriorated : 08
- Overall impression of the well being (Subjective)
  - Improved : 25
  - No change : 03
  - Deteriorated : Nil

## 7. Documentation of Reported Episode of Prevention/Treatment of Vector Borne /Infectious Disease of Ayurveda and Siddha” under Intra Mural Research



Name of the Institute : National Ayurveda Dietetics Research Institute,  
Bangalore

Reporting period : April, 2009 to March, 2011

- a. Principal Investigator : Dr. B. N. Sridhar  
b. Co- investigator(S) : Dr. G. Venkateshwarlu  
Dr. Kishore Kumar R  
Dr. S.H. Doddamani  
Dr. Shubhashree MN

c. Date of initiation of the project : 28.07.2009

d. Details of the diseases/claims:

Details of the disease	Claims	Publication		
		Research papers/ published by the Institute	Research papers/article communicated for publication	No of visit conducted to gather information
Post viral arthralgia (Chikungunya)	i.Tour visit claims :1304 ii. OPD Claims : 164 Total: 1468	-	-	31

e. Details of tour conducted in Karnataka

S. N.	Date of visit	Name of the Ayurveda/Siddha /traditional practitioners or Ayurveda/Siddha colleges /Hospitals /Institutions visited to gather information	Prevention claims	Treatment claims
1	28/7/2009	Govt. Ayush Hospital, Chitradurga	Nil	230
2	04/11/2009	Govt. Ayurvedic Hospital, Marenahaali, Bagaluru post, Bangalore North District, Bangalore	Nil	11
3	11/11/2009	Govt. Ayurvedic Dispensary, Bannerghatta, Bangalore	Nil	300
4	09/12/2009	Govt. Ayurvedic Dispensary, Byatha, HesaraghattaHobli, Bangalore North Taluk, Bangalore urban District	Nil	25
5	16/12/2009	Govt. Ayurvedic Dispensary, Mantanakurchi, Sondekoppa post, Nelamangala Taluk, Bangalore Urban	Nil	13
6	30/12/2009	Govt. Ayurvedic Dispensary, Yelahanka, Bangalore North Taluk, Bangalore.	Nil	15
7	06/01/2010	Govt. Ayurvedic Dispensary, Machohalli, Bangalore North Taluk, Bangalore	Nil	10
8	27/01/2010	Govt. Ayurvedic Dispensary, Somanahalli, Kanakpura Road, Bangalore South Taluk, Bangalore Urban District	Nil	20
9	23/02/2010	Govt. Ayurvedic Dispensary, Mukkodlu, Kanakpura Road, Bangalore South Taluk, Bangalore Urban District	Nil	15
10	24/02/2010	Govt. Ayurvedic Dispensary, Hegganahalli, Devanahalli Taluk, Bangalore Rural District, Bangalore	Nil	15
11	26/02/2010	Govt. Ayurvedic Dispensary, Yentaganahalli,	Nil	13

		Nelamangala Taluk, Bangalore Rural District, Bangalore		
12	05/03/2010	Govt. Ayurvedic Hospital, D Cross, Doddaballapura, Bangalore Rural District, Bangalore	Nil	12
13	05/03/2010	Govt. Ayurvedic Dispensary, Kodihalli, Doddaballapura Taluk, Bangalore Rural District	Nil	12
14	11/03/2010	Govt. Ayurvedic Dispensary, Koligere, Doddaballapura Taluk, Bangalore Rural District, Bangalore	Nil	6
15	11/03/2010	Govt. Ayurvedic Dispensary, HanabeDoddaballapura Taluk, Bangalore Rural District, Bangalore	Nil	10
16	25/03/2010	Govt. Ayurvedic Dispensary, Ragihalli, Anekal Taluk, Bangalore Urban District, Bangalore	Nil	12
17	27/4/2010	Govt. Ayurvedic dispensary, Seesandra, Kolar district	Nil	00
18	27/4/2010	Govt. Ay. dispensary, Shivarapattana, Kolar district	Nil	00
19	17/5/2010	Govt. Ayurvedic Dispensary, Shivarapatna, Malur taluk, Kolar district	Nil	7
20	19/5/2010	Govt. Ayurvedic Dispensary, Seesandra, Kolar district	Nil	5
21	31/05/2010	Govt. Ayurvedic Dispensary, Srinivaspur, Kolar district	Nil	18
22	31/5/2010	Govt. Ayurvedic Dispensary, Somayajalahalli, Kolar district,	Nil	45
23	21/6/2010	Govt. Ayurvedic Dispensary, AmblikalMulabagalu taluk, Kolar district	--	30
24	21/6/2010	Govt. Ayurvedic Dispensary, ChikkaTirupathi, Malur taluk, Kolar district	--	15
25	12/7/2010	Govt. Ayurvedic Dispensary, Hosur Byramangala, Ramanagara district,	Nil	0
26	12/7/2010	Govt. Ayurvedic Dispensary, Thumbenahalli, Ramanagara district	Nil	175
27	12/7/2010	Govt. Ayurvedic Dispensary, Channapattana, Ramanagara district	Nil	235
28	25/8/2010	Govt. Ayurvedic Dispensary, ,Yelahalli,Kanakapura taluk, Ramanagara district	Nil	15
29	30/8/2010	Govt. Ayurvedic Dispensary,Kolagondanahalli,Kanakapura taluk, Ramanagara district	Nil	12
30	22/9/2010	Govt. Ayurvedic Dispensary, Magadi Taluk, Ramanagara district	Nil	14
31	28/9/2010	Govt. Ayurvedic Dispensary, Kanakapura Tk, Ramanagaradist	Nil	14

Note: Observational study on VBD was stopped vide Council's letter No.F.5-15/2008- CCRAS/Tech/Hq/Part (2), dated 27.9.2010.

### 8. An observational study on Flu-Like Illness

Period of the study: 2009 to 2013

Disease wise statement of Patients of Flu like illnesses during the study period

SN	[Disease /Condition] Similar to Flu like illness (Examples)	Patients treated at OPD													
		New						OLD						Grand total	
		Adult		Child		Total		Adult		Child		Total			
		M	F	MC	FC	M	F	M	F	MC	FC	M	F	M	F
1	Vatikpratishyaya	24	7	0	7	24	14	56	44	3	1	59	45	80	57
2	Paitikpratishyaya	15	2	0	0	15	2	28	13	0	3	28	16	39	18
3	Kaphajpratishyaya	137	82	26	22	163	104	131	146	14	18	145	164	240	206
4	Vatashlaishmikjwara	63	37	6	17	69	54	51	63	5	8	56	71	106	109
5	Avian flu	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Swine flu	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Viral fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Rhinitis with fever	3	3	0	0	3	3	0	0	0	0	0	0	0	0
9	Rhinitis with cough	43	16	8	6	51	22	0	0	0	0	0	0	0	0
10	Other flu like illnesses (if any)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	285	147	40	52	325	199	266	266	22	30	288	296	465	390

### 9. Intra Mural and Collaborative Clinical Research Projects (IMCRP)

Brief resume of the IMCRPs carried out (Completed Programmes)

#### 9.1. Title of the project: Multicentric Open clinical trial of Rajapravartinivati in Kastarthava (Dysmenorrhea)

- Name of the Institute/Department : N. A. D. R. I, Bangalore.
- Date of initiation of the study : 13/5/2011
- Date of completion of the study : 12/06/2012
- Name of the Principal Investigator : Dr. Shubhashree MN

##### 9.1.1. Brief Statement of patients/cases studied

Target cases	Cases screened	Screen failures	Cases enrolled	Cases completed	Drop outs	Remarks
40	53	11	42	41	01	Target achieved

##### 9.1.2. Budget expenditure details

Sanctioned budget	Expenditure details in Rupees				Expenditure (Rs.)	Balance amount
	Lab charges	Pt.	Stationary	Miscellaneous		
5,00,000/-	1,80,666/-	28,800/-	3,591/-	3,104/-	2,16,161/-	2,83,839/-

**9.2. Title of the project: Clinical evaluation on the Rasayana effect of Ashwagandha avalehya in apparently healthy elderly persons**

- Name of the Institute/Department : NADRI Bangalore
- Date of initiation of the study : 04/07/2011
- Date of completion of the study : 25/01/2012
- Name of the Principal Investigator : Dr. G. Venkateshwarlu
- Name of the Co-Investigator : Dr. S.H. Doddamani

9.2.1. Budget allocated: Rs.5, 00,000/-

9.2.2. Installment wise release: Released at once

Sl.No.	Installment	Sanctioned order	Date	Date of receipt of fund
1.	1 <sup>st</sup>	O. Order No 3283/2010	15.03.2011	-

**9.2.3. Brief Statement of participants studied**

Sl. N.	Programme	Total Target cases	No. of cases screened	Screen failure	No. of cases Enrolled	No. of cases Completed	No. of cases continued	Drop outs	Remarks/ Status
1	IMCRP-Rasayana	50	59	03	56	52	00	04	Target achieved

**9.3. Title of the project: Clinical evaluation of Vyoshadi Guggulu and Haritaki Churna in the management of Obesity (Sthaulya)**

- Name of the Institute/Department : NADRI, Bangalore.
- Date of initiation of the study : 11.08.2011
- Date of completion of the study : 27.06.2012
- Name of the Principal Investigator : Dr. Kishore Kumar R
- Name of the Co-Investigator : Dr. Sanjay Kumar Giri

**9.3.1. Brief Statement of patients/cases studied**

Sl. No.	Disease/ Program	Target	Screened	S. Failure	Enrolled	Completed	Drop outs	Remarks/ Status
1.	IMCRP-Obesity	50	80	25	55	50	05	Target achieved

**9.3.2. Statement of participants of trial**

Target cases	Screened	Screen Failure	Enrolled	Completed	Drop outs	Remarks
50	80	25	55	50	5	Target achieved

**9.3.3. Budget Expenditure (in Rupees)**

Sanctioned Budget	Lab charges (Outsourcing)	Pt. Conveyance	Medical Eqpts & Stationery	Photocopying	Expenditure incurred	Balance Amount
5,00,000/-	1,44,640/-	42,200/-	6,055/-	5,371/-	1,98,266/-	3,01,734/-

**9.4. Title of the project: Evaluation of Clinical Efficacy and Safety of Brahma Rasayana in Apparently Healthy Elderly persons**

- Name of the Institute : NADRI Bangalore
- Date of initiation of the study : 01/03/2013 [Enrolled date: 5.3.2013]
- Date of completion of the study : 24.2.2014
- Name of the Principal Investigator : Dr. G. Venkateshwarlu
- Name of the Co-Investigator(s) : Dr. S. H. Doddamani  
Dr. S. K. Giri.
- Name of the SRF : Dr. Anand Kumar

9.4.1. Budget allocated : Rs.13,74,000/-

9.4.2. Installment wise release

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1.	1 <sup>st</sup> Rs.8,24,400/-	Officer Order No 1951/2012-13	06.10.2012	-

9.4.3. Brief Statement of cases studied

Sl. N.	Study Programme	Target cases	Cases screened	Screening failure	Cases Enrolled	Cases continued	Cases completed	Drop outs	Status
1	IMCRP- Brahma Rasayana	60	73	13	60	00	58	02	Target achieved

### 9.5. Title of the project: Clinical evaluation of vatariguggulu, Maharasnadi qwatha and Narayana Taila in the Management of Osteoarthritis Knee

- Name of the Institute : NADRI Bangalore
- Date of initiation of the study : 21/10/2013
- Date of completion of the study : 08.08.2014
- Name of the Principal Investigator : Dr. Shubhashree M N
- Name of the Co-Investigator(s) : Dr. Kishore Kumar R  
Dr. S K Giri
- Name of the SRF : Dr. Shwetha Singh
- Date of IEC approval : 05.07.2014

9.5.1. Budget allocated: Rs.12, 74,000/-

9.5.2. Installment wise release

S. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup> Instalment Rs.7,64,400	F.No.CB/Adv/28/Hqrs. /CCRAS /2012 -13	Dt. 1.11.2012	-

9.5.3. Brief Statement of cases studied

Sl. N.	Study Programme	Target cases	screened	Scr. failure	Enrolled	completed	Drop outs	Remarks/ Status
1	IMCRP- OA Knee	60	65	05	60	58	02	Target achieved

**9.6. Name of Project: Prospective, randomized, double blind, placebo controlled comparative trial to evaluate quality of life with AYUSH QOL 2C in patients of non Metastatic Breast Cancer as an adjuvant to Chemotherapy**

➤ Date of initiation of the study : 03 August 2009

➤ Date of completion of the study : 31<sup>st</sup> March 2014

9.6.1. Investigators details

Name of the Collaborating Institute/Department	Name of the Investigators
1. St John's Medical College & Hospital, Bangalore. Division of Clinical Pharmacology & Surgical Oncology	1. Dr. Chanda Kulkarni (PI-) (Retd. On 16.10.2013) 2. Dr. Suraj Manjunath (PI-Surg. Oncology*) *Dr. Shiva Kumar.K (acting PI on behalf of No.2)
2. National Ayurveda Dietetics Research Institute, Bangalore	3. Dr. B.N Sridhar (PI) (Retd. On 31.10.2013) 4. Dr. G.Venkateshwarlu(Co-Investigator)

9.6.2. Brief Statement of patients studied: (period from Aug. 2009 to 20<sup>th</sup> Mar. 2014)

Study Programme	Target cases	screened	Scrn. failure	Enrolled	Completed	Drop outs	Death	Remarks/ Status
AYUSH-QOL 2C in Breast Cancer	80	89	09	80	65	13	02	Study completed

9.6.3. Summary of the study between 1<sup>st</sup> April 2013 to 31<sup>st</sup> March 2014

Sl. No.	Details	No.of cases
1	No. of Cases Screened	00
2	No. of Screen Failure	00
3	No. of Recruited cases	00
4	No. of cases completed the study	27
5	No. of Cases Under study	00
6	No. of Drop outs	02
7	No. of Death	00
8	No. of cases showed S.A.E	01

9.6.4. Details on S.A.E. from 1<sup>st</sup> April 2013 to 31<sup>st</sup> March, 2014

SN	En. No	SAE.No.	SAE reporting date	Pt.Name	OPD No.	Screened date	Date of hospitalization	Reason
1.	075	16	25.5.2013	Sulochana Bai	3094262	01.02.2013	21.5.2013	Herpes Zoster infection

**9.7. Name of Project: Clinical Trial to Study the effect of *Cyavanaprāśa* on Aging in Apparently Healthy Elderly Subjects**

9.7.1. Participating centre along with PI

Sl. No.	Name of the participating centre	Name of PI
1.	National Ayurveda Dietetics Research Institute, Bangalore	PI: Dr. S. K. Giri Co-I: Dr. Kishore Kumar
2.	RRA PodarAyurved Cancer Research Institute (RRAPACRI), Mumbai	PI: Dr. Sneha Marlewar
3.	Dr. Achanta Lakshmipathi Research Centre for Ayurveda (ALRCA), Chennai	PI: Dr. Pitta Srininivas

9.7.2. Date of IEC approval: 05.07.2014

9.7.3. CTRI Registration (for clinical trials): CTRI/2016/03/006701

9.7.4. Date of initiation: 27-11-2014

9.7.5. Budget allocated: Rs. 20, 86,000/-

9.7.6. Installment wise release: Released at once

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup>	Office Order No. 2394/13-14 [3-40/2013-CCRAS/Admn/AAP (Rasayan)]	18/02/2014	24.02.2014

9.7.7. Chronological timeline & deliverables

Sl. No.	Target For	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	70	12 months	Achieved	Not applicable

9.7.8. Current status: Completed

Sl. No.	Participating Centre	Cases enrolled	Cases completed	Drop outs	Cases continued
1	National Ayurveda Dietetic Research Institute, Bangalore.	70	68	02	00

9.7.9. Relevant information, if any: Nothing specific

**9.8. Name of Project: Clinical Evaluation of Ashwagandha Churna and Pravala Pishti in the Management of Osteopenia/Osteoporosis**

9.8.1. Participating centre along with PI

Sl. No.	Name of the participating centre	Name of PI
1.	National Ayurveda Dietetics Research Institute, Bangalore	PI: Dr. Kishore Kumar R. Co-I: Dr. S. K. Giri
2.	Raja RamdeoAnandilal Poddar Ay. Cancer Research Institute, Mumbai	PI: Dr. Manohar Gundeti
3.	Ayurveda Central Research Institute, (Safdarjung Hospital Unit), New Delhi	PI: Dr. Pratap Makhija

9.8.2. Date of IEC approval: 05.07.2014

9.8.3. CTRI Registration/Reference (for clinical trials): CTRI/2015/01/005406

9.8.4. Date of initiation: 10.12.2014

9.8.5. Budget allocated: Rs.15, 91,200/-

9.8.6. Installment wise release: Released at once

Sl. No.	Installment	Sanctioned order	Date	Fund receipt Date
1.	1 <sup>st</sup>	Officer Order No 2344/13-14 (3-18/2012-CCRAS/Admn/AAP/OO)	12.03.2014	26.03.2014

9.8.7. Chronological timeline & deliverables

Sl. No.	Target For	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	45	1-6 months	Achieved	Not applicable

9.8.8. Current status: completed

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	National Ayurveda Dietetics Research Institute, Bangalore	45	45	00	00

9.8.9. Relevant information, if any: Nothing specific

### **9.9. Name of Project: Clinical Evaluation of Kanakasava and Trivrit churna in the management of Bronchial Asthma (Tamakaswasa)**

9.9.1. Participating centre along with PI

Sl.No.	Name of the participating centre	Name of PI
1.	National Ayurveda Dietetics Research Institute, Bangalore (Clinical section)	PI: Dr S. H. Doddamani Co-I: Dr. G. Venkateshwarlu SRF: Dr. Anand Kumar
2.	National Ayurveda Research Institute For Vector Borne Diseases, Vijayawada	Dr. R. K. Swamy
3.	Ayurveda Central Research Institute, Jaipur	Dr. Anu Bhatnagar

9.9.2. Date of IEC approval: 21.04.2014

9.9.3. CTRI Registration/Reference (for clinical trials): REF/2014/05/007007

9.9.4. Date of initiation: 21.11.14

9.9.5. Budget allocated: Rs.14,49,130/-

9.9.6. Installment wise release: Released at once

Sl No.	Installment	Sanctioned order	Date	fund receipt date
1.	1 <sup>st</sup>	Office Order No. 2366/13-14 (3-42/2013-CCRAS /Admn/AAP/BA)	11.02.2014	24.02.2014



9.9.7. Chronological timeline & deliverables

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	70	1-6 months	Achieved	Not applicable

9.9.8. Current status: completed

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIMD Bengaluru	70	70	00	00

9.9.9. Relevant information, if any: Nothing Specific

**9.10. Name of Project: Clinical evaluation on the efficacy of Mamajjakaghanavati in Madhumeha (Type-2 Diabetes Mellitus)**

9.10.1. Participating centre along with PI

Sl.No.	Name of the participating centre	Name of PI
1.	Regional Ayurveda Research Institute for Metabolic Disorders, Bengaluru [National Ayurveda Dietetics Research Institute]	PI: Dr M N Shubhashree Co-I: Dr. S H Doddamani
2.	National Research Institute for Drug Development, Bhubaneswar	P.I.- Dr. Bikartan Das Co.I- Dr. M.M. Rao
3.	National Veterinary – Ayurveda Research Institute and Hospital, Lucknow	P.I.- Dr. G.C. Nanda Co.I - Dr. Vimal Tiwari

9.10.2. Date of IEC approval: 14.03.2016

9.10.3. CTRI Registration/Reference (for clinical trials): REF/2016/06/011468

9.10.4. Date of initiation: 26/05/2016

9.10.5. Budget allocated: Rs. 10, 13,400/- (9<sup>th</sup> Feb 2016)

9.10.6. Installment wise release:

Sl.No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup>	Office Order No. 3-19/2016-CCRAS /Admn /Madhumeha/936	04/02/2016	23.02.2016

9.10.7. Chronological timeline & deliverables

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	60	1-3 months	Achieved	Not applicable

9.10.8. Current status: completed

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIMD Bengaluru	60	55	05	00

**9.11. Name of Project: Retrospective Pharmaco-epidemiological Study on Safety & Effectiveness of Rasaushadhis**

### 9.11.1. Objectives

1. Retrospective cross sectional analysis of available data from clinical records from CCRAS clinical research facilities during last 5 years i.e. 2012-2017.
2. Prospective documentation & information analysis in structured format to draw meaningful possible outcomes and conclusions with a pharmaco-epidemiological perspective.
3. Development of an Ayurvedic informatics database in a reverse way to substantiate and identify superiority and lacunae, in terms of gross effectiveness and safety indicators, of Ayurvedic interventions.

### 9.11.2. Participating centre along with PI:

Sl.No.	Name of the participating centre	Members
1	Regional Ayurveda Research Institute For Metabolic Disorders, Bengaluru	P.I- Dr M.N Shubhashree R.O (Ayu). Co.I.- Dr. Raghavendra Naik R.O (Ayu)

9.11.3. Date of initiation: 22<sup>nd</sup> March 2018

9.11.4. Date of completion: 31<sup>st</sup> December 2018

9.11.5. Office Order number: F.No.1-27/2017-CCRAS/Tech/Hq/3798

Sl.No.	Year of entry	No. of OPD entries	IPD Entries	Total	ADR/AE reported in OPD cases	ADR/AE reported in IPD cases	Total	Remarks
1.	2012-13	1676	NA	1676	1	NA	1	Completed
2.	2013-14	1874	NA	1874	1	NA	1	Completed
3.	2014-15	1439	NA	1439	-	NA	-	Completed
4.	2015-16	1290	NA	1290	-	NA	-	Completed
5.	2016-17	1514	NA	1514	-	NA	-	Completed
6.	2017-18	1380	NA	1380	-	NA	-	Completed

NA: Not applicable as IP facility unavailable

9.11.6. Relevant information, if any: Nothing specific

### 9.12. Name of Project: Clinical Evaluation of the Efficacy of Trayodashanga Guggulu, Maharasnadi Kwatha and Prasarani Taila in the Management of Gridhrasi (Sciatica)

#### 9.12.1. Participating centre along with PI

Sl. No.	Name of the Institute	Name of the Principal Investigator	Name of the Co-Investigator
1	Regional Ayurveda Research Institute for Metabolic Disorders, Bangalore	Dr.S.H. Doddamani, RO (Ay.) Dr. SK Giri, RO (Ay)	Dr. Kishore Kumar R RO (Ay.)
2	Advanced Center for Ayurveda in Mental Health& Neurosciences, Bangalore	Dr. Srinibash Sahoo, RO (Ay.)	Dr. G.Venkateshwarlu, RO (Ay.)
3	Regional Ayurveda Research Institute for skin disorders, Vijaywada	Dr.G.Babu, A.D. (Ay.)	Dr.K.Midhuna Mohan, RO(Ay.)

9.12.2. Date of IEC approval: 15.09.2017

9.12.3. CTRI Registration/Reference (for clinical trials): CTRI/2017/11/010574

9.12.4. Date of initiation: 11/04/2018

9.12.5. Budget allocated: 27, 71,600/-

9.12.6. Installment wise release:

S. No.	Installment	Sanctioned order	Date	Date of fund receipt
1	1 <sup>st</sup> Installment Rs.21,59,800/-	Office Order No. F.N.3- 31/2016ccras/tech/sciatica/984	13.01.2017	23.01.2017

9.12.7. Chronological timeline & deliverables

S. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	60	24 Months	Achieved	Nil

9.12.8. Current status: completed

S. No.	Participating Centre	Cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
2.	RARIMD Bengaluru	53	50	03	00

9.12.9. Relevant information, if any: Nothing specific

### 9.13. Name of Project: Clinical Evaluation of AYUSH PE Eye Drops in the Management of Acute Allergic Conjunctivitis

9.13.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	PI: Dr. Bhavya BM., RO (Ay.) Co-I: 1. Dr. BK. Bharali, AD i/c 2. Dr. Raghavendra Naik, RO (Ay.)
2.	CARICD Punjabi Bagh, New Delhi	PI: Dr. Nandini Jadhav Co-I: Dr. Mridula Dua
3.	RARI for Eye Diseases, Lucknow	PI: Dr. Alok Kumar Srivastav Co-I: 1. Dr. Kamble Pallavi Namdev 2. Dr. Praveen Balakrishnan

9.13.2. Date of IEC approval: 03.07.2018

9.13.3. CTRI Registration/Reference (for clinical trials): CTRI/2018/07/014801

9.13.4. Date of initiation: Initiated from 13<sup>th</sup> August 2018

9.13.5. Budget allocated: Rs. 4,19,650/-

9.13.6. Installment wise release: Released at once

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1.	1 <sup>st</sup>	Office Order No. 1076/18-19 [F.No. 3-15/2018-CCRAS/Admn/IMR/CAC]	22/06/2018	29/06/2018

9.13.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/Not achieved	Causes of deviation, if any
1.	55	12 months	Not Achieved	Not applicable

9.13.8. Status: Study initiated from 13th August 2018, completed on 10<sup>th</sup> July 2019.

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIMD Bengaluru	55	55	00	00

### 9.14. Name of Project: Safety and Efficacy of Ayurveda interventions for Glaucoma: A systematic review

9.14.1 Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	Dr. Bhavya BM, RO (Ay.) Co-I: Dr. MN. Shubhashree, Dr. Raghavendra Naik, RO (Ay.)

9.14.2. Date of IEC approval: NA

9.14.3. CTRI Registration/Reference (for clinical trials): NA

9.14.4. Date of initiation: 23/05/2019

9.14.5. Budget allocated: Rs. 30,600/-

9.14.6. Installment wise release: Released at once Rs.30,000/-

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund	Amount in Rs.
1.	1 <sup>st</sup>	Office Order No. 141/2019-20[3-59/2019-CCRAS/Admn/IMR	22.05.2019	31 <sup>st</sup> May 2019	30,000/-

9.14.7. Chronological timeline & deliverables: 9 months

9.14.8. Current status: Completed

9.14.9. Relevant information, if any: Nothing Specific

**9.15. Name of Project: A prospective non-randomised open label controlled interventional study on the effect of Guduchi Ghan Vati/Sudarshan Ghan Vati as a prophylactic measure among Containment Zone population exposed to COVID 19**

9.15.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	Dr. S.H.Doddamani, RO (S-3), Co-I: Dr.Rinky Thakur, RO (Ay.)

9.15.2. Date of IEC approval: F.No.1-12-2020-CARICD/Tech/CEC dated 19.05.2020

9.15.3. CTRI Registration/Reference: CTRI/2020/05/025385

9.15.4. Date of initiation: 8.06.2020

9.15.5. Budget allocated: Rs. 9,50,000/-

9.15.6. Installment wise release: Amount from Institute RA budget is utilized

9.15.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	1500	4 months	Achieved	Nil

9.15.8. Current status: Completed

9.15.9. Relevant information, if any: Nothing Specific

**9.16.Name of Project: Prospective open label controlled interventional study on the effect of Ayurvedic intervention (Ayurveda Raksha Kit) as a prophylactic measure in the Pandemic of COVID-19 - A community based study**

9.16.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	PI: Dr Rinky Thakur RO (Ay.) Co-I: Dr Shubhashree RO (Ay.) Dr. Raghavendra Naik RO (Ay.)

9.16.2. Date of IEC approval: F.No.1-12/2020-CARICD/Tech/CEC dated 7/8/2020

9.16.3. CTRI Registration/Reference (for clinical trials): CTRI/2020/08/027316

9.16.4. Date of initiation: 15-09-2020

9.16.5. Budget allocated: Rs. 57,71,200

9.16.6. Installment wise release: Sanction amount - Rs. 57,71,200 (The unspent amount of Rs 56,16,321/- available under AMHCP-SCSP Project 2019-2020 has been transferred for this Project)

9.16.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/Not achieved	Causes of deviation, if any
1.	8600	6 months	Achieved	Nil

9.16.8. Current status: Completed

Target	Enrolled patients	Completed	Dropouts
8600	8600	8498	102

9.16.9. Relevant information, if any: Nothing Specific

**9.17. Name of Project: Knowledge, Attitude and Practice towards Ayurvedic medicine use among the Diabetics –a cross sectional study**

9.17.1. Participating centre along with PI:

Sl.No.	Name of the participating centre	Members
1.	Regional Ayurveda Research Institute For Metabolic Disorders, Bengaluru	P-I: Dr. S H Doddamani, RO (Ay.) Co-PI: Dr. Shubhashree MN, RO (Ay.)
2.	M.S. Regional Ayurveda Research Institute for Endocrine Disorders,Jaipur	PI: Dr. Indu P P, RO (Ay.) Co-PI- Dr. Swati Sharma, RO (Ay.) Dr. Monika Kumari, RO (Ay.)

9.17.2. Date of IEC approval: 15-09-2017

9.17.3. CTRI Registration/Reference (for clinical trials): Not applicable

9.17.4. Date of initiation: Initiated form 28<sup>th</sup> November 2018

9.17.5. Budget allocated: -Nil

9.17.6. Chronological timeline & deliverables:

Sl.No.	Target	Time line	Achieved/Not achieved	Causes of deviation, if any
1.	750	1 year	Achieved	Nil

9.17.7. Status: Completed

9.17.8. Relevant information, if any: Nothing Specific

Target	Enrolled patients	Completed	Dropouts
750	750	750	00

**9.18. Name of Project: AYUSH Hospital Management Information System (A-HMIS)”**

9.18.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI/Co-I
1	Regional Ayurveda Research Institute for Metabolic Disorders (RARIMD), CCRAS, Bangalore	PI-Dr M.N Shubhashree R.O (Ay.) Co-I- Dr SH Doddamani R.O (Ay.)

9.18.2. Date of IEC approval: - Not applicable

9.18.3. CTRI Registration/Reference (for clinical trials): - Not applicable

9.18.4. Date of initiation: 1.05. 2019 (Initiated in old OPD, RARIMD, Bengaluru)

9.18.5. Budget allocated: Rs 10, 95,400/-

9.18.6. Installment wise release: Released at once

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	10,95,400	File No.3-107/2019 CCRAS/Admin/IMR/3752	03/09/2019	03/10/2019

9.18.7. Current status: Completed

9.18.8. Relevant information, if any: Nothing Specific

**9.19.Name of Project: A prospective Open labeled Observational study to document the potential safety issues and prescription trends in selected Rasaushadhi's in CCRAS-OPD's across India**

9.19.1 Objectives:

- Primary: Development of an Ayurvedic informatics database of selected Rasaushadhi's in terms of clinical safety.
- Secondary: Prospective documentation and analysis of information related with prescription trends of selected *Rasausadhi's* in a structured format to draw the meaningful possible outcomes and conclusions.

9.19.2 Study Design: Open Labeled Observational Study

9.19.3. Sample Size: 110

9.19.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date: F.No. 84-1/2019-CCRAS/Admn/Hq/7470, dated 19<sup>th</sup> Feb 2020.

9.19.5. Duration of Study: 1 year

9.19.6. Interventions: Each prescription shall contain only one Rasausadhi along with other herbal formulations.

List of formulations to be evaluated for clinical safety:

1. *Laxmi Vilas rasa (Naradiya)*-A.F.I, Part-I, 20:39,
2. *SutasekharRasa*- A.F.I, Part-I, 20:52,
3. *Tribhuvankirti Rasa*- A.F.I, Part-I, 20:20
4. *Swasakuthar Rasa*- A.F.I, Part-I, 20:39,
5. *ChandraprabhaVati*- A.F.I, Part-I, 12:10,

6. *GandhakaRasayana*- - A.F.I, Part-II, 7:5
7. *Rasa manikya Rasa*- A.F.I, Part-I, 20:33,
8. *Smritisagara Rasa*- A.F.I, Part-II, 16:64,
9. *ArogyavardhiniGutika* 250mg- A.F.I, Part-I, 20:4,
10. *Mahayogarajaguggulu*- A.F.I, Part-I, 5:6,
11. *PrabhakarVati*- A.F.I, Part-I, 12:15.

9.19.7. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	CARI, Bengaluru	Dr. S.H.Doddamani, RO (Ay.), Co-I: Dr.S.K.Giri R.O (Ay.) Dr. Bhavya BM R.O (Ay.)

9.19.8. Date of IEC approval: F.6-5/RARIMD/BNG/IECMeet/2018-19/107 dated 23.06.2020

9.19.9. CTRI Registration/Reference: CTRI/2020/05/025385

9.19.10. Date of initiation: 20<sup>th</sup> Jan 2021

9.19.11. Budget allocated: Rs. 6,21,000/-

9.19.12. Installment wise release: released on 19.2.2021

Sl. No.	Installment	Amount	Sanction order	Funds received date
1.	1st (CARI Bengaluru)	6,21,000/-	F. No.84-1/2019-CCRAS/Admin/HQ/7470 dt. 19.02.2020	28.02.2020

9.19.13. Current status: Completed

Sl. No.	Cases enrolled	Cases completed	Drop outs	Cases continued
1.	110	98	12	00

9.19.14. Relevant information, if any: Nothing specific

**9.20.Name of Project: “An open label clinical trial to evaluate clinical efficacy and safety of AYUSH AGT in Dandruff (Darunaka)”**

9.20.1. Objectives:

- Primary: To assess the efficacy of Ayush AGT Lotion in dandruff
- Secondary: To assess the safety\* of Ayush AGT Lotion in dandruff

Safety defined in terms of allergic responses (inflammation of scalp, hairfall, redness of eyes, skin pigmentation, uneven skin tone, breaking of hair, itching, rash on neck, forehead, shoulders and retro auricular area etc) and not to be identified with laboratory investigations.

9.20.2. Study Design: Open Clinical Trial

9.20.3. Sample Size: 50

9.20.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date: F.No 3-22/2019-CCRAS/Admn/AUB/5368, dated 27<sup>th</sup> Feb 2019

9.20.5. Duration of Study: 1 year

9.20.6. Interventions: AYUSH AGT coded drug

AYUSH AGT

Dosage	:10 gm
Route of Administration	: Topical
Dosage form	: Lotion
Time of Administration	: Applied on head and washed after 1 hour.
Packing form	: 200 ml (100 ml x 2 bottle)
Duration of therapy	: 30 days
Follow up period	: 15 days

9.20.7. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	Dr. Thejaswini C., RO (AY.) Dr. Raghavendra Naik, RO (Ay.) (till Nov 2021) Co-I: Dr. Bharali BK, In-charge, CARI Dr. Doddamani SH, RO (Ay.)

9.20.8. Date of IEC approval: 04-04-2019

9.20.9. CTRI Registration/Reference (for clinical trials): CTRI/2020/03/024092 [Registered on: 19/03/2020]

9.20.10 Date of initiation: 28/07/2021

9.20.11. Budget allocated: 3,20,000

9.20.12. Installment wise release:

Sl. No.	Installment	Amount	Sanction order	Funds received date
1.	1st (RARIMD Bengaluru)	3,20,000/-	F. No.3-22/2019-CCRAS/Admin/AUB/5368 dated. 27.02.2019	12.03.2019

9.20.13. Chronological timeline & deliverables: To be initiated

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	50	1year	Achieved	None

9.20.14. Current status: Completed

Sl. No.	Cases enrolled	Cases completed	Drop outs	Cases continued
1.	50	44	06	00

9.20.15. Relevant information, if any: Nothing specific



**9.21.Name of Project: Safety and Efficacy of Ayurveda interventions for Urolithiasis: A systematic review**

9.21.1. Objectives

1. Systematic review of selected studies, systematic review of the published, clinical data in safety, efficacy & effectiveness of Ayurveda intervention in management of Urolithiasis.
2. Meta-analysis of the published clinical data in view of safety and effectiveness of Ayurvedic interventions in the management of Urolithiasis.

9.21.2. Study Design: Systematic Review, Meta Analysis

9.21.3. Sample Size: NA

9.21.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date: F.No. 3-47/2019-CCRAS/Admn/IMR/Urolithiasis/6126 Dt. 30.03.2019.

9.21.5. Duration of Study: 9 months

9.21.6. Interventions: NA

9.21.7. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI
1.	RARIMD, Bengaluru	PI: Dr. RaghavendraNaik, RO (Ay.) Co-I: 1. Dr. Sekhar Namburi UR, RO (Ay.) 2. Dr. Shobhit Kumar, RO (Ay.) 3. Dr. Bhavya BM, RO (Ay.)

9.21.8. Date of IEC approval: NA

9.21.9. CTRI Registration/Reference (for clinical trials): NA

9.21.10. Date of initiation: 10.4.2020

9.21.11. Budget allocated: 30,000/-

9.21.12. Installment wise release: Released at once- 30,000/-

9.21.13. Chronological timeline & deliverables: 9 months

- i) Period required for Collection of data, analysis and preparation of report: 6 months
- ii) Period required for Preparation of manuscript, selection of journal and publication: 3 months

9.21.14. Current status: Completed

9.21.15. Relevant information, if any: Nothing Specific

**9.22. Name of Project: Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India- a descriptive, cross sectional, Epidemiological study**

9.22.1. Participating centre along with PI:

Sl.No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	PI: Dr. SH Doddamani, Dr. Raghavendra Naik (PI till November 2021) CoI: Dr. Rajendra Paliwal

9.22.2. Date of IEC approval: 28/06/2021

9.22.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/034828 [Registered on: 14/07/2021]

9.22.4. Date of initiation: 15/07/2021

9.22.5. Budget allocated: 49,52,000

9.22.6. Installment wise release:

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup> (Rs.14,02,500)	F.No. 50-15/2021-CCRAS/ Admn./THCRP/1068,	11-06-2021	16-06-2021
2	2 <sup>nd</sup> (Rs.13,86,500)	Office Order No. 471/2021- 22, (F.No. 50-15/2021- CCRAS/ Admn./THCRP)	13-09-2021	15-09-2021
3	3 <sup>rd</sup> (Rs.7,00,000)	Office Order No. 911/2021- 22, (F.No. 50-15/2021- CCRAS/ Admn./THCRP)	16-12-2021	23-12-2022
4	4 <sup>th</sup> (Rs.14,63,000)	F F.No. 50-15/2021-CCRAS/ Admn./THCRP/6265/6423	14-03-2022	08-03-2022

9.22.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	6000	1year	Achieved	None

9.22.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARI, Bengaluru	NA	NA	NA	NA

9.22.9. Relevant information, if any:

**9.23. Name of Project: A Prospective Community based Study for the evaluation of Dhatri Loha in the Management of Anaemia (Pandu)**

9.23.1. Participating center along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	PI- Dr. SH Doddamani, Dr. Raghavendra Naik (PI till November 2021) CoI- Dr. Rajendra Paliwal

9.23.2. Date of IEC approval: 28/06/2021

9.23.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/034767 [Registered on: 12/07/2021]

9.23.4. Date of initiation: 18/10/2021

9.23.5. Budget allocated: 49,52,000

9.23.6. Installment wise release: Same as Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India- a descriptive, cross sectional, Epidemiological study

9.23.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	35	1year	Achieved	None

9.23.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI, Bengaluru	35	32	3	00

9.23.9. Relevant information, if any:

**9.24. Name of Project: A Prospective Community based Study for the evaluation of Yogaraja Guggulu, Ashwagandha Churna & Narayana Taila in the Management of Osteoarthritis Knee (Janugata Sandhivata)**

9.24.1. Participating center along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	PI- Dr. SH Doddamani, Dr. Raghavendra Naik (PI till November 2021) CoI- Dr. Rajendra Paliwal

9.24.2. Date of IEC approval: 28/06/2021

9.24.3. CTRI Registration/Reference (for clinical trials): Ref/2021/07/044990

9.24.4. Date of initiation: 18/10/2021

9.24.5. Budget allocated: 49,52,000

9.24.6. Installment wise release: Same as Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India- a descriptive, cross sectional, Epidemiological study

9.24.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	35	1year	Achieved	None

9.24.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARI, Bengaluru	35	33	2	00

9.24.9. Relevant information, if any:

**9.25. Name of Project: Effectiveness of Ayurveda based diet and Lifestyle advocacy on health related Quality of life in Schedule Tribe population in India- a Community based, cluster randomized controlled study**

9.25.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr. SH Doddamani, Dr. Raghavendra Naik (PI till November 2021) CoI- Dr. Rajendra Paliwal

9.25.2. Date of IEC approval: 28/06/2021

9.25.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/034702 [Registered on: 08/07/2021]

9.25.4. Date of initiation: 15/11/2021

9.25.5. Budget allocated: 49,52,000

9.25.6. Installment wise release: Same as mentioned under Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India- a descriptive, cross sectional, Epidemiological study

9.25.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	70	1year	Achieved	None

9.25.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARI, Bengaluru	70	70	00	00

9.25.9. Relevant information, if any:

**9.26. Name of Project: Impact of Ayu Raksha Kit in COVID-19 Community Based Prophylactic Study under THCRP 2021-22**

9.26.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr. SH Doddamani, CoI- Dr. Rajendra Paliwal

9.26.2. Date of IEC approval: 24/01/2022

9.26.3. CTRI Registration/Reference (for clinical trials): REF/2022/01/051119

9.26.4. Date of initiation: 14/02/202

9.26.5. Budget allocated: 16,38,000

9.26.6. Installment wise release:

Sl. No.	Installment	Amount	Sanctioned order	Date	Date of receipt of fund
1.	1st	7,57,100	F.No.1-33/CCRAS/Cash/5600	02/02/22	31/01/2022
2.	2nd	8,80,900	F.No.50-15/2021-CCRAS/Admin/THCRP/6266	04/03/22	24/03/2022

9.26.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	2640	2 Months	Achieved	Nil

9.26.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
	CARI Bengaluru	2640	2545	95	00

9.26.9. Relevant information, if any: ADR Reported -12

**9.27. Name of Project: Profiling of Demographic, health status and Non communicable Diseases among Scheduled Caste population in selected states across India- A descriptive , Cross sectional Epidemiological study**

9.27.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr Thejaswini C, CoI- Dr Srinibash Sahoo

9.27.2. Date of IEC approval: 28/06/2021

9.27.3. CTRI Registration: CTRI/2021/07/034761 [Registered on: 12/07/2021]

9.27.4. Date of initiation: 12/07/2021

9.27.5. Budget allocated: 3064000

9.27.6. Installment wise release:

Sl. No.	Installment (Rs.)	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup> : 8,20,750/-	F.No. 65-1/2021-CCRAS/Admn./SCSP-AMHCP/1074,	11-06-2021	11-06-2021.
2	2 <sup>nd</sup> :8,02,750/)	Office Order No. 469/2021-22 (F.No. 65-1/2021-CCRAS/Admn./SCSP-AMHCP)	13-09-2021	14-09-2021
3	3 <sup>rd</sup> :6,00,000/-	F.No.65-1/2021/CCRAS/Admn/ SCSP (Office order No.951/2021-22)	29-12-2021	29-01-2022
4	4 <sup>th</sup> :8,58,500/-	F.No.65-1/2021-CCRAS/Admn/SCSP/6350/6426	14-03-2022	10-03-2022

9.27.7. Chronological timeline & deliverables:

Sl.No.	Target	Time line	Achieved/Not achieved	Causes of deviation, if any
1	5800	1year	Achieved	None

9.27.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI, Bengaluru	NA	NA	NA	NA

9.27.9. Relevant information, if any:

**9.28. Name of Project: A prospective community based study for the evaluation of Punarnavadi Mandura in Anemia (Pandu)**

9.28.1. Participating center along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr Thejaswini C, CoI- Dr Srinibash Sahoo

9.28.2. Date of IEC approval: 28/06/2021

9.28.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/034967 [Registered on: 19/07/2021]

9.28.4. Date of initiation: 20/07/2021

9.28.5. Budget allocated: 3064000

9.28.6. Installment wise release: Same as Profiling of Demographic, health status and Non communicable Diseases among Scheduled Caste population in selected states across India- A descriptive , Cross sectional Epidemiological study

9.28.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	50	1year	Achieved	None

9.28.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARI, Bengaluru	50	41	9	00

9.28.9. Relevant information, if any:

**9.29. Name of Project: Effectiveness of Ayurveda based diet and Lifestyle advocacy on health related Quality of life in Schedule Caste population in India- a Community based, cluster randomized controlled study**

9.29.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr Thejaswini C, CoI- Dr Srinibash Sahoo

9.29.2. Date of IEC approval: 28/06/2021

9.29.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/034952 [Registered on: 19/07/2021]

9.29.4. Date of initiation: 29/07/2021

9.29.5. Budget allocated: 3064000

9.29.6. Installment wise release: Same as mentioned under Profiling of Demographic, health status and Non communicable Diseases among Scheduled Caste population in selected states across India- A descriptive, Cross sectional Epidemiological study

9.29.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	70	1year	Achieved	None

9.29.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARI, Bengaluru	70	70	00	00

9.29.8. Relevant information, if any:

**9.30. Name of Project: A prophylactic community based study to assess the impact of Ayuraksha Kit in COVID-19**

9.30.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	PI- Dr Thejaswini C, CoI- Dr Srinibash Sahoo

9.30.2. Date of IEC approval: 24/01/2022

9.30.3. CTRI Registration/Reference (for clinical trials): CTRI/2022/02/040156  
[Registered on: 10/02/2022]

9.30.4. Date of initiation: 14/02/2022

9.30.5. Budget allocated: 8,75,720/-

9.30.6. Installment wise release:

Sl. No.	Installment	Amount	Sanctioned order	Date	Date of receipt of fund
1.	1st	90000	F.No.65-1/2021/CCRAS/Admin/SCSP/5885	10/02/22	25/02/2022
2.	2nd	785720	F.No.65-1/2021/CCRAS/Admin/SCSP/6248	03/03/22	07/03/2022

9.30.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	693	2 months	Achieved	Follow up RTPCR tests cannot be achieved as most of the participants were rejected for test.

9.30.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI, Bengaluru	693	693	00	00

9.30.9. Relevant information, if any:

## 10. BRIEF RESUME OF ONGOING CLINICAL RESEARCH PROJECTS

### 10.1. Name of Project: National Pharmacovigilance Program

#### 10.1.1. Objectives:

- To inculcate the reporting culture among the Ayurveda, Siddha, Unani & Homoeopathy (ASU&H) Practitioners and consumers to facilitate the documentation of ADR's.
- To involve healthcare professionals and professional associations in the drug monitoring and information dissemination processes.
- To report the instances of misleading advertisements of Ayurveda, Siddha, Unani & Homoeopathy drugs.

#### 10.1.2. Participating centre along with PI:

Name of the participating centre	Co-ordinators
Regional Ayurveda Research Institute For Metabolic Disorders, Bengaluru. (RARIMD)	Dr M.N Shubhashree ROAyu. Dr. Raghavendra Naik R.O (Ayu).

10.1.3. Date of initiation : 18<sup>th</sup> July 2018

10.1.4. Budget allocated : Rs11,15,000/-

#### 10.1.5. Installment wise release:

Sl.No.	Installment	Sanctioned order	Date	Date of receipt of fund
1.	1,05,000/-	(F.No.8-11003/5/9/2017-AIIA/760)	08/06/2018	12/06/2018
2.	1,25,000/-	(F.No.B-11003/5/9/2017-AIIA/4195)	31/01/2019	25/01/2019
3.	1,00,000/-	(F.No.B/11003/5/9/2017-AIIA/Fin./527)	30/05/2019	28/05/2019
4.	1,00,000/-	(F.No.B/110035/5/9/2017-AllA/Fin./1194)	24/07/2019	26/07/2019
5.	1,50,000/-	T-12012/2/2019-DCC (AYUSH), dated 13 <sup>th</sup> August 2019	05/11/2019	07/11/2019
6.	2,60,000/-	(F.No.B-11003/5/9/2017-AllA/Fin./926)	05/08/2020	07/08/2020
7.	50,000/-	F.No.B-11003/5/9/2017-AIIA/Fin.-Payment/949	7/07/2021	07/07/2021
8.	1,25,000/-	F.No.B-11003/5/9/2017-AIIA/Fin.-Payment/2741	22/11/2021	22/11/2021
9.	1,00,000/-	F.No.B-11003/5/9/2017-AIIA/Fin.-Payment/3594	19/01/2022	19/01/2022

10.1.6. Total Misleading Advertisements Reported : 105

10.1.7. ADR Reported : 1

10.1.8. CME Conducted : 1

10.1.9. Awareness Programmes Conducted : 1

10.1.10. Articles Communicated : 2 published, 2 submitted for publication

10.1.12. Participation in training programme : 1

10.1.13. Participation in CME as resource person : 3



**10.2.Name of Project: A Randomized, Placebo-controlled, Double-blind Clinical Trial to Evaluate the Effect of Trikatu in Subclinical Hypothyroidism.**

10.2.1. Objectives:

Primary: To evaluate the efficacy of Trikatu in the management of Subclinical Hypothyroidism.

Secondary: To Study the safety of Trikatu in the management of Subclinical Hypothyroidism.

10.2.2. Study Design: Randomized, Placebo control, Double blind

10.2.3. Sample Size: 90

10.2.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date:F.No 3-69/2020-CCRAS/Admn/IMR/1669, dated 23<sup>rd</sup> July 2020

10.2.5. Duration of Study: 2 year

10.2.6. Interventions: Trikatu Churna

**Group I: Trikatu** AFI.Vol.1, 322. (Bhaisajyaratnavali, Paribhshaprakarana16).

Dose : 1000 mg Powder

Dosage form : Capsule or Tb

Route of Administration : Oral

Anupana : Water

Time of Administration : Twice a day, 30 minutes before food

Duration of therapy : 84 days

Packing : 30 Capsules or Tb

**Group II: Placebo**

Dose : 1000 mg Powder

Dosage form : Capsule or Tb

Route of Administration : Oral

Anupana : Water

Time of Administration : Twice a day, 30 minutes before food

Duration of therapy : 84 days

Packing : 30 Capsules or Tb

10.2.7. Participating centre along with PI: CARI BENGALURU, Dr. S H Doddamani

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI Bengaluru	Dr. S H Doddamani Dr. Bhavya

10.2.8. Date of IEC approval: 26.09.2020

10.2.9. CTRI Registration/Reference (for clinical trials): 16.02.2022

10.2.10. Date of initiation: 10.02.2022

10.2.11. Budget allocated: 25,13,600

10.2.12. Installment wise release:

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup> installment	CCRAS Sanction order number: F.No. 3-69/2020-CCRAS/ADMN/IMR/1669-Rs-13,56,800/-	23.07.20	31.07.2020
2	2 <sup>nd</sup> installment	CCRAS Sanction order number: F.No. 3-69/2020-CCRAS/Admin/IMR/1669, Dt. 23.07.2020 Rs- 6,78,400/-	25.05.21	28.05.2021

10.2.13. Chronological timeline & deliverables:

S. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	90	2years	Not achieved	-

10.2.14. Current status:

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI Bengaluru	3	0	0	3

10.2.15. Relevant information, if any:

**10.3. Name of Project: Clinical Evaluation of Vidanga churna and Vyoshadi Guggulu in the Management of Medoroga (Obesity) under Annual action plan 2018-19.**

10.3.1. Objectives:

- a) Primary objective: To assess the clinical efficacy of Vyoshadi Guggulu and Vidangachurna in the Management of Medoroga (Obesity)
- b) Secondary Objective: To assess the clinical safety of Vyoshadi Guggulu and Vidangachurna in the patients of Medoroga (Obesity)

10.3.2. Study Design: Open Clinical Trial

10.3.3. Sample Size: 50

10.3.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date: F.No 13-67/2018-CCRAS/Tech/Hq./8304, dated 30<sup>th</sup> March 2020.

10.3.5. Duration of Study: 2 years

10.3.6. Interventions:

1. **Vyoshadi Guggulu** (AFI – Part – I, 5:9 ; API , Part –II, Vol. –II)

- Dose : 1 gm (2 Tablets of 500mg each) thrice daily
- Dosage form : Tablet
- Route of Administration : Oral
- Time of Administration : Thrice a day after food
- Anupan : Lukewarm water
- Duration of therapy : 12 weeks

2. Vidanga Churna (API, Part –I, Vol. –II)

Dose : 3g.

Dosage form : Powder

Route of Administration : Oral

Time of Administration : Twice a day after food

Duration of therapy : 12weeks

Follow-up Period : 2Weeks

10.3.7. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	Dr. Sanjay Kumar Giri(PI) Dr. Doddamani. S.H(Co-I) Dr. Raghavendra Naik(Co-I)

10.3.8. Date of IEC approval: 26.09.2020

10.3.9. CTRI Registration/Reference (for clinical trials): REF/2020/10/037389

10.3.10. Date of initiation: 18.09.2021

10.3.11. Budget allocated: Rs. 16,90,000/-

10.3.12. Installment wise release:

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1 <sup>st</sup> instalment Rs. 10,15,000/-	Office Order No. 3-53/2020-CCRAS/Admin/IMR/8304	30.03.2020	02.04.2020

10.3.13. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/Not achieved	Causes of deviation, if any
1	50	2 years	Continued	-

10.3.14. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI, Bengaluru	22	05	0	17

10.3.15. Relevant information, if any

## 11. SANCTIONED IMR CLINICAL RESEARCH PROJECTS TO BE INITIATED

### 11.1. Name of Project: Clinical Evaluation of Lekhaniya Gana Kashaya and Arogyavardhini Gutika in the Management of Medoroga (Obesity)

#### 11.1.1. Objectives

- Primary: To assess the clinical efficacy of Lekhaniya Gana Kashaya and Arogyavardhini Gutika in the management of Medoroga (Obesity)
- Secondary: To assess the clinical safety of Lekhaniya Gana Kashaya and Arogyavardhini Gutika in the patients of Medoroga (Obesity)

#### 11.1.2. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	Central Ayurveda Research Institute, Bengaluru	PI: Dr Bhavya B.M, RO (Ay.) Co-I :1. Dr Rajendra Paliwal, RO (Ay.) 2. Dr. Shubhashree M.N, RO (Ay.)

11.1.2. Date of IEC approval: 24.1.22

11.1.3. CTRI Registration/Reference (for clinical trials): CTRI/2022/03/040819

11.1.4. Date of initiation: Not yet initiated

11.1.5. Budget allocated: 9,18,000/-

11.1.6. Installment wise release:

Sl. No.	Installment	Amount	Sanctioned order	Date	Date of receipt of fund
1.	1st Installment	40,000	F.No. 3-141/2021-CCRAS/Admn/IMR (O.O No.952)	29.12.21	29.12.2021

11.1.7. Chronological timeline & deliverables: Not yet initiated

11.1.8. Current status: Not yet initiated

11.1.9. Relevant information, if any: None

## 12. RESEARCH PROJECTS RELATED TO COVID-19

### 12.1. Name of Project: Impact of Ayu Raksha Kit in COVID-19 Community Based Prophylactic Study under THCRP 2021-22

#### 12.1.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1	CARI, Bengaluru	PI- Dr. SH Doddamani, CoI- Dr. Rajendra Paliwal

12.1.2. Date of IEC approval: 24/01/2022

12.1.3. CTRI Registration/Reference (for clinical trials): REF/2022/01/051119

12.1.4. Date of initiation: 14/02/2022

12.1.5. Budget allocated: 16,38,000

12.1.6. Installment wise release:

Sl. No.	Installment	Amount	Sanctioned order	Date	Date of receipt of fund
1.	1st	7,57,100	F.No.1-33/CCRAS/Cash/5600	02/02/22	31/01/2022
2.	2nd	8,80,900	F.No.50-15/2021-CCRAS/Admin/THCRP/6266	04/03/22	24/03/2022

12.1.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	2640	2 Months	Achieved	Nil

12.1.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI Bengaluru	2640	2545	95	00

12.1.9. Relevant information, if any: ADR Reported -12

**12.2. Name of Project: A prophylactic community based study to assess the impact of Ayuraksha Kit in COVID-19 under SCSP 2021-21**

12.2.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Coinvestigators
1.	CARI, Bengaluru	PI- Dr Thejaswini C, CoI- Dr Srinibash Sahoo

12.2.2. Date of IEC approval: 24/01/2022

12.2.3. CTRI Registration/Reference (for clinical trials): CTRI/2022/02/040156 [Registered on: 10/02/2022]

12.2.4. Date of initiation: 14/02/2022

12.2.5. Budget allocated: 8,75,720/-

12.2.6. Installment wise release:

Sl. No.	Installment	Amount	Sanctioned order	Date	Date of receipt of fund
1.	1st	90000	F.No.65-1/2021/CCRAS/Admin/SCSP/5885	10/02/22	25/02/2022
2.	2nd	785720	F.No.65-1/2021/CCRAS/Admin/SCSP/6248	03/03/22	07/03/2022

12.2.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	693	2 months	Achieved	Follow up RTPCR tests cannot be achieved as most of the participants were rejected for test.

12.2.8. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARI, Bengaluru	693	693	00	00

12.2.9. Relevant information, if any:

### **13. Research Proposals submitted for approval to CCRAS Hqrs.**

#### **13.1. A Clinical Trial to evaluate the efficacy of Ayurvedic Interventions in the Management of Mild to Severe Non Proliferative Diabetic Retinopathy (Madhumehajanya Drishtigata Roga)**

PI: Dr. Bhavya BM, RO (Ay.)

Co-PI: Dr. Doddamani SH, RO (Ay.)

Dr. Raghavendra Naik, RO (Ay.)

#### **13.2. Evaluation of therapeutic efficacy and safety of 'Arogyavardhinivati and Pippalyadyasava in Non alcoholic fatty liver disease w.s.r.to Udara: A single arm, pre-post experimental study**

PI: Dr. Raghavendra Naik, RO (Ay.)

Co-PI: Dr. Doddamani SH, RO (Ay.)

Dr. Bhavya BM, RO (Ay.)

#### **13.3. A Clinical Study to Evaluate the Efficacy and Safety of Arjunarista in Dyslipidemia**

PI: Dr. Doddamani SH, RO (Ay.)

Co-PI: Dr. Shubhashree MN, RO (Ay.)

Dr. Bhavya BM, RO (Ay.)

Dr. Raghavendra Naik, RO (Ay.)

#### **13.4. Evaluation of Effect of Ayurvedic Interventions in the Management of Refractive changes associated with type 2 diabetes: A Multicentric Open Label Randomized Placebo Controlled Clinical Trial**

PI: Dr. Bhavya BM, RO (Ay.)

Co-PI: Dr. Shubhashree MN, RO (Ay.)

Dr. Doddamani SH, RO (Ay.)

#### **13.5. Exploring the Association between Prakriti (Body Constitution) and Prevalence of Type 2 Diabetes Mellitus (DM) based on Ayurvedic Prakriti Assessment Scale: A Cross-Sectional Study**

P-I: Dr. Bhavya B.M., RO (Ay.)

Co-PI: Dr. Shubhashree MN, RO (Ay.)

Dr. Doddamani SH, RO (Ay.)

#### **13.6. Comparative clinical study of Chandraprabha Vati and Kaanchanar Guggulu in the management of Vatastheela Mutraghat w. s.r. to Benign Prostatic Hyperplasia (BPH)**

P-I: Dr. Rajendra Kumar, RO (Ay.)

Co-PI: Dr. Shubhashree MN, RO (Ay.)

Dr. Bhavya BM, RO (Ay.)

#### **13.7. Efficacy and safety of Ayurveda Formulation 'Trikatu' in Dyslipidemia- A Prospective Randomized Double Blind Placebo Controlled Trial"**

P-I: Dr Bhavya B.M, RO (Ay.)

Co-PI: Dr. Shubhashree MN, RO (Ay.)

Dr Rajendra Paliwal, RO (Ay.)

Dr. Kuppan Gokulakrishnan, Asst .Prof., Neurochemistry, NIMHANS, Bengaluru

Dr. Vidyashree Anchan, RO (Pathology)



**PART-B      HOSPITAL STATISTICS**

a. Out Patient Department

Statement of patients attended at OPD during different years (Since inception up to March 2022)

Year	New cases				Total		Old case				Total		G. Total	
	M	F	MC	FC	M	F	M	F	MC	FC	M	F	M	F
1981-82	141	171	136	84	277	255	178	220	198	81	376	301	653	556
1982-83	633	854	430	377	1063	1231	1439	1719	473	510	1912	2229	2975	3460
1983-84	528	601	125	191	653	792	1303	1446	254	237	1557	1683	2210	2475
1984-85	527	621	223	182	750	803	1193	1731	263	238	1456	1969	2206	2772
1985-86	487	538	159	135	646	673	1066	1582	203	275	1269	1857	1915	2530
1986-87	519	549	134	152	653	701	1485	1674	228	225	1713	1899	2366	2600
1987-88	562	471	124	155	686	626	1579	1541	131	281	1710	1822	2396	2448
1988-89	519	429	89	130	608	559	1598	1488	214	269	1812	1757	2420	2316
1989-90	253	345	49	50	302	395	633	916	59	88	692	1004	994	1399
1990-91	320	334	65	76	385	410	843	803	83	80	926	883	1311	1293
1991-92	301	283	68	86	369	369	683	1158	92	86	775	1244	1144	1613
1992-93	359	561	70	97	429	658	869	1211	101	86	970	1297	1399	1955
1993-94	320	334	65	76	385	410	843	803	83	80	926	883	1311	1293
1994-95	273	345	49	50	322	395	633	916	59	88	692	1004	1014	1399
1995-96	327	316	76	99	403	415	924	1199	137	129	1061	1328	1464	1743
1996-97	436	686	111	148	547	834	1463	2731	324	314	1787	3045	2334	3879
1997-98	600	938	169	218	769	1156	1716	3268	350	296	2066	3564	2835	4720
1998-99	863	1136	202	190	1065	1326	2413	4098	450	459	2863	4557	3928	5883
1999-00	1251	1854	232	293	1483	2147	3553	6045	379	645	3932	6690	5415	8837
2000-01	1187	1495	165	253	1352	1748	2870	3915	171	325	3041	4240	4393	5988
2001-02	1158	1430	167	213	1325	1643	2997	3706	224	305	3221	4011	4546	5654
2002-03	1127	1279	175	222	1302	1501	2825	3425	297	295	3122	3720	4424	5221
2003-04	1017	1287	145	121	1162	1408	2823	3695	205	200	3028	3895	4190	5303
2004-05	1184	1015	91	107	1275	1122	1604	1990	88	154	1692	2144	2967	3266
2005-06	1371	977	122	97	1493	1074	3413	2770	141	131	3554	2901	5047	3975
2006-07	1408	971	88	85	1496	1056	3473	2937	124	126	3597	3063	5093	4119
2007-08	1312	866	75	93	1387	959	3194	2942	118	147	3312	3089	4699	4048
2008-09	1389	988	75	125	1464	1113	3210	2838	95	154	3305	2992	4769	4105
2009-10	1283	988	77	69	1360	1057	3273	2797	128	132	3401	2929	4761	3986
2010-11	1366	1123	81	89	1447	1212	4033	3704	116	130	4149	3834	5596	5046
2011-12	1524	1356	84	116	1608	1472	4979	4916	171	313	5150	5229	6758	6701
2012-13	1384	1216	84	69	1468	1285	5311	4664	196	120	5507	4784	6975	6069
2013-14	1583	1350	78	78	1661	1428	5198	4361	111	66	5309	4427	6970	5855
2014-15	1567	1280	78	62	1645	1342	4974	4465	75	89	5049	4554	6694	5896
2015-16	2145	1714	88	75	2233	1789	6590	5460	146	92	6736	5552	8969	7341
2016-17	1864	1510	78	66	1942	1576	4997	3786	86	62	5083	3848	7025	5424
2017-18	1854	1328	61	62	1915	1390	4609	3229	75	82	4684	3311	6599	4701
2018-19	3163	2178	125	106	3288	2284	6690	4705	153	71	6843	4776	10131	7060
2019-20	3787	2997	176	117	3963	3114	7942	6449	160	158	8102	6607	12065	9721
2020-21	3468	2604	165	148	3633	2752	7074	5077	200	182	7274	5259	10907	8011
2021-22	4041	3101	187	127	4228	3228	8215	6087	130	115	8345	6202	12573	9430
<b>Total</b>	<b>49401</b>	<b>44419</b>	<b>5041</b>	<b>5289</b>	<b>54442</b>	<b>49708</b>	<b>12470</b>	<b>122467</b>	<b>7291</b>	<b>7916</b>	<b>131999</b>	<b>130383</b>	<b>186441</b>	<b>180091</b>

Total number of patients treated since inception is 3,66,532.



In-Patient Department: Not Applicable

8. Statement of Patients attended OPD during the reporting period for April 2021 –March 2022

S. No.	NAMC ID	NAMC Code	NAMC_Name	Short_definition	No. of patients treated												Grand Total (M+F)		
					New						Follow up							Total	
					Adult		Child		Total		Adult		Child		Total			M	F
					M	F	M	F	M	F	M	F	M	F	M	F			
1.	147	AAC-12	आध्मानम्/आनाहः	distension/tympanites/meteorism or painful abdominal distension	2	1	0	0	2	1	0	1	0	0	0	1	2	2	4
2.	2983	AAC-12.4	विबन्ध	simple constipation	11	2	1	0	12	2	6	7	0	0	6	7	18	9	27
3.	157	AAC-20	गृध्रसी	sciatica	13	16	0	0	13	16	29	49	0	0	29	49	42	65	107
4.	163	AAC-24	पक्षाघातः/ पक्षवधः	hemiplegia/hemiparesis	7	2	0	0	7	2	24	0	0	0	24	0	31	2	33
5.	241	AAE-9	मांसगतवातकोप	vitiated वात in मांस	2	1	0	0	2	1	8	0	0	0	8	0	10	1	11
6.	174	AAC-32	मन्यास्तम्भः	Stiff neck/torticollis/spasmodic torticollois	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
7.	141	AAC-8	अवबाहुकः	frozen shoulder	18	17	0	1	18	18	39	11	0	0	39	11	57	29	86
8.	248	AAE-16	सन्धिवातः	osteoarthritis	357	281	2	0	359	281	824	745	3	0	827	745	1186	1026	2212
9.	287	ABB-26	पालित्य	premature graying of	7	21	0	2	7	23	4	19	0	0	4	19	11	42	53

				hair															
10.	348	ACB-23	अग्निमान्द्यम्	impaired digestion / loss of appetite	1	1	0	0	1	1	8	1	0	0	8	1	7	2	11
11.	480	EA-3	कासः	cough / tussis	108	42	10	8	118	50	208	57	3	3	211	60	329	110	439
12.	489	EA-4	श्वासः	dyspnoea	27	10	1	0	28	10	42	41	2	0	44	41	72	51	123
13.	633	EB-10	शूलः	colicky pain/abdominal colic	21	12	0	1	21	13	27	21	0	0	27	21	48	34	82
14.	647	EB-10.11	अन्नद्रवशूलः	peptic ulcer	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
15.	676	EB-12	परिकर्तिका	proctalgia	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
16.	515	EB-2	अतिसारः	diarrhoea	5	2	0	1	5	3	10	6	0	0	10	6	15	9	24
17.	524	EB-2.8	आमातिसारः	आमstage of अतिसार	0	0	0	0	0	0	7	1	0	0	7	1	7	1	8
18.	536	EB-3	अजीर्णम्	indigestion	3	0	0	0	3	0	2	2	0	0	2	2	5	2	7
19.	558	EB-4	अम्लपित्तम्	hyperacidity	101	45	0	1	101	46	198	84	0	0	198	84	299	130	429
20.	586	EB-6	छर्दिः	vomiting/emesis	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
21.	628	EB-9	प्रवाहिका	dysentery	1	2	0	0	1	2	2	8	0	0	2	8	3	10	13
22.	681	EC-2	हृद्रोगः	heart disease	1	0	0	0	1	0	3	2	0	0	3	2	4	2	6
23.	689	EC-3	ज्वरः	fever / pyrexia	8	6	0	0	8	6	7	5	1	1	8	6	16	12	28

24.	812	EC-5	पाण्डुरोगः	anaemia	0	2	0	0	0	2	0	1	0	0	0	1	0	3	3
25.	823	EC-6	आमवातः	rheumatism due to आम	3	6	0	0	3	6	20	30	0	0	20	30	23	36	59
26.	828	EC-7	अरुचिः	anorexia	0	1	0	0	0	1	0	2	0	0	0	2	0	3	3
27.	1029	ED-14	शीतपित्तम्	urticaria with vata predominan ce	18	12	1	1	19	13	27	11	0	0	27	11	46	24	70
28.	1033	ED-16	भगन्दरः	fistula-in- ano	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
29.	838	ED-2.2	कण्डूः	pruritis	14	7	0	1	14	8	8	28	0	0	8	28	22	36	58
30.	850	ED-2.8	निद्रानाशः/अनिद्रा	loss of sleep (insomnia)	9	4	0	0	9	4	10	15	0	0	10	15	19	19	38
31.	874	ED-3	कामला	jaundice	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
32.	883	ED-4	कुष्ठम्	integumenta ry disease	15	8	3	2	18	10	19	8	2	1	21	9	39	19	58
33.	905	ED- 4.3.10	विचर्चिका	wet eczema	59	32	0	1	59	33	82	79	0	0	82	79	141	112	253
34.	897	ED- 4.3.3	किटिभः	psoriasis	81	35	3	1	84	36	146	75	6	0	152	75	236	111	347
35.	902	ED- 4.3.8	पामा	scabies	1	0	0	0	1	0	1	0	0	0	1	0	2	0	2
36.	919	ED-5	श्वित्रः	vitiligo /leucoderma	14	7	0	0	14	7	64	37	0	0	64	37	78	44	122
37.	956	ED-8	वातरक्तम्	rheumatism due to रक्त	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
38.	972	ED-9	विद्रधिः	abscess	1	0	0	0	1	0	3	0	0	0	3	0	4	0	4

39.	1064	EE-2	अर्बुदः	tumor	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
40.	1074	EE-3	अर्शः	haemorrhoids	53	24	0	0	53	24	173	40	0	0	173	40	226	64	290
41.	1095	EE-4	ग्रन्थिः	cyst	11	11	0	0	11	11	45	18	0	0	45	18	56	29	85
42.	1139	EF-2.4.4	मधुमेहः	diabetes mellitus	133	74	0	0	133	74	886	573	0	0	886	573	1019	647	1666
43.	1161	EF-3	मेदोरोगः	obesity	19	17	0	0	19	17	56	79	0	0	56	79	75	96	171
44.	1163	EF-4	पिडका	eruption	8	2	0	0	8	2	2	0	0	0	2	0	10	2	12
45.	1173	EI-2	क्लैब्यम्	male infertility	4	0	0	0	4	0	2	0	0	0	2	0	6	0	6
46.	1244	EI-6.8	अन्न-वृद्धिः	hernia	5	0	0	0	5	0	17	0	0	0	17	0	22	0	22
47.	1248	EJ-2	अश्मरी	lithiasis/urolithiasis/nephrolithiasis	5	3	0	0	5	3	15	3	0	0	15	3	20	6	26
48.	1258	EJ-3	मूत्राघातः	urinary retention	2	1	0	0	2	1	9	1	0	0	9	1	11	2	13
49.	1278	EJ-4	मूत्रकृच्छ्रम्	dysuria	12	7	1	0	13	7	22	9	0	0	22	9	35	16	51
50.	1304	EK-3	श्वयथुः/शोथः /शोफः	oedema/inflammation	3	0	0	0	3	0	1	2	0	0	1	2	4	2	6
51.	1337	EK-4.6	यकृद्दाल्युदरः	hepatomegaly	2	1	0	0	2	1	3	1	0	0	3	1	5	2	7
52.	1360	EL-2.10	उदावर्तिनी	dysmenorrhoea	0	32	0	0	0	32	0	53	0	0	0	53	0	85	85
53.	1392	EL-4	रक्तप्रदरः/ असृग्दरः	menorrhagia / metrorrhagia	0	1	0	0	0	1	0	6	0	0	0	6	0	7	7

				a / dysfunction al uterine bleeding (DUB)															
54.	1398	EL-5	श्वेतप्रदरः	leucorrhoea	0	13	0	0	0	13	0	14	0	0	0	14	0	27	27
55.	1521	EM-11	भ्रमः	giddiness / dizziness / vertigo	1	1	0	0	1	1	0	0	0	0	0	0	1	1	2
56.	1421	EM	मनोवहस्रोतोविकारः	disorders of मनोवहस्रोतस्	8	8	3	1	11	9	78	17	2	8	80	25	91	34	125
57.	1457	EM-3	अपस्मारः	epilepsy	2	0	0	0	2	0	9	0	0	0	9	0	11	0	11
58.	1466	EM-5	मदात्ययः	alcohol abuse	20	0	0	0	20	0	30	0	0	0	30	0	50	0	50
59.	1522	F	शिरःशूल/ शिरोरुक्	headache/ce phalgia/cep halalgia	22	25	0	1	22	26	14	56	0	0	14	56	36	82	118
60.	1530	F-8	अर्धविभेदकः	hemigrania	6	8	0	1	6	9	53	15	0	0	53	15	59	24	83
61.	1543	FA-3	खलित्यम्	baldness / alopecia totalis	4	8	0	0	4	8	3	16	0	0	3	16	7	24	31
62.	1548	FA-4	दारुणकः	pytiasis capitis	3	11	0	4	3	15	1	27	0	11	1	38	4	53	57
63.	1583	GC	दन्तरोगः	tooth disorders	6	1	0	0	6	1	9	0	0	0	9	0	15	1	16
64.	1616	GF	कण्ठरोगः	throat disorders	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
65.	1643	GF-19	गलगण्डः	goiter	2	6	0	1	2	7	7	12	0	1	7	13	9	20	29

66.	1649	GG	मुखपाकः	stomatitis	3	1	0	0	3	1	15	0	0	0	15	0	18	1	19
67.	1662	H	अक्षिरोगः/ नेत्ररोगः	ophthalmic diseases	2	2	0	0	2	2	0	1	0	0	0	1	2	3	5
68.	1813	I	नासारोगः	nose diseases	1	2	0	0	1	2	0	0	0	0	0	0	1	2	3
69.	1814	I-1	प्रतिश्यायः/पीनसः	rhinitis	52	23	5	4	57	27	60	33	10	3	70	36	127	63	190
70.	1860	J	कर्णरोगः	ear diseases	2	4	1	0	3	4	0	2	0	0	0	2	3	6	9
71.	1897	J-20	कर्णशूलः	earache/otal gia	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1
72.	1913	K	व्रणः	wounds	7	5	0	1	7	6	9	0	0	0	9	0	16	6	22
73.	1961	K-14	नाडीव्रणः	fistula/sinus wound	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
74.	2170	MD-11	दौर्बल्यम्	debility	48	24	1	0	49	24	51	48	1	2	52	50	101	74	175
75.	2184	N	कृमिः/सञ्जातकृमि	worm infestation	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
76.	2280	O-35	युवानपिडका (मुखदूषिका)	pimples	1	1	0	0	1	1	7	4	0	0	7	4	8	5	13
77.	2287	O-42	व्यङ्गः	black patches on face/melasm a	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
					1359	896	33	33	1392	929	3406	2378	30	30	3436	2408	4828	3337	8165

**Total New Patients – 2321; Total Old Patients – 5844; Grand Total – 8165**

- Number of patients in OPD : 8,165
- Number of patients in New OPD : 13,838
- Total : 22,003**

8a.Statement of Patients attended New OPD during the reporting period for April 2021 to March 2022

S. N o.	NAM C ID	NA MC Code	NAMC Name	Short_definition	No. of patients treated														Gr and Total (M+F)
					New						Follow up						Total		
					Adult		Child		Total		Adult		Child		Total		M	F	
					M	F	M	F	M	F	M	F	M	F	M	F			
1.	147	AAC-12	आध्मानम्/ आनाहः	distension/tympanites/meteorism or painful abdominal distension	17	3	0	0	17	3	15	5	1	0	16	5	33	8	41
2.	2983	AAC-12.4	विबन्ध	simple constipation	30	14	5	1	35	15	47	13	4	1	51	14	86	29	115
3.	132	AAC-2	अपतन्त्रकः	convulsive fit	0	0	0	0	0	0	0	7	0	0	0	7	0	7	7
4.	157	AAC-20	गृध्रसी	sciatica	169	134	1	0	170	134	274	257	1	0	275	257	445	391	836
5.	163	AAC-24	पक्षाघातः/ पक्षवधः	hemiplegia/hemiparesis	34	3	0	0	34	3	84	1	0	0	84	1	118	4	122
6.	166	AAC-24.2	बाल-पक्षाघातः	hemiplegia in children	1	0	0	1	1	1	0	0	0	0	0	0	1	1	2
7.	241			Mamsagata vata kosha	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
8.	172	AAC-30	पङ्गुः / केवलवात	lameness (bilateral)	1	1	0	0	1	1	1	0	0	0	1	0	2	1	3
9.	174	AAC-32	मन्यास्तम्भः	Stiff neck/torticollis/spasmodic torticollis	6	4	0	0	6	4	3	3	0	0	3	3	9	7	16
10.	179	AAC-37	शिरोग्रहः	head and neck rigidity	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1

11.	135	AAC-4	अर्दितः	facial paralysis	1	1	1	0	2	1	0	6	0	0	0	6	2	7	9
12.	139	AAC-6	अस्थिशोषः	osteopenia/osteoporosis	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
13.	141	AAC-8	अवबाहुकः	frozen shoulder	22	30	0	0	22	30	33	18	0	0	33	18	55	48	103
14.	248	AAE-16	सन्धिवातः	osteo-arthritis	446	450	7	3	45	45	108	952	1	4	10	95	15	14	294
15.	285	ABB-24	दाहः	burning sensation	7	11	0	0	7	11	32	18	0	0	32	18	39	29	68
16.	287	ABB-26	पालित्य	premature graying of hair	3	3	0	2	3	5	2	2	0	0	2	2	5	7	12
17.	348	ACB-23	अग्निमान्द्यम्	impaired digestion / loss of appetite	4	8	7	1	11	9	13	7	5	0	18	7	29	16	45
18.	420	BI	राजयक्ष्मा	consumption	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
19.	471	EA-2	हिक्का	hiccup/singultus	0	1	0	0	0	1	1	0	0	0	1	0	1	1	2
20.	480	EA-3	कासः	cough / tussis	79	54	17	4	96	58	114	100	6	4	12	10	21	16	378
21.	489	EA-4	श्वासः	dyspnoea	53	44	4	1	57	45	73	51	1	1	74	52	13	97	228
22.	500	EA-5	स्वरभेदः	dysphonia	1	0	0	0	1	0	1	0	0	0	1	0	2	0	2
23.	633	EB-10	शूलः	colicky pain/abdominal colic	21	14	2	0	23	14	33	12	0	1	33	13	56	27	83
24.	650	EB-10.14	हृदयशूलः	cardialgia/precordial pain	2	2	0	0	2	2	1	0	0	0	1	0	3	2	5



25.	656	EB-11	उदावर्तः	obstipation	0	0	0	0	0	0	1	1	0	0	1	1	1	1	2
26.	676	EB-12	परिकर्ति का	proctalgia	6	4	0	0	6	4	5	3	0	0	5	3	11	7	18
27.	515	EB-2	अतिसारः	diarrhoea	2	2	0	0	2	2	0	8	0	0	0	8	2	10	12
28.	536	EB-3	अजीर्णम्	indigestion	7	4	3	3	10	7	7	4	1	1	8	5	18	12	30
29.	558	EB-4	अम्लपित्त म्	hyperacidity	166	104	2	1	16 8	10 5	260	136	0	1	26 0	13 7	42 8	24 2	670
30.	586	EB-6	छर्दिः	vomiting/emesis	0	1	0	0	0	1	0	1	0	0	0	1	0	2	2
31.	601	EB-7	ग्रहणीदो षः	disorders of lower gastro-intestinal tract	3	1	0	0	3	1	8	0	0	0	8	0	11	1	12
32.	681	EC-2	हृद्रोगः	heart disease	2	1	0	0	2	1	14	0	0	0	14	0	16	1	17
33.	689	EC-3	ज्वरः	fever / pyrexia	13	16	4	1	17	17	14	24	0	1	14	25	31	42	73
34.	812	EC-5	पाण्डुरोगः	anaemia	4	26	0	1	4	27	13	21	0	0	13	21	17	48	65
35.	823	EC-6	आमवातः	rheumatism due to आम	8	17	0	0	8	17	7	50	0	0	7	50	15	67	82
36.	828	EC-7	अरुचिः	anorexia	2	0	3	1	5	1	1	0	1	0	2	0	7	1	8
37.	997	ED-10	विसर्पः	erysipelas /acute spreading eruptions	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
38.	1024	ED-13	क्षीपदः	filariasis	0	2	0	0	0	2	0	1	0	0	0	1	0	3	3
39.	1029	ED-14	शीतपित्तम्	urticaria with <i>vata</i> predominance	4	8	2	0	6	8	7	3	3	0	10	3	16	11	27

40.	1031	ED-15	उदरदः	urticaria with <i>kapha</i> predominance	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
41.	1033	ED-16	भगन्दरः	fistula-in-ano	7	2	0	0	7	2	2	0	0	0	2	0	9	2	11
42.	838	ED-2.2	कण्डूः	pruritis	48	31	2	4	50	35	53	19	0	0	53	19	10 3	54	157
43.	850	ED-2.8	निद्रानाशः /अनिद्रा	loss of sleep (insomnia)	18	12	0	0	18	12	46	15	0	0	46	15	64	27	91
44.	874	ED-3	कामला	jaundice	7	3	2	0	9	3	4	1	0	0	4	1	13	4	17
45.	883	ED-4	कुष्ठम्	integumentary disease	181	118	14	15	19 5	13 3	231	129	7	8	23 8	13 7	43 3	27 0	703
46.	905	ED-4.3.1 0	विचर्चिका	wet eczema	8	6	0	2	8	8	10	13	0	0	10	13	18	21	39
47.	897	ED-4.3.3	किटिभः	psoriasis	24	5	0	0	24	5	49	3	0	0	49	3	73	8	81
48.	898	ED-4.3.4	विपादिका	cracks in palms and soles	4	5	2	1	6	6	7	6	0	0	7	6	13	12	25
49.	919	ED-5	श्वित्रः	vitiligo /leucoderma	10	7	2	1	12	8	10	9	3	0	13	9	25	17	42
50.	944	ED-7	रक्तपित्तम्	bleeding disorder	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
51.	956	ED-8	वातरक्तम्	rheumatism due to रक्त	5	2	0	0	5	2	4	2	0	0	4	2	9	4	13
52.	972	ED-9	विद्रधिः	abscess	1	0	0	0	1	0	0	1	0	0	0	1	1	1	2
53.	1064	EE-2	अर्बुदः	tumor	1	0	0	0	1	0	2	0	0	0	2	0	3	0	3

54.	1074	EE-3	अर्शः	haemorrhoids	48	32	0	0	48	32	97	53	0	1	97	54	14	86	231
55.	1095	EE-4	ग्रन्थिः	cyst	56	52	0	0	56	52	61	64	0	0	61	64	11	11	233
56.	1139	EF-2.4.4	मधुमेहः	diabetes mellitus	504	267	3	2	507	269	1202	689	8	0	1210	689	1717	958	2675
57.	1161	EF-3	मेदोरोगः	obesity	37	28	1	2	38	30	59	61	0	1	59	62	97	92	189
58.	1163	EF-4	पिडका	eruption	2	0	0	1	2	1	1	0	0	2	1	2	3	3	6
59.	1173	EI-2	क्लैब्यम्	male infertility	6	0	0	0	6	0	19	0	0	0	19	0	25	0	25
60.	1244	EI-6.8	अन्त्र-वृद्धिः	hernia	0	1	0	0	0	1	0	1	0	0	0	1	0	2	2
61.	1248	EJ-2	अश्मरी	lithiasis/urolithiasis/ nephrolithiasis	19	11	0	0	19	11	33	11	0	0	33	11	52	22	74
62.	1258	EJ-3	मूत्राघातः	urinary retention	2	2	0	0	2	2	7	5	0	0	7	5	9	7	16
63.	1278	EJ-4	मूत्रकृच्छ्रम्	dysuria	13	11	1	1	14	12	14	13	0	0	14	13	28	25	53
64.	1304	EK-3	श्वयथुः/शोथः/शोफः	oedema/inflammation	18	23	1	0	19	23	28	38	0	2	28	40	47	63	110
65.	1360	EL-2.10	उदावर्तिनी	dysmennorrhea	0	99	0	2	0	101	0	161	0	0	0	161	0	262	262
66.	1374	EL-2.24	वन्ध्या	female infertility	1	3	0	0	1	3	0	5	0	0	0	5	1	8	9
67.	1392	EL-4	रक्तप्रदरः/ असृग्दरः	menorrhagia / metrorrhagia / dysfunctional uterine bleeding (DUB)	0	5	0	1	0	6	0	7	0	1	0	8	0	14	14
68.	1398	EL-5	श्वेतप्रदरः	leucorrhoea	0	13	0	0	0	13	0	9	0	0	0	9	0	22	22

69.	1521	EM-11	भ्रमः	<b>giddiness / dizziness / vertigo</b>	12	10	0	0	12	10	46	24	0	0	46	24	58	34	92
70.	1421	EM	मनोवहस्रोतोविकारः	<b>disorders of मनोवहस्रोतस्</b>	23	16	13	7	36	23	42	22	15	1	57	23	93	46	139
71.	1457	EM-3	अपस्मारः	<b>epilepsy</b>	2	2	0	0	2	2	21	7	0	0	21	7	23	9	32
72.	1466	EM-5	मदात्ययः	<b>alcohol abuse</b>	9	0	0	0	9	0	16	0	0	0	16	0	25	0	25
73.	1522	F	शिरःशूल / शिरोरुक्	<b>headache/cephalgia/ cephalalgia</b>	27	45	0	0	27	45	33	88	2	0	35	88	62	133	195
74.	1530	F-8	अर्धविभेदकः	<b>hemicrania</b>	1	15	0	0	1	15	3	18	0	0	3	18	4	33	37
75.	1531	F-9	सूर्यावर्तः	<b>sunshine induced cephalalgia</b>	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
76.	1543	FA-3	खलित्यम्	<b>baldness / alopecia totalis</b>	29	56	0	2	29	58	22	39	0	0	22	39	51	97	148
77.	1548	FA-4	दारुणकः	<b>pytiriasis capitis</b>	19	9	0	0	19	9	23	5	0	0	23	5	42	14	56
78.	1565	GB	दन्तमूलरोगः	<b>gum disorders</b>	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
79.	1583	GC	दन्तरोगः	<b>tooth disorders</b>	7	10	0	0	7	10	5	11	2	0	7	11	14	21	35
80.	1604	GE-1	गलशुण्डिका	<b>uvulitis/elongated uvula</b>	0	5	1	1	1	6	1	9	3	0	4	9	5	15	20
81.	1616	GF	कण्ठरोगः	<b>throat disorders</b>	2	2	1	0	3	2	2	5	1	3	3	8	6	10	16
82.	1643	GF-19	गलगण्डः	<b>goiter</b>	4	25	0	0	4	25	4	31	0	0	4	31	8	56	64

83.	1649	GG	मुखपाकः	stomatitis	8	2	1	2	9	4	6	19	4	0	10	19	19	23	42
84.	1662	H	अक्षिरोगः /नेत्ररोगः	ophthalmic diseases/ eye diseases	12	9	1	1	13	10	9	6	0	0	9	6	22	16	38
85.	1720	HD- 1	प्रस्तारि- अर्म	pterygium	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
86.	1740	HF- 1	अभिष्य न्दः	conjunctivitis	9	7	0	0	9	7	6	3	0	0	6	3	15	10	25
87.	1745	HF- 2	अधिमन्थः	glaucoma	1	2	0	0	1	2	1	2	0	0	1	2	2	4	6
88.	1754	HF- 7	शुष्काक्षि पाकः	xerophthalmia	0	3	0	0	0	3	0	2	0	0	0	2	0	5	5
89.	1761	HG- 1	तिमिरः	partial or total blindness/amaurosi s/ametropia/partial obstruction of vision	78	56	3	0	81	56	52	42	0	0	52	42	13 3	98	231
90.	1778	HG- 2	काचः	moderate low vision	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
91.	1813	I	नासरोगः	nose diseases	3	0	0	0	3	0	2	8	0	0	2	8	5	8	13
92.	1814	I-1	प्रतिश्यायः /पीनसः	rhinitis	92	61	22	12	11 4	73	171	118	22	14	19 3	13 2	30 7	20 5	512
93.	1852	I-15	नासागत- रक्तपित्तम्	epistaxis	1	1	0	0	1	1	0	0	0	0	0	0	1	1	2
94.	1853	I-16	नासार्शः	nasal polyp	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
95.	1860	J	कर्णरोगः	ear diseases	14	8	3	1	17	9	13	5	0	14	13	19	30	28	58

96.	1880	J-14	कर्ण-स्रावः	otorrhoea	2	0	1	0	3	0	1	0	0	0	1	0	4	0	4
97.	1896	J-19	बाधिर्यम्	deafness	1	4	0	0	1	4	5	1	0	0	5	1	6	5	11
98.	1869	J-9	कर्ण-नादः	tinnitus	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
99.	1913	K	व्रणः	wounds	11	3	1	1	12	4	27	17	1	0	28	17	40	21	61
100.	1971	LA	भग्नः/अस्थिभग्नः	fracture	4	3	0	0	4	3	12	1	0	0	12	1	16	4	20
101.	1972	LA-1	सन्धिमुक्तम्	dislocation	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1
102.	2170	MD-11	दौर्बल्यम्	debility	150	119	17	12	167	131	185	186	6	23	191	209	358	340	698
103.	2184	N	कृमिः/सञ्जातकृमि	worm infestation	3	1	3	3	6	4	0	0	2	1	2	1	8	5	13
104.	2250	O-14	कदरः	corn /callosity	1	1	0	0	1	1	0	1	0	0	0	1	1	2	3
105.	2280	O-35	युवानपिडका/मुखदूषिका	pimples	14	26	0	0	14	26	2	15	0	0	2	15	16	41	57
106.	2284	O-39	इन्द्रलुप्तः	alopecia	4	0	0	0	4	0	13	1	0	0	13	1	17	1	18
107.	2287	O-42	व्यङ्गः	black patches on face / melasma	0	0	0	0	0	0	1	1	0	0	1	1	1	1	2
				<b>Total-</b>	<b>268</b>	<b>220</b>	<b>154</b>	<b>94</b>	<b>28</b>	<b>22</b>	<b>480</b>	<b>370</b>	<b>100</b>	<b>85</b>	<b>49</b>	<b>37</b>	<b>77</b>	<b>60</b>	<b>138</b>
					<b>2</b>	<b>5</b>			<b>36</b>	<b>99</b>	<b>9</b>	<b>9</b>		<b>09</b>	<b>94</b>	<b>45</b>	<b>93</b>	<b>38</b>	

**TOTAL NEW PATIENTS: 5,135      TOTAL OLD PATIENTS: 8,703      GRAND TOTAL: 13838**

- Number of patients in Old OPD : 8,165
- Number of patients in New OPD : 13,838
- Total : 22,003

**Statement of Patients attended OPD during the reporting period with National Ayurveda Morbidity Codes (NAMC) April 2021 to March 2022**

Period /अवधि Reporting Period April 2020 - March 2021	New cases				Total		Old cases				Total		G.Total		Grand Total (M+F)
	M पु	F स्त्री	MC पुब	FC क न्या	M पु	F स्त्री	M पु	F स्त्री	MC पुब	FC कन्या	M पु	F स्त्री	M पु	F स्त्री	
<b>OPD</b>	1359	896	33	33	1392	929	3406	2378	30	30	3436	2408	4828	3337	8165
<b>New OPD</b>	2682	2205	154	94	2836	2299	4809	3709	100	85	4909	3794	7745	6093	13838
<b>Total</b>	<b>4041</b>	<b>3101</b>	<b>187</b>	<b>127</b>	<b>4228</b>	<b>3228</b>	<b>8215</b>	<b>6087</b>	<b>130</b>	<b>115</b>	<b>8345</b>	<b>6202</b>	<b>12573</b>	<b>9430</b>	<b>22003</b>

**8.1 Srotas wise No. of patients attended at OPD of this Institute for the reporting period  
April 2021-March 2022**

Sr. No.	Disease/ रोग	IPD	-- OPD --- No. of Patients						
			New / नया		Old/ पुराना		Total/ कुल		G.Total
			Mपु	Fस्त्री	Mपु	Fस्त्री	Mपु	Fस्त्री	
1	<b>Prana vaha srotasa roga (Respiratory diseases)</b>	N.A	301	164	451	257	752	421	1173
2	<b>Anna vaha srotasa roga (Gastro intestinal diseases)</b>	N.A	426	229	656	305	1082	534	1616
3	<b>Rasa vaha srotasa roga (Lymphatic diseases)</b>	N.A	959	584	2502	1650	3461	2234	5695
4	<b>Rakta vaha srotasa roga (Cardio vascular diseases)</b>	N.A	29	50	65	40	94	90	184
5	<b>Mamsa vaha srotasa roga (Musculoskeletal/Skin diseases)</b>	N.A	791	600	1186	935	1977	1535	3512
6	<b>Medo Vaha srotasa roga (Lipid disorders)</b>	N.A	57	47	115	141	172	188	360
7	<b>Asthi/Majja vaha srotasa roga (Bone/Joint diseases)</b>	N.A	822	739	1925	1705	2747	2444	5191
8	<b>Shukra vaha srotas roga (Male reproductive tract diseases)</b>	N.A	11	1	18	3	29	4	33
9	<b>Mutra vaha srotasa roga (Urinary diseases)</b>	N.A	58	41	121	43	179	84	263
10	<b>Purisha vaha srotasa roga (Excretary/Anorectal diseases)</b>	N.A	114	67	274	122	388	189	577
11	<b>Artava vaha srotasa roga (Gynecological diseases)</b>	N.A	1	166	14	254	15	420	435
12	<b>Vata vikara/Manasa roga (Neurological/Psychological diseases)</b>	N.A	211	134	453	165	664	299	963
13	<b>Urdhva jatrugata roga Eye/ ENT diseases</b>	N.A	448	406	565	582	1013	988	2001
	<b>Total / कुल</b>		<b>4228</b>	<b>3228</b>	<b>8345</b>	<b>6202</b>	<b>12573</b>	<b>9430</b>	<b>22003</b>



**9.1. Statement of patients attended Geriatric O.P.D during reporting period April 2020 – March 2021**

S. No	NAMC ID	NAMC Code	NAMC_Name	New patients		Follow up patients		Total		Grand Total (M + F)
				M	F	M	F	M	F	
1.	147	AAC-12	आध्मानम्/आनाहः	3	1	0	1	3	2	5
2.	2983	AAC-12.4	विबन्ध	3	0	2	2	5	2	7
3.	157	AAC-20	गृध्रसी	3	6	10	24	13	30	43
4.	163	AAC-24	पक्षाघातः/पक्षवधः	3	1	18	0	21	1	22
5.	141	AAC-8	अवबाहुकः	6	6	3	5	9	11	20
6.	248	AAE-16	सन्धिवातः	152	90	456	346	608	436	1044
7.	287	ABB-26	पालित्य	0	1	0	0	0	1	1
8.	480	EA-3	कासः	25	10	91	10	116	20	136
9.	489	EA-4	श्वासः	7	4	14	32	21	36	57
10.	633	EB-10	शूलः	7	2	11	2	18	4	22
11.	536	EB-3	अजीर्णम्	1	0	0	0	1	0	1
12.	558	EB-4	अम्लपित्तम्	23	11	51	16	74	27	101
13.	681	EC-2	हृद्रोगः	1	0	2	2	3	2	5
14.	689	EC-3	ज्वरः	3	1	4	0	7	1	8
15.	823	EC-6	आमवातः	0	1	0	0	0	1	1
16.	1029	ED-14	शीतपित्तम्	5	3	8	0	13	3	16
17.	1033	ED-16	भगन्दरः	0	0	0	1	0	1	1
18.	838	ED-2.2	कण्डूः	2	3	3	19	5	22	27
19.	850	ED-2.8	निद्रानाशः/अनिद्रा	2	1	3	22	5	23	28
20.	883	ED-4	कुष्ठम्	8	1	24	1	32	2	34
21.	905	ED-4.3.10	विचर्चिका	11	6	14	23	25	29	54
22.	897	ED-4.3.3	किटिभः	19	4	68	13	87	17	104
23.	919	ED-5	श्वित्रः	1	1	2	29	3	30	33

24.	972	ED-9	विद्रधिः	1	0	5	0	6	0	6
25.	1074	EE-3	अर्शः	15	2	70	20	85	22	107
26.	1095	EE-4	ग्रन्थिः	3	3	18	4	21	7	28
27.	1139	EF-2.4.4	मधुमेहः	64	27	484	249	548	276	824
28.	1173	EI-2	क्लैब्यम्	1	0	0	0	1	0	1
29.	1244	EI-6.8	अन्त्र-वृद्धिः	1	0	17	0	18	0	18
30.	1248	EJ-2	अश्मरी	2	0	12	0	14	0	14
31.	1258	EJ-3	मूत्राघातः	1	0	3	0	4	0	4
32.	1278	EJ-4	मूत्रकृच्छ्रम्	4	2	17	5	21	7	28
33.	1337	EK-4.6	यकृद्दाल्युदरः	0	1	0	0	0	1	1
34.	1398	EL-5	श्वेतप्रदरः	0	2	0	0	0	2	2
35.	1421	EM	मनोवहस्रोतोविकारः	2	1	30	0	32	1	33
36.	1466	EM-5	मदात्ययः	1	0	1	0	2	0	2
37.	1522	F	शिरःशूल/ शिरोरुक्	4	6	7	17	11	23	34
38.	1530	F-8	अर्धावभेदकः	0	1	0	0	0	1	1
39.	1565	GB	दन्तमूलरोगः	0	0	3	0	3	0	3
40.	1583	GC	दन्तरोगः	4	0	6	0	10	0	10
41.	1643	GF-19	गलगण्डः	1	1	6	2	7	3	10
42.	1662	H	अक्षिरोगः/नेत्ररोगः	0	1	0	0	0	1	1
43.	1814	I-1	प्रतिश्यायः/पीनसः	10	2	12	1	22	3	25
44.	1852	I-15	नासागत-रक्तपित्तम्	0	0	3	0	3	0	3
45.	2170	MD-11	दौर्बल्यम्	14	7	21	7	35	14	49
			<b>Total</b>	<b>413</b>	<b>209</b>	<b>1499</b>	<b>853</b>	<b>1840</b>	<b>1062</b>	<b>2974</b>

**Total New Patients: 622; Total Old Patients: 2352; Grand Total: 2974**

**9.1a. Statement of patients attended Geriatric O.P.D (New OPD)during reporting period April 2021 – March 2022**

Sl. No	NAMC ID	NAMC Code	NAMC Name	New patients		Follow up patients		Total		Grand Total (M + F)
				M	F	M	F	M	F	
1.	147	AAC-12	आध्मानम् / आनाहः	2	0	5	1	7	1	8
2.	2983	AAC-12.4	विबन्ध	12	1	13	2	25	3	28
3.	157	AAC-20	गृध्रसी	23	23	34	44	57	67	124
4.	163	AAC-24	पक्षाघातः	12	2	26	2	38	4	42
5.	241		मांसगतवातः	0	1	0	0	0	1	1
6.	141	AAC-8	अवबाहुकः	3	6	21	1	24	7	31
7.	248	AAE-16	सन्धिवातः	137	112	414	248	551	360	911
8.	285	ABB-24	दाहः	2	0	10	4	12	4	16
9.	348	ACB-23	अग्निमान्द्यम्	2	0	5	1	7	1	8
10.	471	EA-2	हिक्का	0	1	0	0	0	1	1
11.	480	EA-3	कासः	22	3	55	16	77	19	96
12.	489	EA-4	श्वासः	17	6	32	12	49	18	67
13.	633	EB-10	शूलः	4	2	6	2	10	4	14
14.	515	EB-2	अतिसारः	1	0	0	0	1	0	1
15.	536	EB-3	अजीर्णम्	1	0	0	0	1	0	1
16.	543	EB-3.7	विसूचिका	0	0	0	1	0	1	1
17.	558	EB-4	अम्लपित्तम्	23	18	64	17	87	35	122
18.	601	EB-7	ग्रहणीदोषः	0	0	1	0	1	0	1
19.	681	EC-2	हृद्रोगः	0	0	9	0	9	0	9
20.	689	EC-3	ज्वरः	1	1	1	3	2	4	6
21.	812	EC-5	पाण्डुरोगः	0	1	0	2	0	3	3
22.	823	EC-6	आमवातः	1	4	3	18	4	22	26
23.	828	EC-7	अरुचिः	0	0	1	0	1	0	1
24.	838	ED-2.2	कण्डूः	6	1	14	1	20	2	22
25.	850	ED-2.8	निद्रानाशः / अनिद्रा	4	0	25	1	29	1	30
26.	874	ED-3	कामला	2	0	1	0	3	0	3
27.	883	ED-4	कुष्ठम्	18	6	44	8	62	14	76
28.	897	ED-4.3.3	किटिभः	4	0	9	1	13	1	14

29.	898	ED-4.3.4	विपादिका	0	1	0	0	0	1	1
30.	919	ED-5	श्वित्रः	2	4	1	7	3	11	14
31.	1064	EE-2	अर्बुदः	2	0	2	0	4	0	4
32.	1074	EE-3	अर्शः	5	0	9	1	14	1	15
33.	1095	EE-4	ग्रन्थिः	6	3	5	3	11	6	17
34.	1139	EF-2.4.4	मधुमेहः	162	72	380	159	542	231	773
35.	1161	EF-3	मेदोरोगः	5	2	5	5	10	7	17
36.	1248	EJ-2	अश्मरी	7	2	22	1	29	3	32
37.	1258	EJ-3	मूत्राघातः	3	1	6	2	9	3	12
38.	1278	EJ-4	मूत्रकृच्छ्रम्	2	2	5	4	7	6	13
39.	1304	EK-3	श्वयथुः/शोथः /शोफः	5	4	10	12	15	16	31
40.	1521	EM-11	भ्रमः	4	6	28	12	32	18	50
41.	1421		मनोविकार	1	2	2	0	3	2	5
42.	1522	F	शिरःशूल / शिरोरुक्	1	4	1	2	2	6	8
43.	1543	FA-3	खलित्यम्	1	0	1	0	2	0	2
44.	1548	FA-4	दारुणकः	1	0	0	1	1	1	2
45.	1583	GC	दन्तरोगः	2	2	1	1	3	3	6
46.	1604	GE-1	गलशुण्डिका	0	1	0	0	0	1	1
47.	1643	GF-19	गलगण्डः	1	3	0	4	1	7	8
48.	1649	GG	मुखपाकः	4	2	3	16	7	18	25
49.	1662	H	अक्षिरोगः/नेत्ररोगः	2	2	4	0	6	2	8
50.	1740	HF-1	अभिष्यन्दः	1	1	3	1	4	2	6
51.	1745	HF-2	अधिमन्थः	0	1	0	0	0	1	1
52.	1761	HG-1	तिमिरः	34	12	39	5	73	17	90
53.	1778	HG-2	काचः	0	1	0	0	0	1	1
54.	1814	I-1	प्रतिश्यायः	6	4	29	9	35	13	48
55.	1860	J	कर्णरोगः	7	1	15	1	22	2	24
56.	1880	J-14	कर्ण-स्नावः	1	0	0	0	1	0	1
57.	1896	J-19	बाधिर्यम्	1	0	2	0	3	0	3
58.	1869	J-9	कर्ण-नादः	1	0	0	0	1	0	1
59.	1913	K	व्रणः	1	2	6	10	7	12	19
60.	2170	MD-11	दौर्बल्यम्	28	26	58	50	86	76	162
61.	2250	O-14	कदरः	0	1	0	1	0	2	2
			Total-	593	350	1430	692	2023	1042	3065

Total New Patients: 943; Total Old Patients: 2122; Grand Total: 3065

**Statement of Patients attended Geriatric OPD during the reporting period from April 2021 to March 2022**

Sr. No	OPD	New patients		Follow up patients		Total		Grand Total (M + F)
		M	F	M	F	M	F	
1.	<b>New OPD</b>	593	350	1430	692	2023	1042	3065
2.	<b>Old OPD</b>	413	209	1499	853	1840	1062	2974
3.	<b>Total</b>	<b>1006</b>	<b>559</b>	<b>2929</b>	<b>1545</b>	<b>3863</b>	<b>2104</b>	<b>6039</b>

**9.2. Statement of patients of flu like illnesses attended at OPD during April 2021 - March 2022**

Period अवधि	New Cases				Total		Old Cases				Total		Grand Total	
	M पु	F स्त्री	MC पुब	FC क न्या	M पु	F स्त्री	M पु	F स्त्री	MC पुब	FC क न्या	M पु	F स्त्री	M पु	F स्त्री
<b>New OPD (April 2021 - March 2022)</b>	92	61	22	12	114	73	171	118	22	14	193	132	307	205
<b>Old OPD (April 2021 -March 2022)</b>	47	24	5	7	52	31	101	36	2	7	103	43	155	74
<b>Total (April 2021 - March 2022)</b>	<b>139</b>	<b>85</b>	<b>27</b>	<b>19</b>	<b>166</b>	<b>104</b>	<b>272</b>	<b>154</b>	<b>24</b>	<b>21</b>	<b>296</b>	<b>175</b>	<b>462</b>	<b>279</b>

**Total New Patients: 270    Total Old Patients: 471    Grand Total: 741**

Initiated free medical camp on “Flu like illness” at Clinical section (OPD), RARIMD on 04.03.2015.

\*Asper Council email received on 28<sup>th</sup> March 2020, regarding Corona Virus: Preventive and Prophylactic Advocacy in Ayurveda.

Special attention is given to the patients with high fever, cough, cold, upper respiratory tract infection and created awareness about Coronavirus and distributed medicines for boosting immunity in OPD and displayed the material on the notice board provided by the Council.

**Statement of patients of Ayurveda De-addiction OPD, TulasiThota, Balepete, Bangalore during April 2021 - March 2022**

Sr. No.	ID	Code No	रोग / Disease	No. of patients attended - OPD					
				New		Old		Grand total	
				M	F	M	F	M	F
1.	11146	F10.2	Alcohol dependence, unspecified	13	0	48	0	61	0
2.	11147	F17.2	Nicotine dependence, unspecified	5	0	7	0	12	0
3.	2410	F19	Multiple specified psychoactive substances dependence	3	0	21	0	24	0
			<b>Total</b>	<b>21</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>97</b>	<b>0</b>

**Statement of Panchakarma Procedure Performed from April 2021 to March 2022**

Sr. No.	Procedure	April to June 2021		July to September 2021		October to December 2021		January to March 2022		Total		Grand Total
		M	F	M	F	M	F	M	F	M	F	
1.	<b>Abyanga</b>	18	3	167	166	213	116	217	85	615	370	<b>985</b>
2.	<b>Swedana</b>	13	3	102	126	104	91	135	62	354	282	<b>636</b>
3.	<b>Shali Shashtika Pinda Swedan</b>	14	0	5	0	19	0	5	0	43	0	<b>43</b>
4.	<b>Patra Pinda Swedan (PPS)</b>	0	0	82	75	60	25	56	33	198	133	<b>331</b>
5.	<b>Jambir Pinda Sweda (JPS)</b>	0	0	0	0	7	0	0	0	7	0	<b>7</b>
6.	<b>Churna Pinda Sweda (CPS)</b>	0	0	6	9	20	0	0	0	26	9	<b>35</b>
7.	<b>Kukkutanda Pind Sweda</b>	6	0	7	0	7	0	0	0	20	0	<b>20</b>
8.	<b>Istika Swedan</b>	0	0	7	0		0	0	0	7	0	<b>7</b>
9.	<b>Valuka Swedana</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
10.	<b>Kaayaseka</b>	0	0	7	0	0	0	0	0	7	0	<b>7</b>
11.	<b>Mamsa Upanaha</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
12.	<b>Vamana</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
13.	<b>Virechana</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
14.	<b>Niruhavasti</b>	0	0	0	0	2	0	1	0	3	0	<b>3</b>
15.	<b>Anuvasana vasti</b>	0	0	0	0	3	0	3	0	6	0	<b>6</b>
16.	<b>Matravasti</b>	0	0	8	0	1	7	2	0	11	7	<b>18</b>
17.	<b>Kativasti</b>	10	0	45	38	64	31	76	48	195	117	<b>312</b>
18.	<b>Greevavasti</b>	0	0	6	21	5	35	4	2	15	58	<b>73</b>
19.	<b>Jaanuvasti</b>	0	2	29	27	27	17	13	36	69	82	<b>151</b>
20.	<b>Udvartana</b>	0	3	9	6	28	21	8	21	45	51	<b>96</b>
21.	<b>Nasya</b>	0	0	7	14	17	0	0	0	24	14	<b>38</b>
22.	<b>Shirodhara</b>	2	0	0	7	25	0	15	0	42	7	<b>49</b>
23.	<b>Bidalaga</b>	0	0	9	0	1	7	0	0	10	7	<b>17</b>
24.	<b>Netra Seka</b>	0	0	9	4	2	8	0	15	11	27	<b>38</b>
25.	<b>Netratarpana</b>	0	0	0	4		1	0	0	0	5	<b>5</b>
26.	<b>Netrabasti</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
27.	<b>Mukhalepana</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
28.	<b>Ksheeravasti</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
29.	<b>Thalam</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
30.	<b>Total</b>	<b>63</b>	<b>11</b>	<b>505</b>	<b>497</b>	<b>605</b>	<b>359</b>	<b>535</b>	<b>302</b>	<b>1708</b>	<b>1169</b>	<b>2877</b>

**Statement of Panchakarma Procedure Performed during different years since 2020-21**

<b>Sr. No.</b>	<b>Name of Procedure</b>	<b>20-21</b>	<b>21-22</b>	<b>Total</b>
1.	<b>Abhyanga</b>	521	985	<b>1506</b>
2.	<b>Swedana</b>	287	636	<b>923</b>
3.	<b>Shali Shashtika Pinda Swedan (SSPS)</b>	14	43	<b>57</b>
4.	<b>Patra Pinda Swedan (PPS)</b>	264	331	<b>595</b>
5.	<b>Jambir Pinda Sweda (JPS)</b>	6	7	<b>13</b>
6.	<b>Churna Pinda Sweda (CPS)</b>	3	35	<b>38</b>
7.	<b>Kukkutanda Pinda Sweda (KPS)</b>	12	20	<b>32</b>
8.	<b>Istika Swedan</b>	0	7	<b>7</b>
9.	<b>Valuka Swedana</b>	0	0	<b>0</b>
10.	<b>Kaayaseka</b>	0	7	<b>7</b>
11.	<b>Mamsa Upanaha</b>	7	0	<b>7</b>
12.	<b>Vamana</b>	0	0	<b>0</b>
13.	<b>Virechana</b>	0	0	<b>0</b>
14.	<b>Niruhavasti</b>	3	3	<b>6</b>
15.	<b>Anuvasanavasti</b>	5	6	<b>11</b>
16.	<b>Matravasti</b>	13	18	<b>31</b>
17.	<b>Kativasti</b>	235	312	<b>547</b>
18.	<b>Greevavasti</b>	63	73	<b>136</b>
19.	<b>Jaanuvasti</b>	91	151	<b>242</b>
20.	<b>Udvardana</b>	26	96	<b>122</b>
21.	<b>Nasya</b>	28	38	<b>66</b>
22.	<b>Shirodhara</b>	73	49	<b>122</b>
23.	<b>Bidalaka</b>	0	17	<b>17</b>
24.	<b>Netra Seka</b>	0	38	<b>38</b>
25.	<b>Netratarpana</b>	0	5	<b>5</b>
26.	<b>Netrabasti</b>	0	0	<b>0</b>
27.	<b>Mukhalepana</b>	3	0	<b>3</b>
28.	<b>Ksheeravasti</b>	0	0	<b>0</b>
29.	<b>Thalam</b>	0	0	<b>0</b>
30.	<b>Total</b>	<b>1654</b>	<b>2877</b>	<b>4531</b>



**आदिवासीस्वास्थ्यरक्षाअनुसंधानपरियोजना2021-22**  
**TRIBAL HEALTH CARE RESEARCH PROJECT (THCRP) 2021-22**

**THCRP Team**

Head of the Institute	Dr. Sulochana Bhat (Assistant Director Incharge)
Monitoring officer	Dr. Shashidhar H. Doddamani RO (Ay.) Dr. Raghavendra Naik RO (Ay.) till November 2021
Team members	Dr. Rajendra Kumar RO (Ay.)
Senior Research Fellows (SRFs)	Dr. Sindhu C.V., Dr. Athira A.G.
Pharmacists	Mr. Ranodeep Chaterjee
Data Entry Operator	Ms. Nayana
Multi Task Staff	Mr. Abhishek
Driver	Mr. Praveen N

**Background**

In order to provide primary Health care services for the tribal communities living in the remote areas, Central Council for Research in Ayurvedic sciences initiated Tribal Health Care Research Program (THCRP) in 1982 and continued at 6 peripheral Institutes/Units, till 2013-14. This program has been extended to 14 states through 14 CCRAS peripheral Institutes under Tribal Sub Plan (TSP). This project involves study of the living conditions of tribal people including health related demography; documentation of folk claims and Local Health Traditions (LHT); use of common medicinal plants in the area; propagation of knowledge about hygiene and prevention of diseases; and extending medical aid at their doorsteps. The Tribal Health Care Research Project was initiated at Central Ayurveda Research Institute, Bengaluru in 2014 and the first Tribal Health Care Camp was conducted on 17-1-2015. THCRP team has reached out to over 51,252 Tribal population and 18,592 patients during house hold survey and medical camps conducted in 157 villages till date.

During the reporting year 2021-2022, 06 villages/pockets of Heggadadevankote (HD Kote)rural district were surveyed and Health Care Camps were conducted on regular basis in identified Tribal pockets. Household survey information of about 5252 Tribal populations was documented. Total 2592 patients were treated including follow-ups and a total of 7350 blood tests (Hb and RBS) were carried out in the health care camps. The team met different tribes such as Kadu kurubas, Yarava, Soligas, Jenu kuruba, Hakki pikki etc.residing in the above-mentioned places. Some Folk healers were identified during camps and about 11 folklore medical claims/LHT were collected and validated.

## Summary

Sr.No	Particulars	Consolidated data of the study
1.	Durations of the study	12 months
2.	Villages covered	6 villages
3.	Visits made	114 visits
4.	ST Population covered	5252
5.	No. of patients treated	2592
6.	No. of ST patients treated	2130
7.	No. of ST Male treated	929
8.	No. of ST Female treated	1201
9.	No. of Investigations done	7350

### Consolidated statement of work carried out during (April 2021 to March 2022)

#### Population Surveyed Status of “Tribal Health care Research Program” under TSP

S.No	Name of Village/ Area	No. of Tours	Population Surveyed				Total		Grand Total
			ST		others		ST	Others	
			M	F	M	F			
1	Agathur	22	523	563	91	87	1086	178	1264
2	Bacchegowad anahalli	22	402	418	63	59	820	122	942
3	Hebbalguppe	14	295	313	48	51	608	99	707
4	Hirehalli	16	450	410	53	47	860	100	960
5	K. Belthuru	24	520	494	76	81	1014	157	1171
6	Savve	16	433	431	66	53	864	119	983
	Total	114	2623	2629	397	378	5252	775	6027

**Patients treated status of “Tribal Health care Research Program” under TSP**

S.No	Name of Village/ Area	Patients treated for project year																
		New				Follow up				Total						Total		Grand Total
		ST		others		ST		Others		ST			Others			M	F	
		M	F	M	F	M	F	M	F	M	F	TOTAL	M	F	TOTAL			
1	Agathur	189	232	25	32	21	34	7	2	210	266	476	32	34	66	242	300	
2	Bacchegowadanahalli	109	156	19	26	23	32	1	4	132	188	320	20	30	50	152	218	370
3	Hebbalguppe	112	145	27	35	20	31	9	13	132	176	308	36	48	84	168	224	392
4	Hirehalli	123	159	41	46	26	50	14	24	149	209	358	55	70	125	204	279	483
5	K. Belthuru	118	161	22	35	30	46	11	15	148	207	355	33	50	83	181	257	438
6	Savve	126	125	20	21	32	30	6	7	158	155	313	26	28	54	184	183	367
TOTAL		777	978	154	195	152	223	48	65	929	1201	2130	202	260	462	1131	1461	2592

**Investigation carried out under Tribal Health Care Research Programme during 2021-22**

S. No.	Name of Village/ Area	CBC	HB%	Blood-sugar (RBS)	urine	stool	Any other	Total
1	Agathur	-	849	728	-	-	-	1577
2	Bacchegowadanahalli	-	577	459	-	-	-	1036
3	Hebbalguppe	-	455	377	-	-	-	832
4	Hirehalli	-	684	592	-	-	-	1276
5	K. Belthuru	-	757	636	-	-	-	1393
6	Savve	-	661	575	-	-	-	1236

**Folk claims collected under Tribal Health Care Research Programme during 2021-22**

<b>SL. No</b>	<b>Place of collection (Name of village/ Area)</b>	<b>Drug/ contents of formulation/ Procedure</b>	<b>Part of plant Used/ material required</b>	<b>Formulation preparation method / Procedure detail</b>	<b>Uses of Drug/ Procedure</b>
1.	Hebbalguppe	<ol style="list-style-type: none"> <li>1. Sappesoppu (Meshashringi/ Gymnemasylvestre)</li> <li>2. Bevinaela (Nimba/ Azardirachtaindica)</li> <li>3. Bilpatre (Bilwa/ Aeglemarmelos)</li> </ol>	Leaves.	Collect 1 leaf of each plant, wash them in clean water and later use them.	One leaf of all the three plants to be consumed in the morning on an empty stomach for 3-5 day to bring down the increased blood glucose level in Prameha(Hyperglycemia).
2.	Hebbalguppe	<ol style="list-style-type: none"> <li>1. Ishwari (Aristolochiaindica),</li> <li>2. Jambeara</li> </ol>	Ishwari root, Jambearaswarasa	Ishwari root is rubbed with Jambearaswarasa and a paste is prepared.	The paste is applied over skin in cases of Kandu, and washed after it dries.
3.	Hebbalguppe	<ol style="list-style-type: none"> <li>1. Bheemanakaddi( Bala/ Sidaacuta),</li> <li>2. Chinha (Tamarindusindica),</li> <li>3. Nilgiri(Eucalyptus globules/ Tailaparna),</li> <li>4. Edamurikayi/balamurikayi (Avartani/ Helicteresisora),</li> <li>5. Amritaballi (Guduchi/ Tinosporacardifolia),</li> <li>6. Kuppemani (Haritamanjari/Acalyphaindic),</li> <li>7. Tilataila</li> </ol>	Fruits, bark, leaves	All the ingredients are procured fresh, pounded, and added to Tilataila and boiled till the oil reduces to half.	The broken bones are set using bamboo, and then wrapped with a cotton cloth. Then the prepared oil is poured over it.

4.	Savve	1. Tumbegida (Dronapushpi/ Lucas aspera)	Panchanga	Juice is extracted by washing the collected plant and crushing it.	The juice is administered to the victim of snake bite, at frequent intervals.
5.	Savve	1. Swamyberu (Ishwari/AristolachiaIndica), 2. Aadumuttada (Vasa/ Adhatodavasica)	Ishwari stem, Vasa root.	Vasa leaf juice is extracted	Ishwari stem is given to chew and vasa swarasa is administered simultaneously, at frequent intervals in victims of snake bite
6.	Hebbalguppe	1. Kaggalimara (Khadira/Acacia catechu)	Kaggali tree root, Narikelajala	Kaggali tree root is ground to extract the juice.	The extracted juice of kaggali tree root is administered along with narikelajala for 5 days in the morning to relieve menorrhagia in women.
7.	Hebbalguppe	1. Lantana gida (Ghaneri/Lantana camara)	Lantana Leaf	Collect 4-5 Leaves, wash them in clean water and later use.	Rub the dorsal (rough) surface of the cleaned leaves over the skin lesion in the opposite direction of the hair root for 15 consecutive days during the morning hours to relieve Dadru (Tinea infections)
8.	Savve	1. Aloevera Leaf pulp(Lolesara) (Kumari/Aloe barbadensis) 2. Turmeric powder (Haridra/ Curcuma longa)	Aloevera pulp	Aloevera pulp is taken, scrapped and is then triturated with turmeric powder.	This mixture is heated over a lamp, applied over a white cloth and is tied over the abscess and is left overnight. This helps in ripening of abcess(vidradhipaka).

9.	Savve	1. Tumbegida( Dronapushpi/ Lucas aspera)	Leaves	The leaves are cleaned under running water and are later pounded to extract the swarasa( juice).	2 drops of this juice is instilled in both the nostrils at the time of sunrise to clear the mucus secretion thereby relieving the headache( Dushtapratishyaya)
10.	Savve	1. SeebeGida (Psidiumguajava/ Peruka)	Leaves	1 leaf is taken, cleaned and is later used.	In case of dental carries, this leaf is given for chewing at night, before bed time. The person is asked to lie on the lateral side (towards the side of dental carries). The person should neither swallow nor spit the secretions for 1 hour. After one hour he can spit and later go to sleep. Person is allowed to cleanse the mouth only on the next day.
11.	Savve	1. Kaachikaddi (Jatrophacurcas/ Dravanti)	Twigs	Take the twig, wipe it and later use	Use the twig for brushing the tooth, this helps in strengthening the gums and tooth. This is an excellent remedy for shaky tooth(Dantachala)

## Ayurveda Mobile Health Care Programme under Scheduled Caste Sub Plan 2021-2022

1.	In charge Name	Dr Sulochana Bhat
2.	PI &Co-I Names	Dr Thejaswini C & Dr Srinibash Sahoo
3.	Name of RO visiting the tours	Dr Thejaswini C & Dr Srinibash Sahoo
4.	Name of SRF	Dr Tejaswi Kiran & Dr Suhasini R D
5.	Name of Office Assistant	Mr Sudalai Kumar
6.	Name of Pharmacist	Mr Neelesh Kumar
7.	Name of Driver cum MTA	Mrs Asha N

### Background

The present work “Ayurveda Mobile Health Care Programme under Scheduled Caste Sub Plan” consists of the data regarding study of living conditions, health status, geographical and environmental profile of Scheduled Caste people in the selected areas. The Program commenced from December 2015 and is running successfully providing effective health care services to the India’s most exploited communities, the Scheduled Caste community. The core objective was to study the dietetic habits, socio-demographic profile, nature and frequency of prevalent diseases, propagation of knowledge about hygiene, prevention of diseases and providing medical aid by conducting door to door survey. Health awareness camps were conducted to sensitise the community about Ayurvedic medical services, importance of women and child health, nutrition, hygiene, diet and lifestyle modifications, precautions during Covid-19 Pandemic, and its preventive measures. During the financial year 2021-22, four IMR projects entitled

- “Profiling of Demographic, health status and Non communicable Diseases among Scheduled Caste population in selected states across India- A descriptive , Cross sectional Epidemiological study”,
- “A prospective community based study for the evaluation of *Punarnavadi Mandura* in Anemia (Pandu)”,
- “Effectiveness of Ayurveda based diet and Lifestyle advocacy on health related Quality of life in Schedule Caste population in India- a Community based, cluster randomized controlled study” and
- A prophylactic community based study to assess the impact of Ayuraksha Kit in COVID-19 were conducted.

The following five SC population dominated areas within convenient distance from Central Ayurveda Research Institute, Bengaluru were selected

1. Bannerughatta
2. Tharalu
3. Somanahalli
4. K.Gollahalli
5. Kumbalgodu



During this one-year study, the team surveyed about 5940 SC population in 158 visits and treated about 1741 patients. Among the patients treated 1721(98.8%) were SC and 20 (1.14%) were belonging to other communities. Environmental and personal hygienic condition was poor in some area and was good at some areas. There was maximum of pukka houses in all areas with some kaccha houses. Majority of the houses were equipped with electricity, cooking gas and drinking water. Main staple food was found to be ragi, rice, wheat and pulses. Most of the roads were pukka but were not properly maintained. Awareness about the cleanliness and hygiene was found to be less as the garbage were dumped near the roads and public places. Predominant languages were Kannada, Tamil and Telugu. All the villages were having one nearby Govt. Hospital for health care services and Govt. School for education of children.

Out of 5940 surveyed population, 1459 were children. It was observed that 3024 (50.90%) were female and 2916 (49.09%) were male. As far as literacy rate is concerned, maximum people i.e. 1,152(25.70%) have completed the high school education and only 635 (14.17%) were graduates. Among total population, about 3461 (77.23%) of the population was non-addicted to any of the substance, however maximum of 613 (13.6%) population were addicted to Gutka/Panmasala consumption, followed by population addicted to smoking 566(12.63%). Maximum people 4277 (95.44%) were non-vegetarians habituated to mixed diet. Majority of people about 2620 (58.46%) and 2092(46.68%) were occasionally having fruits and vegetables respectively. It was observed that 509 (11.35%) population were unemployed. Among surveyed population maximum of 1508 (33.65%) females were home makers and 1468(32.76%) males were self-employed. The most prevalent diseases treated were Sandhigatavata, Madhumeha, Paandu, Amlapitta, Katishula etc. in adults. In children, Agnimandhya, Krimi, Yuvanapidaka, Dourbhalyam were commonly found in all most all the areas. The team had put their efforts by distributing IEC material among the masses in local language Kannada to make people aware about preventive measures of disease and propagation of Ayurvedic concept of Pathya-Apathya. It was found that most of the prevailing diseases responded to the Ayurvedic treatment positively.

#### **Study at aglance**

<b>S. No.</b>	<b>Particulars</b>	<b>Consolidated data of the study</b>
1.	Duration of the study	1 year
2.	Villages covered	5
3.	Visits made	158
4.	SC Population covered	5940

5.	No. of patients treated	1741
6.	No. of SC patients treated	1721
7.	No. of SC Adults treated	1528
8.	No. of SC Children treated	213
9.	No. of Investigations done	7485

**•Introduction about state and its SC population**

Karnataka formerly known as the State of Mysore is located in the southern part of India. Kannada, one of the classical languages of India, is the most widely spoken and is the official language of the state. The capital of the state is Bengaluru which has evolved as one of the most vibrant cities in the country. Bangalore has grown into a hub for many major companies mainly IT companies. Many youngsters have flocked to Bangalore in recent times in search of employment. The state of Karnataka was formed in 1956 as the State of Mysore and was renamed as Karnataka in 1973. The administrative units of the State for 2011 Census consisted of 30 Districts, 176 Sub-districts (Taluks), 29,340 Villages (including 1943 Un-inhabited villages), 347 Towns including 127 Census Towns and 220 Statutory Towns. Karnataka with a population of 6,10,95,297, retains the ninth rank as in 2001, in population size among all the States and Union Territories and accounts for 5.05 per cent of Country's population of 1,21,05,69,573 in 2011. Of the 6,10,95,297 persons enumerated in the State, 3,09,66,657 are Males and 3,01,28,640 are Females. Among the districts within the State, Bangalore District is the most populated District with 96,21,551 population and accounts for 15.75 per cent of the State's total population while Kodagu District with a population share of 0.91 per cent is the least populated District.

The Scheduled Caste population constitutes 17.15 per cent of the total population of the State. The Scheduled Caste population in the State has increased from 85,63,930 in 2001 to 1,04,74,992, registering a decennial growth rate of 22.32 per cent. The highest proportion of Scheduled Caste population is returned from Kolar District with 30.32 percent, followed by Chamarajanagar District with 25.42 percent. The least proportion of Scheduled Caste population is recorded in the coastal district of Udupi (6.41 per cent) and preceded by Dakshina Kannada (7.09 per cent) District. The proportion of Scheduled Caste population is less than 10 per cent in 4 districts, between 10 to 20 per cent in 13 districts and above 20 per cent in the remaining 13 districts.

**•Introduction of AMHCP (SCSP) at CARI, Bengaluru with aims and objectives in brief:**

The Ayurveda Mobile Health Care program is one of the Scheduled Case Sub Plan which is specifically designed to channelize the flow of Health benefits and outlays from the general sector in the state plan and from the union ministry of Social Justice and Empowerment for the development of Scheduled Caste in physical as well as financial terms. The Central Council for Research in Ayurvedic Sciences (CCRAS), an Autonomous body under Ministry of AYUSH, Govt. of India is an apex body in India for undertaking, coordinating, formulating, developing and promoting research on scientific lines in Ayurvedic Sciences. Ayurveda Mobile Health Care program is one of the Scheduled Case Sub Plan Programme has been initiated in 18 states through 20 CCRAS peripheral Institutes. Through this programme, door to door health care facilities will be provided to the areas with SC pockets. The Program commenced at Advanced Centre for Ayurveda in Mental Health and Neuro Sciences one of the CCRAS peripheral Institute on 15th December 2015 which was later shifted to Regional Ayurveda Research Institute on metabolic disorders, from FY-2020-2021(which is now Central Ayurveda Research institute). The program was initiated with an Aim to provide health care awareness and Ayurvedic medical services to the Schedule Caste (SC) dominant community. The main objective is to Study the living conditions, geographical and environmental profile of SC people, study of their dietetic habits, to know nature and frequency of prevalent diseases; Study and documentation of demographic data from door to door survey; Assessment of Health status and extension of health services by organizing health awareness camps; Propagation of knowledge about prevention of diseases. Provide medical aid/incidental support in the adopted areas at door steps; Awareness about hygiene, cleanliness of domestic surroundings & environment and also the distribution of IEC (information, education and communication) material among the people in local languages and English / Hindi.

**•Selected villages / areas:**

A total number of 5 villages in Bangalore district of Karnataka such as Bannerughatta, Tharalu, Somanahalli, K.Gollahalli, Kumbalgodu have been visited during the period under the SCSP program and extended services oriented health care to the selected SC dominated areas along with health survey and collection of vital statistical data.

**• Details about survey:**

During this one-year study, the team covered total 5940 populations of the selected SC population dominated five areas such as Bannerughatta, Tharalu,Somanahalli, K.Gollahalli,

and Kumbalgodu through 158 visits. Regular week days were assigned for each village for survey where socio demographic profiles, dietary habits, hygiene conditions, lifestyles of people were documented. Health awareness camps were conducted at allotted place such as community centers, Anganawadi schools and temple. In addition, Covid-19 related awareness talks were delivered. Out of the total population covered, about, 4481 (75.4%) were adults and 1459 (24.5%) were children, 3024 (50.9%) were female and 2961 (49.8%) were male. As far as literacy rate is concerned, maximum people i.e. 1,152 (25.70%) have completed the high school education and only 635 (14.17%) were graduates. Among total population, about 3461 (77.23%) of the population was non-addicted to any of the substance, however maximum of 613 (13.6%) population were addicted to Gutka/Pan masala consumption, followed by population addicted to smoking 566(12.63%). Maximum people 4277 (95.44%) were non-vegetarians habituated to mixed diet. Majority of people about 2620 (58.46%) and 2092(46.68%) were occasionally having fruits and vegetables respectively. It was observed that 509 (11.35%) population were unemployed. Among surveyed population maximum of 1508 (33.65%) females were home makers and 1468(32.76%) males were self-employed.

- **Details about patients treated:**

The number of people approaching the medical camp for investigations and medicines was drastically low due to pandemic condition. A total of 1741 patients of these areas were examined and treated in this study. An 1848 follow ups were carried out. Out of the total population covered, about, 1721(98.8%) were SC and 20 (1.14%) were belonging to other communities

During the study of the selected five areas such as Bannerughatta, Tharalu, Somanahalli, K.Gollahalli, Kumbalgodu a total of 1741 patients were enrolled and examined. The highest distribution of patients was observed among females. The most prevalent diseases treated were Sandhigatavata, Madhumeha, Paandu, Amlapitta, Katishula etc. in adults. In children, Agnimandhya, Krimi, Yuvanapidaka, Dourbhalyam were commonly found.

- **Number of investigations done:**

A total of 7485 investigations were carried out. About 3594 Blood sugar level and 3861 Haemoglobin level examinations were carried out in which the patients diagnosed with diabetes and anaemia were prescribed the Ayurvedic medications during the survey, medical camp and the follow up for the same was carried out.

- **IEC materials/ lectures brief:**

During door to door survey in all five areas, IEC materials on common prevalent diseases and Ayurvedic concepts printed in local language Kannada were distributed among the people to create awareness about the prevention of diseases and propagation of Ayurvedic concept of Pathya-Apathya, Dinacharya, Ritucharya, Ahara sevanavidhi, Rasayana treatments etc. IEC material also included introduction about common disorders such as Kasa, Dourbalya, Hridroga, Agnimandhya, Madhumeha, Hypertension, Pakshaghata and its preventive measures. SCSP team organized the various awareness programs on Covid-19 pandemic at different places and distributed immune boosting medicines to general public.

- **Major observations during study:**

In most of the surveyed areas, Kannada, Tamil and Telugu were the languages spoken by the people. Roads are of pucca and kacha type. Hygiene, sanitary conditions, cleanliness and drainage network were very poor in some areas whereas it was maintained well in other areas. In most of the areas facilities such as Govt. Schools, private schools, PHC, Private allopathic clinics were there. Most of the children are vaccinated according to the National immunization schedule and adult population were double vaccinated for Covid-19. The lactating mothers were provided nutritional supplements from nearby Anganwadi which is monitored by respective Asha workers. Majority people consume non-vegetarian diet and all the houses were having good access to drinking water which is supplied from Bangalore Corporation and gram panchayath. Most of the surveyed population were having own toilet facilities which is constructed outside the house and some were dependent on Public toilet. People have very irregular lifestyle such as irregular timings of food, sleep, and addictions. So, lifestyle disorders such as Hyperacidity, Skin infections, Diabetes mellitus, are mostly found in these areas. Men are habituated to drinking alcohol and smoking. Women are habituated with chewing tobacco and pan.

- **Most common diseases seeking Ayurvedic treatment:**

It was observed that most of the people seek Ayurvedic treatment for Prameha, Sandhigatavata, Amlapitta, Vatavyadhi, Dourbalya, Kushta, etc. Patients used to take over the counter medicines for joint pain, gastritis, headache in all the surveyed areas.

- **Measure outcome/ benefits to society/ change observed due to Programme:**

After one year of survey, it is observed that most of the people achieved an awareness regarding Ayurvedic medicines. Instead of taking OTC medicines they have started using

single drug formulations and other Ayurvedic formulation. Some people started following dinacharya and pathyas which have improved their overall health status, particularly in Type-2 diabetic patients there was reduction in neuropathic symptoms those who were taking Nishaamalaki together with Nishakatakadi Kashaya, most of the patients started using tailas for abhyanga as a daily basis. It is observed among the follow up visits, a moderate relief was achieved in most of the Sandhigatavata, Vatavyadhi, Gridhrasi, and Kushta cases, a complete relief was achieved in most of the Amlapitha, Rajadosha, Pandu, Jwara, Prathishyaya, Kasa and Pradara. It was also observed that there was a marked improvement in terms of impaired glucose levels among the patients diagnosed with Diabetic mellitus and abnormal haemoglobin levels in anaemic patients. The patients who took part in the study entitled “Effectiveness of Ayurveda based diet and Lifestyle advocacy on health related Quality of life in Schedule Caste population in India- a Community based, cluster randomized controlled study” had significantly improvement in their swastya assessment score and WHO BREF score, due to the continuous use of anutaila as the part of the study patients had improvement in the symptoms such as Migraine, sinusitis, cervical spondylitis, hair fall etc. It was also observed the patients who were subjected for the study entitled “A prospective community based study for the evaluation of *Punarnavadi Mandura* in Anaemia (Pandu)” had also significant improvement in condition.

**1. Area wise statement of number of Tours, No. of house surveyed, Population Surveyed, Patients treated**

Sl. No	No. of villages covered	No. of tours	No. of House Surveyed	Population Surveyed (SC)			Patient treated											
							New				Old				Total			
				M	F	Total	SC		Other		SC		Other		SC		Other	
							M	F	M	F	M	F	M	F	M	F	M	F
1	Bannerughatta	32	255	604	576	1180	171	156	1	1	117	197	0	0	288	353	1	1
2	Taralu	38	270	630	705	1335	201	273	5	6	163	366	23	22	364	639	28	28
3	Somanahalli	28	189	504	534	1038	131	185	1	2	65	239	0	1	196	424	1	3
4	K. Gollahalli	33	267	656	656	1312	156	186	1	0	170	220	0	0	326	406	1	0
5	Kumbhalgodu	27	215	522	553	1075	98	164	0	3	57	208	0	0	155	372	0	3
TOTAL		158	1196	2916	3024	5940	757	964	8	12	572	1230	23	23	1329	2194	31	35

**2. Area wise statement of Population Surveyed, Patients treated, Investigations done**

Sl. No	Name of Villages Covered	SC Population Surveyed	Patient treated									Investigations (Survey + OPD)
			New			Old			Total			
			SC	Other	Total	SC	Other	Total	SC	Other	Total	
1	Bannerughatta	1180	327	2	329	314	0	314	641	2	643	1370
2	Taralu	1335	474	11	485	529	45	574	1003	56	1059	2212
3	Somanahalli	1038	316	3	319	304	1	305	620	4	624	1356
4	K.Gollahalli	1312	342	1	343	390	0	390	732	1	733	1254
5	Kumbhalgodu	1075	262	3	265	265	0	265	527	3	530	1293
Total		5940	1721	20	1741	1802	46	1848	3523	66	3589	7485

**3. Area wise statement of SC child Population surveyed and treated during the reporting period**

Name of villages covered	No. of SC Children surveyed					No. of SC Children treated															
	0-10 yr		11 to 18 yr		Total	New					Follow up					Total					Gross Total
	MC	FC	MC	FC	Total	MC	FC	MC	FC	Total	MC	FC	MC	FC	Total	MC	FC	MC	FC		
Bannerughatta	81	72	75	61	289	11	7	6	5	29	3	8	2	0	13	14	15	8	5	42	
Taralu	82	87	81	88	338	16	17	7	12	52	10	2	0	7	19	26	19	7	19	71	
Somanahalli	76	80	53	44	253	13	17	10	4	44	9	6	4	1	20	22	23	14	5	64	
K.Gollahalli																					
Gollahalli	101	76	81	91	349	21	12	7	9	49	6	11	1	14	32	27	23	8	23	81	
Gollahalli																					
Kumbhalgodu	59	57	67	47	230	4	20	10	8	42	0	7	4	3	14	4	27	14	11	56	
Total	399	372	357	331	1459	65	73	40	38	216	28	34	11	25	98	93	107	51	63	314	



**4. Area wise statement of SC adult population surveyed and treated during the reporting period**

Name of villages covered	No. of SC adult surveyed				No. of SC adult treated											
	Above18-30 yr	31-40 yr	41 yr & Above	Total	New				Follow up				Total			
					Above18-30 yr	31-40 yr	41 yr & Above	Total	Above18-30 yr	31-40 yr	41 yr & Above	Total	Above18-30 yr	31-40 yr	41 yr & Above	Gross Total
Bannerughatta	320	190	381	891	55	59	186	300	30	33	238	301	85	92	424	601
Taralu	357	277	442	1076	76	102	255	433	42	77	436	555	118	179	691	988
Somanahalli	290	167	329	786	51	47	177	275	41	34	210	285	92	81	387	560
K.Gollahalli Gollahalli Gollahalli	326	263	340	929	74	68	152	294	70	49	239	358	144	117	391	652
Kumbhalgodu	285	190	324	799	37	60	126	223	21	29	201	251	58	89	327	474
Total	1578	1087	1816	4481	293	336	896	1525	204	222	1324	1750	497	558	2220	3275

**5. Screening for Anemia, Malnutrition, Hypertension and Diabetes(Data collected from survey only)**

Sl. No	No. of villages covered	Screening														
		Anaemia (Hb%)					Malnutrition			Diabetes Mellitus (BSL)			HTN (Blood pressure)			
		MC	M	FC	F	TOTAL	MC	FC	TOTAL	M	F	TOTAL	M	F	TOTAL	
1.	Bannerughatta	40	203	38	222	503	47	40	87	202	224	426	448	443	891	
2.	Taralu	58	247	63	300	668	40	30	70	237	302	539	500	576	1076	
3.	Somanahalli	25	182	21	206	434	31	33	64	176	201	377	378	408	786	

4.	K.Gollahalli Gollahalli Gollahalli	49	183	43	219	494	42	34	76	177	215	392	452	477	929
5.	Kumbhalgodu	30	206	29	233	498	21	26	47	201	235	436	382	417	799
<b>Total</b>		<b>202</b>	<b>1021</b>	<b>194</b>	<b>1180</b>	<b>2597</b>	<b>181</b>	<b>163</b>	<b>344</b>	<b>993</b>	<b>1177</b>	<b>2170</b>	<b>2160</b>	<b>2321</b>	<b>4481</b>

### 6. Total Lab Investigations (Survey + OPD)

Sl. No	No. of villages covered	Investigations/Screening																											
		Hb%										Blood Sugar Level						Other Investigation						Total Investigations					
		SC				Other				Total		SC		Other		Total		SC		Other		Total		SC		Other		Total	
		MC	M	FC	F	MC	M	FC	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	Bannerughatta	44	311	46	330	0	1	0	0	356	376	317	318	0	0	317	318	3	0	0	0	3	0	675	694	1	0	676	694
2.	Taralu	64	378	70	547	0	10	0	9	452	626	465	626	16	10	481	636	4	13	0	0	4	13	911	1256	26	19	937	1275
3.	Somanahalli	30	261	27	376	0	0	0	0	291	403	262	397	0	1	262	398	1	1	0	0	1	1	554	801	0	1	554	802
4.	K.Gollahalli Gollahalli Gollahalli	57	264	49	314	0	0	0	0	321	363	259	305	0	0	259	305	3	3	0	0	3	3	583	671	0	0	583	671
5.	Kumbhalgodu	32	253	35	351	0	0	0	2	285	388	255	362	0	1	255	363	1	1	0	0	1	1	541	749	0	3	541	752
<b>Total</b>		<b>227</b>	<b>1467</b>	<b>227</b>	<b>1918</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>1705</b>	<b>2156</b>	<b>1558</b>	<b>2008</b>	<b>16</b>	<b>12</b>	<b>1574</b>	<b>2020</b>	<b>12</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>3264</b>	<b>4171</b>	<b>27</b>	<b>23</b>	<b>3291</b>	<b>4194</b>

### 7. Status of IMR Projects under AMHCP-SCSP

Name of the project	Date of initiation	Target	No. of Patients Screened	No. of Patients enrolled	No. of patients successfully completed	No. of drop out patients	Reason for Dropout	Remarks	
QOL	29/07/2021	70	Gr.I- 35	53	35	35	0	NA	NA
			Gr.II- 35	45	35	35	0	NA	NA
Anemia	20/07/2021	50		165	50	41	9	Patients were not willing to continue	
Osteoarthritis		50		NA	NA	NA	NA	NA	NA
Aswagandha		120	Gr.I-60	NA	NA	NA	NA	NA	NA
			Gr.II- 60	NA	NA	NA	NA	NA	NA
ARK	14/02/2022	693	Gr.I-630	630	630	630	0	NA	NA
			Gr.II- 63	63	63	63	0	NA	NA

**Centre of Excellence for Research and Clinical services  
in Madhumeha (Diabetes mellitus)**

Central Ayurveda Research institute is awarded “Centre of Excellence for Research and Clinical services in Madhumeha (Diabetes mellitus)” by Ministry of AYUSH. The total fund sanctioned is Rs.7,24,80,400/- for a duration of four years(3+1 year extension due to Covid pandemic). Rs.2,88,00,000/- was released as first instalment in March 2021 and the scheme got initiated in April 2021.

**Deliverables**

1. Developing Ayurveda guideline for prevention and management of Madhumeha.
2. Validation of Ayurveda approaches for diabetes
3. Prevention and management of Diabetes with multi-speciality approach
4. Development of anti-diabetic formulations and food recipes through scientific validation
5. Development of IEC materials
6. Conduction of camps for Diabetic patients
7. Trainings to public and students on prevention and management of diabetes
8. E-Healthcare initiatives for the prevention and management of diabetes
9. Technical collaborations with institutes for research studies
10. NABL and NABH accreditation

An expert advisory committee comprising of experts from various fields such as Ayurveda, Modern Medicine, Pharmacology, Drug development, Food technology, Research and Bio-Statistics has been formed. The committee meets as per need to steer the activities under the scheme.

**Manpower recruited under CoE scheme**

Sl. No	Name	Designation
1	Dr.KavyaN	Consultant Ayurveda
2	Dr.Amulya Kannan	SRF Ayurveda
3	Dr. Niveditha B M	SRF Ayurveda
4	Dr.Monica K P	SRF Yoga
5	Sri. Rahul Sakharkar	SRF IT
6	Kum.Anagha Jenu	SRF Biostatistics
7	Kum. Shilpashree A T	SRF Chemistry
8	Kum.Anitha Achari	Office assistant
9	Kum.Pratima Achari	Office assistant
10	Sri.Manoj Kumar T V	MTA
11	Sri.Naveena B	Driver

The functioning of the Centre of excellence can be broadly put under the heads of clinical services, academic, training, outreach activities and research.

### **Clinical services**

Under the scheme, a specialized OPD for patients of Madhumeha is made functional since 22<sup>nd</sup> July 2021. The patients were provided with free consultation, medicines, laboratory investigations and food & lifestyle counselling. The specialized OPD has catered to 617 diabetic patients and 1445 follow-up visits in this year offering Ayurveda and Yoga therapies totalling up to 2062 visits during the year 2021-22. 345 patients have had free laboratory investigations under the scheme.

<b>Department</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
OPD New patients	380	237	617
No of OPD Follow-up visits	918	527	1445
Total patients attending OPD	1298	764	2062

Free yoga classes were conducted in online and offline mode at CARI Hospital and in out reach camps from 2021 and 274 patients have been benefited. Classes are conducted under the guidance of professional Yoga teachers. A specialized Yoga module for Diabetes has been developed and is being instructed to patients of Diabetes on a regular basis. Additionally, Yoga camps have been conducted at different venues near the hospital reaching out to the high risk & patients of Diabetes. A month long online yoga class based on Common yoga protocol was conducted to mark International Yoga day 2021 from 21<sup>st</sup> May to 21<sup>st</sup> June 2021.

An extensive and detailed data was collected from all the patients attending the special diabetes OPD under CoE, which was digitally managed using e-formats. A risk assessment module was developed with clinical and statistical inputs, which includes classical Ayurvedic understanding of Diabetes aetiology and symptomatology. The scoring is being developed using statistical tools, machine learning and artificial intelligence from the collected data.

Documentation for NABL/NABH accreditation is in progress. Council approval for initiating IPD services awaited.

### **Academic, training and outreach activities**

Diabetes health camps are held within a 10-kilometer radius of the Central Ayurveda Research Institute to screen patients for diabetes and diabetic-related issues, provide health-related education, doctor consultation, distribute medicines to treat diabetic and pre-diabetic

diseases and refer patients to the hospital for further follow-ups as needed. These camps are based on excellent diabetes care and awareness concepts, allowing the general population to learn how to manage their diabetes. Patients are motivated and supported by peers and devoted experts. From February 2022 to March 2022, 7 Medical camps were conducted under CoE of which, 2 were in apartments, 1 at anganwadi, 1 at old age home, 1 at the police station, 1 at Sericulture institute, and 1 at Gram panchayat. The total beneficiaries from all the camps were 210.

<b>Camp No.</b>	<b>Date</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
1.	19.02.2022	15	12	27
2.	26.02.2022	9	37	46
3.	09.03.2022	28	16	44
4.	15.03.2022	11	06	17
5.	20.03.2022	16	15	31
6.	21.03.2022	05	17	22
7.	30.03.2022	23	0	23
<b>Total</b>		107	103	210

Three training programmes were conducted for general public to raise awareness about Diabetes, its diagnosis, prevention and management through diet Yoga and lifestyle. One training programme has been conducted to students from Sushrutha Ayurvedic Medical College, Bengaluru regarding research methodology, biostatistics and comprehensive management of Diabetes mellitus which was attended by 46 students of final year BAMS.

<b>Sl.No</b>	<b>Name of the workshop/seminar</b>	<b>Date</b>	<b>Resource person</b>	<b>Remarks</b>
1.	Awareness program for general public  Yoga awareness program for general public on Importance of yoga in general health. Held at CARI, Hospital	31/08/2021	Dr.Monica.K.P	Attended by 50 people
2.	Training and Diabetes awareness programme for members of Streeshaktisangha at Vajarahalli Anganawadi	28/02/2022	Dr.Kavya N	Attended by 100 people
3.	Training and Diabetes awareness programme for inmates of Matruchaya trust old age home	31/03/2022	Dr.Nivedita BM	Attended by 26 members

4.	Ayurveda student training programme Hands-on training provided to students regarding Research methodology, Biostatistics and Comprehensive management of diabetes mellitus	16/03/2022	Dr.Kavya N Ms.AnaghaJenu Ms.Shilpashree AT Dr.Monica KP	Attended by 46 students of Sushrutha Ayurveda Medical College, Bengaluru
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Under the Centre of excellence scheme a static website, [www.cari.gov.in](http://www.cari.gov.in) has been developed for the promotion and introducing e-healthcare initiatives, compliant with the Digital India, to reach out to wider population. The Institute's website is ready for cloud hosting by NIC, security audit is in process for obtaining VAPT certificate. Website hosting will be taken up shortly. A brief video of the Institute has been created for further enhancement of digital presence of the institute and for wider outreach.

#### **Research activities**

The research activities under the CoE are being carried out under different sub-heads.

**Drug development:** The Centre of Excellence is mandated with selection of 2 potential formulations for clinical trials. An exhaustive literature survey was carried out in order to list out the formulations which have been mentioned in *chikitsa* of *Prameha*. 657 total formulations were compiled from 18 different treatises of Ayurveda. After a thorough scrutiny and expert opinion, 4 formulations have been shortlisted as potential candidates for further testing. The four formulations thus selected were manufactured at Central Ayurveda Research Institute, Jhansi, and their quality control analysis has been done. Preclinical and clinical study protocols are drafted and are under scrutiny. Potential collaborators for conduct of pre-clinical animal studies to determine safety, toxicity and biological activities of the selected formulations are being communicated.

**Chemistry:** Drug standardisation research unit has been upgraded with procurement of advanced instruments and equipments such as HPTLC. The phytochemical analysis of different drugs are being carried out facilitating standardisation and quality control of drugs for further processing. The unit also accepts samples from students and researchers for standardisation and drug analysis.

**Food development:** Developing SoPs for ready to eat/cook anti-diabetic food supplements/meal replacements is also mandated to the institute under the CoE scheme.

Literary review of different food preparations in Diabetes has been carried out and discussions held with scientists of food technology for development of ready to eat / cook anti-diabetic food preparations, based on the literature survey and Ayurveda principles of *pathyaahara*. 2 preparations are under consideration.

**Development of protocol and IEC materials:** A comprehensive guideline for Ayurveda management of Diabetes mellitus and treatment protocol has been drafted based on detailed literature research and the draft is under scrutiny.

The below 4 IEC materials have been developed under CoE scheme and are being distributed to public at CARI Hospital, camps and other outreach programmes..

- ಮಧುಮೇಹನಿಯಂತ್ರಣಹಾಗೂನಿರ್ವಹಣೆಗೆಸಮಗ್ರಸೂತ್ರ(Prevention and Management of Diabetes mellitus)
- ಸಾಮಾನ್ಯಯೋಗಕ್ರಮಪಿಡಿ(Common Yoga Protocol)
- ಆಹಾರಸೇವನೆಯಮುಖ್ಯನಿಯಮಗಳು(Regimens to be followed during food consumption)
- ಟೈಪ್-2 ಮಧುಮೇಹದ ಬಗ್ಗೆ ಮುಖ್ಯ ಸಂಗತಿಗಳು(Important facts about Type-2 Diabetes mellitus)

**Technical collaborations:** Technical collaborations for conduct of various research activities is also done under CoE. A MoU has been signed with Indian Institute of Science, Bengaluru on 02.02.2022. The MoU with Centre for Incubation, Innovation, Research Consultancy (CIIRC), Jyothi Institute of Technology, Bengaluru is under legal vetting. Networking with the below organisations for potential technical collaborations is in progress.

For patient influx and clinical trials

- National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru
- Bangalore Medical College and Research Institute, Bengaluru
- Community Health Centre under Govt. of Karnataka, Kaggalipura

For pre-clinical studies

- Interactive Research School Health Affairs, Bharati Vidyapeeth, Pune
- Govt Veterinary College, Nagpur
- Madras Diabetes Research Foundation, Chennai

For food technology:

- National Institute of Nutrition, Hyderabad
- Centre for Incubation, Innovation, Research Consultancy (CIIRC), Jyothi Institute of Technology, Bengaluru



### **Upgradation of the Institute through CoE**

The following laboratory instruments were purchased under CoE scheme and installed for pathology diagnostics and investigations

1. Urine analyzer
2. ERBA Biochemistry Analyser
3. ERBA- 5part Hematology Analyser
4. RBA Advance Four Channel Coag. Analyser
5. Erba HB-Varioanalyser
6. Hormone analyzer
7. Blood Tube Mixer
8. Chemicals, reagents and other lab consumables necessary for the functioning of all the above instruments

Infrastructural development of the laboratory includes the following

1. Purchase of Phlebotomy Chair
2. Aluminum partition work
3. Installation of laboratory taps
4. Construction of slabs

### **SMPU**

- Magnus trinocular microscope was procured for drug studies.
- Herbal garden of the institute (with anti-diabetic plants) was upgraded with layouts and pavements using paver stones.
- Ensured irrigation facility has brought in by expanding pipeline system.

### **HPTLC and DSRU**

- High performance Thin Layer Chromatography was installed along with other necessary equipment like Nitrogen gas generator, computer, printer and UPS system for the drug analysis and standardization.
- Aluminum partition and window sealing were done in HPTLC unit to protect the equipment from dust and moist. Laboratory water taps were also installed.
- Chemicals, reagents and other lab consumables were purchased for the conduction of analysis in HPTLC and DSRU units.

### **Hospital services**

- Ambulance and its necessary accessories were purchased for the transportation of patients as well as to use it as a mobile clinic for the conduction of Diabetes camps under CoE scheme.
- Unlimited power supply was installed for power backup which covers the entire hospital building (OPDs, Pharmacy, Pathology Lab, Yoga-hall, Marma and Shalya Units, Panchakarma unit, IPD)

## Publications

Sl.No	Title	Journal	Authors	Status
1.	Yava (Barley): A Potential Dietary Component for Management of Metabolic Disorders w.s.r. to Diabetes Mellitus	Journal of Ayurveda and Integrative Medicine	1. Kavya N 2. Amulya Kannan 3. Monica K P 4. Sulochana Bhat	Under Revision
2.	Ayurveda Single drug therapy for Prameha in Nighantu Sahitya-A review	Annals of Ayurvedic medicine	1. Monica K P 2. Kavya N 3. Raghavendra Naik 4. Amulya Kannan 5. Sulochana Bhat	Under review
3.	Literary review on formulations for Prameha management from various Ayurveda treatises	Journal of Drug Research in Ayurvedic Sciences	1. Amulya Kannan 2. Raghavendra Naik 3. Kavya N 4. Monica KP 5. Sulochana Bhat	Under review
4.	ĀmalakīSvarasa ( <i>Phyllanthusemblica</i> ) – A Potential Single Drug Intervention in Management of Prameha (Diabetes Mellitus): A Case Study	International Journal of Research in Ayurveda and Pharmacy	1. Amulya Kannan 2. Kavya N 3. Nivedita BM 4. Monica KP 5. Sulochana Bhat	Communicated

### The total expenditure by the end of financial year 2021-22

Sub-heads	Total sanctioned in Rs.	Total expenditure in Rs.	Balance in Rs.
Salary	8304800.00	3607047.00	4697753.00
Non-recurring	18010000.00	17672422.00	337578.00
Recurring	2485200.00	1080090.50	1405109.50
Total	28800000.00	22359559.50	6440440.50*

\*Amount saved for extended first year-2022-23

### 7.3. Survey of Medicinal Plants Unit

#### I. Brief resume of work carried out since inception.

##### 1) Name of the Forest areas/Divisions/Ranges covered:

Sl. No	Year	Name of the district	Name of the forest division	Forest areas (ranges/beats) surveyed
1.	1971-1972	Bengaluru	Bengaluru	Bannerghatta, Suvarnamukhi
		Chickmagaluru	Chikmagaluru	Charmadi ghats, Moodigere, Bhagavathi vally, Malleswara
			Koppa	Gangamool, Kigga forests
		Chamarajnaragar	Chamarajnaragar	Attikan (B R Hills), Karti kere, Honnamatti, Bedgudi, kati devar gudi forest ( B R Hills)
			Kollegal	Bedaguli, Gopal swamy hills forests
Mysore	Mysore	Kakanakote forests		
2.	1972-1973	Chickmagaluru	Chickmagaluru	Charmadi ghats, Kudure Mukh, Begaru, Bhairapura, Magundi, Balehole-Kalasa, Sonanakadu, Hondagane, Bhagavathi, Yelnir ghat
		Chamrajnaragar	Kollegal	Arakanakadu, Kuppe betta, Palar river, malai Mahadeshwara hills forests, K.Gudi, B. R. Hills
3.	1973-1974	Chickmagaluru	Chickmagaluru	Keseve, Keseve-halag, Kumbar gundi-Talabidare, Kage mane giri, Keseve-Mald Kargalebyle (Muthodi & Hebbe)
		Shimoga	Bhadra Wild life	Baba budan hills, Kalhattigiri, Hebbe forest, Shankar shoal forest (Tarikere range), Bhadra Sanctuary, Lakkavalli state forest
		Chamarajanagar	B R wild life	B R hills
			Bandipura	Gopala swamy hills
			Kollegal	Malai Mahadeshwara hills
		Mysore	Hunsur	Kakanakote forest
Chickmagalur	Chickmagalur	Thungabhadra, Narasimhparvatha, Kigga forest, Hirebyle, Samse		
4.	1974-1975	Tumkur	Tumkur	Huliyur durga, Ugne, Devarayana durga, Kollikallu, Siddarabetta, Madhugiri, Timlapuara
		Chickmagaluru	Chickmagaluru	Charmadi ghats, Kottigehar, Muthodi, Kesuve-Yelnir ghats, Samse and Malleshwar
		Koppa	Koppa	Gangamoola forest, Kerekatte
		Shimoga	Bhadra Wild life	Baba budan hills, Sankashola, Suklahatti Kalhattigiri, Lakavalli state forest
5.	1975-1976	Kameng district (Arunachal Pradesh)	Kameng	Kameng district forest
		Nilgiris (TN)	Nilgiris	Nilgiris forest
6.	1976-1977	Tumkur	Tumakur	Forest of Bukkapatna, Manchaladorai, Kollikallu, Devarayan durga and Huliyur Durga state forest
		Coorg	Virajpet	Pattikat reserve forest, Talacauvey, Urty ghat, Bhagamandala-Karika-Kerty ghat, Kakabbe-Aramane
		Bengaluru	Bengaluru	Bannerghatta

7.	1977-1978	Coorg	Virajpet	Kadamakkal, Pattikat, Sampaje, Anekad, Athur, Kushal nagar, Mathikode reserve forests
		Mysore	Hunasur	Thithimathi
8.	1978-1979	Tumakaur	Tumakur	Huliyur durga state forest, manchaldorai state forest, Kolikallu state forest, Timplapura state forest, Devarayan durga state forest
		Hoshangabadh (MP)	Hoshangabadh	Pachmarhi areas
		Annupur (MP)	Annupur	Amarakantak areas
		Satna (MP)	Satna	Chitrakoot areas
9.	1979-1980	Tumakur	Tumkur	Bannehalla, Hosahalli, Kondli cross, Kalasapura, Chickmagalur Range, Kadur Camp, Yemmedoddi, Kadur range
		Chickmagalur	Chickmagalur	Gunavati, Koppa, Adada, Hariharapura, Kuskal, Chikkagrahara, Muttikoppa, Aramballi, NR Pura Range, Mallandura, Aaduvalli-Kalale, Chickagrahara, Mudigere-NR pura transit Honnur
10.	1980-1981	Andaman & Nicobar	Andaman and Nicobar	Andaman and Nicobar
		Ramanagar	Cauvery Wild life	Manjunatha state forest, Bididale, kanakapura range
11.	1981-1982	Ramanagar	Cauvery Wild life	Bididale, Sangam forest
		Coorg	Virajpet	Kerty reserve forest towards thovtipalam, Forest towards sollekalli, Between kerti and Irti, Towards Wottekalli
12.	1982-1983	Coorg	Mercara	Mattara, Brahmagiri, Irupu, Srimangala, Birunani, nagar Hole, Kushala Nagar, Mercara, Talcauvery, Jodapala, Kakabbe
		Bengaluru	Bengaluru	Banneraghatta
13.	1983-1984	Coorg	Mercara	Kundalli, Heggade mane, Pusphagiri, Shanthalli, Abbi, Tadiandamole, kakabbe, Bhagamandal, Talacauvery, Karike, Sidapura, Mercara, Nagarahole, Birunani, Makut, Brahmagiri, Srimangala, Sampaje, Somavarapet, Koothi, Jakkanahalli, Jodapaala
			Virajapet	Sulya, Karike, Virajapet, makut, Shanivarshanthé, Napoklu, Kakabbe, Sollekolli, Wotekolli, Macut state border, Arabbi tittu, Koottu hole
14.	1984-1985	Coorg	Madikeri	Somvarpet, Shanivar santhe, gangavar, Igoor, Mercara, sampaje, Jodupala, Nagarahole, Kutta
			Virajpet	Shrimangala, Virajpet, Sollekalli, Wottekalli, Makutta
15.	1985-1986	Coorg	Coorg	Coorg
		Kolar	Kolar	Nandi hills, Haristhal, Nadagudi, Kaivar, Kolar, Mulabaga, Nagali, Srinivasapura, Ramachandrapura, Sololadappandoddi, Maravapalli, Bhagepalli, CB pura, Narasimha betta, Varlakonda, KR Pura

		Chikkaballapur	Chikkaballapur	Chikkaballapur
16.	1986-1987	Kolar	Kolar	Solalappana dinne, Haristhala, Kanive, Nandi hills
		Coorg	Virajpet	Makut-Virajpet, Somavarpet, Kundalli, Shanthalli, Abbe Falls
			Madikeri	Mercara, Bhagamangala, Talacauvery, Napoklu, Karike, Nagarahole, Irpu, Kutta
17.	1987-1988	Shimoga	Shimoga	Theertha halli, Nagara-Sampekatte, Hulikal Ghats, Nagodi-Sampekatte, Agumbe, Masthikatte-Yedur, Hulikalghats, Sampekatte, Hosanagar-Humcha-Nivane, Sampekatte-Nittur, Chakranagar, Begar-Agumbe, Hosanagar, Wotekalli-Makut, Shanthalli-Puspagiri
18.	1988-1989	Shimoga	Shimoga	Indnodi, Nagara, Nagodi, Mastikatte, Tankebailu, Yedur, Hulikal, Savehaklu, Hosanagar, mavinhole, Linganhalli, Sorab, Holekoppa, Sampegudda, Kuppegadde, Talaguppa, Hiremane, Kargal, Jog, Kumsi, Anandapur, Hosagadde, Agumbe, Kundadri
			Sagar	Sagar, Tagarathi, Inchavalli, Shikaripur, Nagavalli, Govardhan giri, Kogar, Sampekatte, Kodachadri, Nagara, Hulikal ghats, Agumbe, Onakabbe falls
19.	1989-1990		No survey tours conducted	
20.	1990-1991	Shimoga	Sagar	Joga surrounding, Hosanagar
			Shimoga	Kodachadri range, Nagara fort, Agumbe
21.	1991-1992	North Canara	Sirsi	Hulikal, Kolbis cross, Khurse ghats, Bandal Ghats, Unchalli, Janmane, Mavingudi forest, Magodu falls,
			Yellapur	Ganesh Gudi, Anshi ghat, Patoli, Gund forest
		Shimoga	Shimoga	Agumbe forest
		Ramanagar	Ramanagar	Savanadurga
		Bengaluru rural	Bengaluru rural	Thippagondanahalli, Muthyal madu, Anekal
22.	1992-1993	North Canara	Dandeli	Patoli, Guad, dandeli, Kulgi forest, Anshi ghats, Kumbarwada
			Karawar	Karwar, Gokarna
		Bengaluru	Bengaluru Rural	Muthyalamadu, Tippagondanhalli,
		Ramnagar	Ramanagar	Savanadurga, Magadi, Ramanagaram, Kanva
23.	1993-1994	-	-	No Survey tours conducted
24.	1994-1995	Uttara Kannada	Sirsi	Sisri-Yellapur, Bedati, Hunesettikoppa, Sidligundi, Kyakodu, Bhatkal, Hejjulu, Karni, Ganesh gudi, Ramanagar, Patoli, Kanasi, Arebail, Bisgod, Sathodi
25.	1995-1996	Uttara Kannada	Dandeli	Dandeli, Patoli, Ansi Ghats, Siddapur
			Sirsi	Sirsi
		Belgaum	Belgaum	Castle rock, Supa, Tinnai ghats
26.	1996-1997	Uttara Kannada	Dandeli	Dandeli, Tinaighats, Sintheri rocks, Ulavi, Hadsa-Joida, Berchi-Ganesh Gudi, Anmod Ghats
			Sirsi	Sirsi, Sirsi-Yellapur
			Yellapur	Yellapur, sathodi, Magodu, Patoli, Gokarna

			Honnavara	Honnavara, Gersoppa
27.	1997-1998	-	-	Medico Botanical tour was suspended
28.	1998-1999	Belgaum	Belgaum	Kulgi, Anashi, Supa, Belgaum, Khanapur, Tinnai ghat, Londa, Vercaud, AnmolHemmadaga, Jagal, Nagaragali
		Uttara Kannada	Dandeli	Dandeli
29.	1999-2000	Belgaum	Belgaum	Naagaragali, Kanakumbi, jamboti, Mahadayi
30.	2000-2001	Belgaum	Belgaum	Pandhari river, Tinnai ghats, Hemadaga, Khanapur, Nagaragali, Londa, Astholi, Anamod, Durki river
			Gokak	Gokak, Thukkanetti,
31.	2001-2002	Belgaum	Belgaum	Naagaragali, Hemmadga, Khanapur, Jamboti, Castle rock, Anmod, Jaglebet and Ramanagra
32.	2002-2003	Belgaum	Belgaum	Anmod lower and Upper, jamboti, Kanakumbi, Castle rock, Savaragaali, Khanapur, Kumbarda, Nagaragali, Shirol, Hemmadaga
33.	2003-2004	Belgaum	Belgaum	Londha range, Khanapur, Pandhari river bank (Londha), Khanapur Belgaum road, Bidi.
34.	2004-2005	South Canara	Udupi	Halakkihole, Ballala, Kambradi, Kundapura
		South Canara	Mangalore	Anjheri camp, Moodibidre, Hatti angadi,
35.	2005-2006	South Canara	Mangalore	Sulliya, Kumar Parvata, Subramanya, Pottur, Panja
36.	2006-2007	Hassan	Hassana	Bellur and Halebeedu (Pushpagiri) forest range, Hagare reserve forest, Rama devar hally reserve forest
37.	2007-2008	Hassan	Hassana	Shakleshpura and Alur forest ranges
38.	2008-2009	Mandya	Mandya	Hulikere lower and upper block Mandya range, Srirangapattan, Maddur, Melkote, K R Pet ranges
39.	2009-2010	Mandya	Mandya	Naagamangala & Malavalli forest ranges
		Chitradurga	Chitradurga	Chitradurga, Hodalkere, Molakalmuru, Chelikere, Hosadurga & Hiriyyur forest ranges
40.	2010-2011	Dharawad	Dharawad	Kalaghatagi, Hubli and Darawad forest ranges
41.	2011-2012	Bellary	Bellary	Bellary, Hospet, Sandur, Kudligi, Hadagali, Hagari bommanalli ranges
42.	2012-2013	Davanagere	Davanagere	Davangere, Harappanahalli, Honnali & Jagalur ranges
		Haveri	Haveri	Hanagal, Haveri, Herikerur and Shiggaon ranges
43.	2013-2014	Gadag	Gadag	Gadag, Mundargi, Shirhatti and Ron forest ranges
		Koppal	Koppal	Koppal, Gangavati and Kushtagi forest ranges
44.	2014-2015	Bagalkot	Bagalkot	Bagalkot, Hunagund, Badami, Jamakhandi, Mudhol, Bilagi forest ranges
		Raichur	Raichur	Raichur, Lingasugur, Devadurga, Sindhanur and Manvi forest ranges
45.	2015-2016	Kolar	Kolar	Malur, Kolar, Mulbagalu, Bangarpet, Srinivasapura
		Vijayapura	Vijayapura	Sindagi, Bagevadi, Bijapur, Indi and Muddebihal
46.	2016-2017	Kalaburagi	Kalaburagi	Sedum, Kalaburagi, Aland and Chincholi ranges
		Bidar	Bidar	Aurad, Humnabad, Basavakalyan, Bhalki and Bidar
47.	2017-2018	Hassan	Hassan	Arsikere, Alur, Belur, Yeslur, Sakleshpur, Hassan,

				Holenarsipur, Chennarayapatna forest ranges
		Yadgir	Yadgir	Shorapur and Yadgir forest ranges
48.	2018-2019	Dakshina Kannada	Dakshina Kannada	Mangalore, Belthangady, Sullia, Uppinangady, Puttur, Bantwal, Subramanya, Panja ranges
		Udupi	Udupi	Udupi, Byndoor, Kundapura, Shankaranayana, Hebri, , Karkala, Moodibidri, Venoor ranges
49.	2019-2020	-	-	No survey tour conducted
50.	2020-2021	-	-	No survey tour conducted
51	2021-22	Bagalkot and Raichur	Bagalkot&Raichur	1 MEBS tour in Bagalkot and Raichur districts
		Vijayapura Kolar	Vijayapura Kolar	1 MEBS tour in Vijayapura district 1 MEBS tour in Kolar district
<b>Special tours:</b>		Nilgiris- South and North divisions Andaman & Nicobar Islands. Madhya Pradesh, Arunachal Pradesh Siddarabatta Hills (Tumkur District) Karnataka State (in 2005-06)		

- 2) Total number of specimens collected : 33798
- a) Plant origin : 33776
- b) Mineral origin : 20
- c) Animal origin : 02
- 3) Total number of
- a) Families collected : 229
- b) Genera collected : 2042
- c) Species collected : 2782
- 4) Total number of plant specimen in the herbarium : 44411
- 5) Total number of Index Cards prepared : nil
- 6) Total number of drug samples in the museum : 764
- a) Plant origin : 742
- b) Mineral origin : 20
- c) Animal origin : 02
- 7) Total number of mounted plant specimens identified and not yet added to the herbarium (accession number not given) : nil
- 8) Total number of unmounted specimens not identified : nil
- 9) Details of medicinal plants (used in Ayurveda & Siddha system of medicine collected and their frequency status in the area).

Sl. No.	Sanskrit name	Botanical name	Family	Part used	Frequency
1.	Datura	<i>Datura innoxia</i> Mill.	Solanaceae	Whole Plant	Common
2.	Adhaki	<i>Cajanus cajan</i> (L.) Millsp.	Fabaceae	Root	Cultivated

3.	Gulabash	<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Whole Plant	Common
4.	Gambhari	<i>Gmelina arborea</i> Roxb.	Lamiaceae	Fruit	Planted
5.	Ajagandha	<i>Cleome gynandra</i> L.	Cleomaceae	Whole Plant	Common
6.	Varsabhu	<i>Trianthema portulacastrum</i> L.	Aizoaceae	Whole Plant	Common
7.	Punarnava	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Whole Plant	Common
8.	Bahupraja	<i>Breynia retusa</i> (Dennst.) Alston	Euphorbiaceae	Stem, Leaf	Common
9.	Kosataki	<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Whole Plant	Cultivated
10.	Nimba	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Leaf	Planted
11.	Gokshura	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Whole Plant	Common
12.	Sitaphal	<i>Annona squamosa</i> L.	Annonaceae	Leaf	Common
13.	Dudhika	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Whole Plant	Common
14.	Sleshmataka	<i>Cordia dichotoma</i> G.Forst.	Boraginaceae	Fruit	Planted
15.	Kitamari	<i>Aristolochia bracteolata</i> Lam.	Aristolochiaceae	Fruit	Common
16.	Granthiparni	<i>Leonotis nepetifolia</i> (L.) R. Br.	Lamiaceae	Leaf	Common
17.		<i>Opuntia ficus-indica</i> (L.) Mill.	Cactaceae	Root	Occasional
18.	Nili	<i>Indigofera tinctoria</i> L.	Fabaceae	Fruit	Occasional
19.		<i>Grewia flavescens</i> Juss.	Malvaceae	Stem	Common
20.	Palasa	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Flower & Root	Common
21.	Tulsi	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Root	Common
22.	Arka	<i>Calotropis procera</i> (Aiton) Dryand.	Apocynaceae	Whole Plant	Common
23.		<i>Caralluma umbellata</i> Haworth	Apocynaceae	Live plants	Common
24.	Kamal	<i>Nelumbo nucifera</i> Gaertn.	Nelumbonaceae	Root tuber	Rare
25.	Sirisa	<i>Albizia lebbek</i> (L.) Benth.	Fabaceae	Stem Bark	Planted
26.	Khadira	<i>Acacia catechu</i> (L.f.) Willd.	Fabaceae	Heart Wood	Common
27.	Dronapuspi	<i>Leucas aspera</i> (Willd.) Link	Lamiaceae	Whole Plant	Common
28.	Kovidarah	<i>Bauhinia purpurea</i> L.	Fabaceae	Flowers	Planted
29.	Dhatura	<i>Datura metal</i> L.	Solanaceae	Flowers	Common
30.	Bibhitaka	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Fruit	Occasional
31.	Arjuna	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Combretaceae	Small Branches	Common
32.		<i>Millingtonia hortensis</i> L.f.	Bignoniaceae	Flower	Planted
33.	Saptaparni	<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Stem Bark	Planted
34.	Kadamba	<i>Neolamarckia cadamba</i> (Roxb.) Bossler	Nelumbonaceae	Stem Bark	Planted
35.	Avartaki	<i>Senna auriculata</i> (L.) Roxb.	Fabaceae	Flower	Common
36.	Saka	<i>Tectona grandis</i> L.f.	Lamiaceae	Flower	Common
37.	Jyotismati	<i>Celastrus paniculatus</i> Willd.	Celastraceae	Fruit	Rare
38.	Karavira	<i>Nerium oleander</i> L.	Apocynaceae	Flower	Planted
39.	Apamarga	<i>Achyranthes aspera</i> L.	Amaranthaceae	Seeds	Common
40.	Bilva	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Leaves & Root	Planted
41.	Asopalava	<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.Saunders	Annonaceae	Leaves	Planted
42.	Mashaparni	<i>Martynia annua</i> L.	Martyniaceae	Fruit	Common
43.	Kakanashi	<i>Vigna trilobata</i> (L.) Verdc.	Fabaceae	Whole Plant	Occasional
44.	Kadara	<i>Acacia polyacantha</i> (Willd.)	Fabaceae	Stem Bark	Common



		Seigler & Ebinger			
45.	Kodali soppu	<i>Blepharis maderaspatensis</i> (L.) B.Heyne ex Roth	Acanthaceae	Leaves	Common
46.	Sarah	<i>Saccharum munja</i> Roxb.	Poaceae	Root	Common
47.	Saliparni	<i>Desmodium gangeticum</i> (L.) DC.	Fabaceae	Root	Occasional
48.	Sahacara	<i>Barleria prionotis</i> L.	Acanthaceae	Root	Common
49.	Mahanimba	<i>Melia azadirach</i> L.	Meliaceae	Seed	Planted
50.	Ashvagandha	<i>Withania somnifera</i> Dunal	Solanaceae	Seed	Common
51.	Aragvadha	<i>Cassia fistula</i> L.	Fabaceae	Fruit	Occasional
52.	Alabu	<i>Lagenaria siceraria</i> (Molina) Standley	Cucurbitaceae	Fruit	Cultivated
53.		<i>Teramnus labialis</i> (L.f.) Spreng.	Fabaceae	Whole plant	Common
54.		<i>Abutilon ramosum</i> (Cav.) Guill. & Perr.	Malvaceae	Leaf	Occasional
55.	Dhawana	<i>Grewia tillifolia</i>	Malvaceae	Stem Bark	Common
56.	Bakuchi	<i>Cullen corylifolium</i> (L.) Medik.	Fabaceae	Seed	Common
57.	Shalmali	<i>Bombax ceiba</i> L.	Malvaceae	Flower	Occasional
58.	Kampillaka	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg.	Euphorbiaceae	Fruit	Common
59.	Jeevanthi	<i>Leptadenia reticulata</i> (Retz.) Wight & Arn.	Apocynaceae	Arial part	Rare
60.	Dhawana	<i>Grewia tenax</i> (Forssk.) Fiori	Malvaceae	Stem Bark	Occasional
61.		<i>Launaea procumbens</i> (Roxb.) Amin	Asteraceae	Whole Plant	Common
62.		<i>Clerodendrum phlomidis</i> L.f.	Lamiaceae	Stem Bark	Common
63.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook.f. & Thomson	Menispermaceae	Whole Plant	Common
64.	Swarnapatri	<i>Senna angustifolia</i> Mill.	Fabaceae	Leaf	Occasional
65.	Latakaranja	<i>Caesalpinia crista</i> L.	Fabaceae	Seed	Occasional
66.	Mundika	<i>Sphaeranthus indicus</i> L.	Asteraceae	Whole Plant	Common
67.	Kantakari	<i>Solanum virginianum</i> L.	Solanaceae	Flower	Common
68.	Kushmanda	<i>Benincasa hispida</i> Cogn.	Cucurbitaceae	Fruit	Cultivated
69.	Dadima	<i>Punica granatum</i> L.	Punicaceae	Flower	Cultivated
70.		<i>Drymaria cordata</i> (L.) Willd ex Schult.	Caryophyllaceae	Whole Plant	Rare
71.	Jhandu	<i>Tagetes erecta</i> L.	Asteraceae	Flower	Cultivated
72.	Madhuka	<i>Madhuca longifolia</i> (Koen.) Macbride	Sapotaceae	Flower	Planted

10) Rare, Endangered or Threatened medicinal plants collected (please provide the details i.e name of the plant, family, part used, place of collection, threat status etc. in tabular form): nil

## II. Details of the work carried out during the year 2021-22.

### a) Areas surveyed (Long tours):

Sl. No.	Name of the areas surveyed	Survey dates	No. of days	No. of photographs documented
I	Conducted Medico Ethno Botanical Survey in the forest areas of Bagalkot and Raichur districts of Karnataka	17.01.2022 to 22.01.2022	06 days (Including Journey)	125 plant photographs
	Journey from CARI, Bengaluru to Hospet	17.01.2022	Day-01	
	Journey from Hospet to Bagalkot	18.01.2022	Day-02	
	Documentation of photographs from Bilgi, Badami and Shiru forest areas of Bagalkot district	19.01.2022	Day-03	
	Journey from Bagalkot to Raichur and documentation of photographs from Golpalli, Manvi forest areas of Raichur district	20.01.2022	Day-04	
	Journey from Raichur to Hospet	21.01.2022	Day-05	
	Journey from Hospet to CARI Bengaluru	22.01.2022	Day-06	
II	Conducted Medico Ethno Botanical Survey in the forest areas of Vijayapura district of Karnataka	01.03.2022 to 05.03.2022	05 days (Including Journey)	75 plantt photographs
	Journey from CARI Bengaluru to Hospet	01.03.2022	Day-01	
	Journey from Hospet to Vijayapura and Kannur surrounding areas for documentation of plant photographs	02.03.2022	Day-02	
	Documentation of photographs from Inchageri surrounding forest areas of Vijayapura district	03.03.2022	Day-03	
	Journey from Vijayapura to Meddebihal and surrounding areas for documentation of plant photographs and reached to Hospet	04.03.2022	Day-04	
	Journey from Hospet to CARI Bengaluru	05.03.2022	Day-05	
III	Conducted Medico Ethno Botanical Survey in the forest areas of Kolar district of Karnataka	17.03.2022 to 19.03.2022	03 days (Including Journey)	75 plantt photographs
	Journey from CARI Bengaluru to Gokunte forest, Kolar district	17.03.2022	Day-01	
	Field visit	18.03.2022	Day-02	
	Journey from Kolar to Markendeswara betta and back to CARI, Bengaluru	19.03.2022	Day-03	

### b) Short tours (crude drug collection tours):

Sl. No.	Name of the areas surveyed	Date	Number of specimens / raw drugs/museum samples collected (kg)
1.	Yelahanka surrounding areas, Bengaluru Rural	25.05.2021	Total 38.000 kg fresh crude drugs belonging to 14 plant species were collected
2.	Davanagere and Bellary districts	08-09.07.2021	Total 16.200 kg fresh crude drugs belonging to 8 plant species and 02 live plants of <i>Caralluma</i>

			<i>umbellata</i> Haworth collected and planted at CARI
3.	Savandurga surrounding areas, Ramanagar district	10.08.2021	Total 9.700 kg fresh crude drugs belonging to 04 plant species were collected
4.	Kaggalipura area, Bangalore urban district	25.08.2021	Total 2.000 kg fresh crude drugs belonging to 02 plant species were collected
5.	Rajanukunte surrounding areas, Bengaluru Rural	22.09.2021	Total 9.200 kg fresh crude drugs belonging to 10 plant species were collected
6.	Nagegowdana Palya, Bangalore district	06.10.2021	Total 1.000 kg fresh crude drugs belonging to 03 plant species were collected
7.	Agara surrounding areas, Bangalore urban	26.10.2021	Total 2.000 kg fresh crude drugs belonging to 03 plant species were collected
8.	Bellary and Koppal districts	16-18.11.2021	Total 3.500 kg fresh crude drugs belonging to 03 plant species were collected
9.	Agara and surrounding areas, Bangalore urban	22.11.2021	Total 5.500 kg fresh crude drugs belonging to 02 plant species were collected
10.	Nelamangala surrounding areas, Bangalore district	10.12.2021	Total 2.000 kg fresh crude drugs belonging to 01 plant species were collected
11.	Kaggalipura surrounding areas, Bangalore urban	14.12.2021	Total 3.500 kg fresh crude drugs belonging to 01 plant species were collected
12.	Bellary, Bagalkot and Raichur districts	17-22.01.2022	Total 3.900 kg fresh crude drugs belonging to 07 plant species were collected
13.	Kaggalipura surrounding areas, Bangalore urban	04.02.2022	Total 2.000 kg fresh crude drugs belonging to 01 plant species were collected
14.	Belgavi & Dharwad districts	08-10.02.2022	Total 4.700 kg fresh crude drugs belonging to 06 plant species were collected
15.	Bellary and Koppal districts	16-19.02.2022	Total 19.700 kg fresh crude drugs belonging to 10 plant species were collected
16.	Vijayapura district	01-05.03.2022	Total 4.000 kg fresh crude drugs belonging to 03 plant species were collected
17.	Chickmagalur and Hassan districts	09-11.03.2022	Total 2.000 kg fresh crude drugs belonging to 01 plant species were collected
18.	Kolar district	17-19.03.2022	Total 3.000 kg fresh crude drugs belonging to 02 plant species were collected

c) Tour wise details of herbarium specimens collected : 33 specimens for NRDR project

d) Total number of:

- i) families of the collected specimens : nil
- ii) genera of the collected specimens : nil
- iii) species of the collected specimens : nil

e) Total number of plant specimens mounted for herbarium : 33 specimens

f) Total number of plant specimens added to herbarium : 33

g) Total number of seed samples added to the museum : nil

h) Total number of mounted plant specimens identified and not added to the herbarium : nil

i) Total number of unmounted specimens not identified : nil

**j) Details of drug samples collected/procured and supplied during 2021-22:**

Name of the drug			Part	Quantity			To whom	Purpose of supply	Balance
				collected/ purchased	ty supplie d				
S1. No.	Sanskrit name	Botanical name		Fresh weight (kg.)	Dry weight (kg.)	Dry weight (kg.)			
1.	Brahma dandu	<i>Argemone mexicana</i> L.	Stem	3.000	-	-	-	-	2.000
2.	Brahma dandu	<i>Argemone mexicana</i> L.	Seed	2.000	-	-	-	-	1.000
3.	Atmagupta	<i>Mucuna pruriens</i> (L.) DC.	Seed	1.500	-	-	-	-	0.800
4.	Durva	<i>Cynodon dactylon</i> (L.) Pers.	Whole Plant	3.000	-	-	-	-	1.500
5.	Mallika	<i>Jasminum sambac</i> (L.) Aiton	Flower	2.000	-	0.300	CARI, Kolkata	IMR project-II	0.00
6.	Paranti	<i>Ixora coccinea</i> L.	Root	0.500	-	0.250	CARI, Kolkata	IMR project-II	0.00
7.	Datura	<i>Datura innoxia</i> Mill.	Whole Plant	3.000	-	-	Material got infected		0.00
8.	Adhaki	<i>Cajanus cajan</i> (L.) Millsp.	Root	3.000	-	-	-	-	2.200
9.	Gulabash	<i>Mirabilis jalapa</i> L.	Whole Plant	3.000	-	-	-	-	0.700
10.	Gambhari	<i>Gmelina arborea</i> Roxb.	Fruit	2.000	-	0.250	CCRAS, New Delhi,	IMR project	0.000
				-	-	0.500	CSMCARI, Chennai	IMR project	0.300
11.	Ajagandha	<i>Cleome gynandra</i> L.	Whole Plant	1.000	-	-	-	-	0.400
12.	Varsabhu	<i>Trianthema portulacastrum</i> L.	Whole Plant	3.000	-	-	-	-	0.800
13.	Rakta punarnava	<i>Boerhavia diffusa</i> L.	Whole Plant	1.000	-	-	Material got infected		0.00
14.	Bahupraja	<i>Breynia retusa</i> (Dennst.) Alston	Stem	4.000	-	-	-	-	3.000
15.	Bahupraja	<i>Breynia retusa</i> (Dennst.) Alston	Leaf	3.000	-	-	-	-	1.000
16.	Kosataki	<i>Luffa acutangula</i> (L.) Roxb.	Whole Plant	3.000	-	-	-	-	1.500
17.	Nimba	<i>Azadirachta indica</i> A.Juss.	Leaf	3.000	-	-	Material got infected		0.00
18.	Gokshura	<i>Tribulus terrestris</i> L.	Whole Plant	1.000	-	-	-	-	0.200
19.	Sitaphal	<i>Annona squamosa</i> L.	Leaf	3.000	-	-	-	-	1.200
20.	Dudhika	<i>Euphorbia hirta</i> L.	Whole Plant	2.000	-	-	-	-	0.500
21.	Sleshmataka	<i>Cordia dichotoma</i> G.Forst.	Fruit	3.000	-	-	-	-	2.000
22.	Ervaru	<i>Cucumis melo</i> var. <i>utilissimus</i> (Roxb.) Duthie & Fuller	Fruit	1.300	-	0.075	-RARI Pune	IMR project	0.00
23.	Shobhanjana	<i>Moringa oleifera</i> Lam.	Root	1.000	-	-	-	-	0.100
24.	Shobhanjana	<i>Moringa oleifera</i> Lam.	Stem Bark	1.000	-	-	-	-	0.800

25.	Bharangi	<i>Rothea serrata</i> (L.) Steane & Mabb.	Leaf	1.000	-	-	-	Material got infected	0.00
26.	Cakramarda	<i>Senna tora</i> (L.) Roxb. (Syn. <i>Cassia tora</i> L.)	Leaf	1.000	-	-	-	-	0.400
27.	Gambhari	<i>Phyllodium pulchellum</i> (L.) Desv.	Root	1.000	-	-	-	-	0.250
28.	Nimba	<i>Azadirachta indica</i> A.Juss.	Stem Bark	2.000	-	-	-	-	0.600
29.	Kitamari	<i>Aristolochia bracteolata</i> Lam.	Whole Plant	2.000	-	0.250	RARI, Jammu	IMR project	0.00
30.	Kitamari	<i>Aristolochia bracteolata</i> Lam	Root	0.200	-	0.160	RARI, Jammu	IMR project	0.00
31.	Kitamari	<i>Aristolochia bracteolata</i> Lam.	Fruit	1.000	-	0.250	RARI, Jammu	IMR project	0.150
32.	Granthiparni	<i>Leonotis nepetifolia</i> (L.) R. Br.	Leaf	1.000	-	0.300	RARI, Gwalior	EMR project	0.00
33.		<i>Opuntia ficus-indica</i> (L.) Mill.	Root	2.000	-	0.500	CSMCARI, Chennai	EMR project	1.000
34.	Nili	<i>Indigofera tinctoria</i> L.	Fruit	1.000	-	0.500	CSMCARI, Chennai	IMR project	0.100
35.		<i>Grewia flavescens</i> Juss.	Stem	2.000	-	1.000	RARI, Gwalior	EMR project	0.800
36.	Palasa	<i>Butea monosperma</i> (Lam.) Taub.	Root	2.000	-	0.800	CARI, Kolkata	EMR & IMR project	0.500
37.	Tulsi	<i>Ocimum tenuiflorum</i> L.	Root	2.000	-	0.500	RARI, Gwalior	EMR project	0.00
38.	Arka	<i>Calotropis procera</i> (Aiton) Dryand.	Whole Plant	3.000	-	0.500	CARI, Kolkata	IMR project	0.800
39.		<i>Caralluma umbellata</i> Haworth	Live plants	02 Nos.	-	-	-	Used in Herbal Garden	0.00
40.	Sigru	<i>Moringa oleifera</i> Lam.	Root	2.000	-	0.500	CSMCARI, Chennai	IMR project	0.250
41.		<i>Mentha arvensis</i> L.	Leaf	1.000	-	0.500	CARI, Kolkata	IMR project	0.200
42.	Bharangi	<i>Clerodendrum serratum</i> (L.) Moon	Leaf	1.000	-	0.100	RARI, Pune	IMR project	0.300
43.	Aakhuparni	<i>Ipomoea reniformis</i> (Roxb.) Choisy	Whole Plant	2.000	-	0.500	CARI, Kolkata	IMR project	0.00
44.	Sigru	<i>Moringa oleifera</i> Lam.	Exudate	0.350	-	0.350	CSMCARI, Chennai	IMR project	0.00
45.	Sana	<i>Crotalaria juncea</i> L.	Seed	0.250	-	-	-	Used in herbal garden	0.00
46.	Ambasthaki	<i>Hibiscus sabdariffa</i> L.	Seed	0.250	-	-	-	Used in herbal garden	0.00
47.	Nimba	<i>Azadirachta indica</i> A. Juss.	Seed	2.000	-	-	-	-	1.000
48.	Kamal	<i>Nelumbo nucifera</i> Gaertn.	Stem	0.500	-	0.100	CARI, Kolkata	IMR project	0.00

49.	Kamal	<i>Nelumbo nucifera</i> Gaertn.	Root tuber	0.200	-	0.100	CARI, Kolkata	IMR project	0.00
50.	Sirisa	<i>Albizia lebbek</i> (L.) Benth.	Stem Bark	3.000	-	-	Nil	Nil	0.500
51.	Khadira	<i>Acacia catechu</i> (L.f.) Willd.	Heart Wood	3.000	-	0.300	PCIMH Ghaziabad	Monograph	0.400
52.	Dronapuspi	<i>Leucas aspera</i> (Willd.) Link	Whole Plant	3.000	-	-	-	-	0.750
53.	Kovidarah	<i>Bauhinia purpurea</i> L.	Flowers	1.000	-	0.350	RARI, Jammu	IMR project	0.00
54.	Dhatura	<i>Datura metel</i> L.	Flowers	1.000	-	-	Material got infected		0.00
55.	Latakaranja	<i>Caesalpinia bonduc</i> (L.) Roxb.	Seed	0.500	-	0.450	CARI, Kolkata	IMR project	0.00
56.	Sigru	<i>Moringa oleifera</i> Lam.	Flower	0.500	-	-	Material got infected		0.00
57.	Arka	<i>Calotropis gigantea</i> (L.) Dryand.	Flower	1.000	-	0.350	RARI, Jammu	IMR project	0.00
58.	Saka	<i>Tectona grandis</i> L.f.	Flower	0.800	-	0.650	RARI, Jammu	IMR project	0.00
59.	Japa	<i>Hibiscus rosa-sinensis</i> L.	Flower	0.500	-	-	Material got infected		0.00
60.	Narikela	<i>Cocos nucifera</i> L.	Flower	0.500	-	0.350	RARI, Jammu	IMR project	0.00
61.	Karnasphota	<i>Cardiospermum halicacabum</i> L.	Whole Plant	2.000	-	0.500	CARI, Kolkata	IMR project	0.00
62.	LalAmbari	<i>Hibiscus subdariffa</i> L.	Whole Plant	3.000	-	-	Material got infected		0.00
63.	Tulasi	<i>Ocimum tenuiflorum</i> L.	Flower	0.300	-	0.240	RARI, Jammu	IMR project	0.00
64.	Punarnava	<i>Boerhavia diffusa</i> L.	Whole Plant	0.500	-	-	Used for herbal garden		0.00
65.	Irmed	<i>Acacia farnesiana</i> (L.) Wight et Arn.	Stem Bark	1.000	-	0.200	CARI Bengaluru	CoE project	0.500
66.	Bilva	<i>Aegle marmelos</i> (L.) Correa	Leaf	2.000	-	-	-	-	0.140
67.	Kadarah	<i>Acacia polycantha</i> Willd.	Stem Bark	1.000	-	-	Used as museum sample		0.00
68.	Narikela	<i>Cocos nucifera</i> L.	Fruit	2.500	-	1.100	RARI, Pune	IMR project	0.00
69.	Narikela	<i>Cocos nucifera</i> L.	Shell	0.500	-	0.300	CARI, Kolkata	EMR project	0.00
70.	Agase	<i>Sesbania grandiflora</i> (L.) Pers.	Flower	1.500	-	0.450	RARI, Jammu	IMR project	0.00
71.	Bibhitaka	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Fruit	1.000	-	0.300	PCIMH Ghaziabad	Monograph	0.500
72.	Bahupraja	<i>Breynia retusa</i> (Dennst.) Alston	Leaf	1.000	-	-	-	-	0.300
73.	Arjuna	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Small Branches	2.000	-	-	-	-	1.000
74.	Akash Nimba	<i>Millingtonia hortensis</i> L.f.	Flower	1.000	-	0.240	RARI, Jammu	IMR project	0.00
75.	Saptaparni	<i>Alstonia scholaris</i> (L.) R.Br.	Stem Bark	1.000	-	-	Used as museum		0.100

							sample	
76.	Kadamba	<i>Neolamarckia cadamba</i> (Roxb.) Bosser	Stem Bark	1.000	-	-	-	0.140
77.	Avartaki	<i>Senna auriculata</i> (L.) Roxb.	Flower	0.500	-	0.350	RARI, Jammu	IMR project
78.	Saka	<i>Tectona grandis</i> L.f.	Flower	0.200	-	-	Material got infected	
79.	Jyotismati	<i>Celastrus paniculatus</i> Willd.	Fruit	0.200	-	-	Nil	Nil
80.	Karavira	<i>Nerium oleander</i> L.	Flower	1.000	-	0.120	RARI, Jammu	IMR project
81.	Bandhuka	<i>Ixora coccinea</i> L.	Flower	0.200	-	0.075	CARI, Kolkata	IMR project-II
82.	Ambasthaki	<i>Hibiscus sabdariffa</i> L.	Aerial Part	2.000	-	-	Nil	Nil
83.	Masha	<i>Vigna mungo</i> (L.) Hepper	Seeds	-	0.500	0.500	CARI, Jhansi	IMR project
84.	Apamarga	<i>Achyranthes aspera</i> L.	Seeds	0.300	-	0.050	CARI, Kolkata	IMR project
85.	Bilva	<i>Aegle marmelos</i> (L.) Correa	Leaves	0.500	-	0.120	CARI, Kolkata	IMR project
86.	Bilva	<i>Aegle marmelos</i> (L.) Correa	Root	0.200	-	0.100	CARI, Kolkata	IMR project
87.	Asopalava	<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.Saunders	Stem Bark	1.000	-	-	-	0.800
88.	Asopalava	<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.Saunders	Leaves	0.500	-	-	-	0.200
89.	Dhatura	<i>Datura metel</i> L.	Flowers	0.500	-	-	-	0.070
90.	Mashaparni	<i>Vigna trilobata</i> (L.) Verdc. = <i>Phaseolus trilobus</i> Aiton	Whole Plant	2.000	-	0.800	Arya Vaidya Pharmacy Coimbatore	AMRA project
91.	Kakanashi	<i>Martynia annua</i> L.	Fruit	0.500	-	0.500	Arya Vaidya Pharmacy Coimbatore	AMRA project
92.	Arka	<i>Calotropis procera</i> (Aiton) Dryand.	Flower	1.000	-	-	Used as museum sample	
93.	Kadara	<i>Acacia polyacantha</i> (Willd.) Seigler & Ebinger	Stem Bark	3.500	-	0.700	CARI, Bengaluru	CoE project
94.	Uttingana	<i>Blepharis maderaspatensis</i> (L.) B.Heyne ex Roth	Leaves	2.000	-	0.850	CSMCARI, Chennai	NIF project
95.	Saptaparni	<i>Alstonia scholaris</i> R.Br.	Stem Bark	5.500	-	2.750	CSMCARI, Chennai	IMR project
96.	Munja	<i>Saccharum munja</i> Roxb.	Root	2.000	-	0.450	Arya Vaidya Pharmacy Coimbatore	AMRA project
97.	Kadara	<i>Acacia polyacantha</i> (Willd.) Seigler & Ebinger	Stem Bark	3.500	-	3.000	CARI, Jhansi	CoE project
98.	Amalaki	<i>Phyllanthus emblica</i> L.	Fruit	15.000	-	15.000	CSMCARI,	IMR

							Chennai	project	
99.	Chavya	<i>Piper chaba</i> Trel. & Yunck.	Stem	-	5.000	5.000	CARI, Jhansi	Yograj Guggulu	0.00
100.	Sanjeevani	<i>Selaginella bryopteris</i> (L.) Baker	Whole Plant	-	1.000	1.000	CSMCARI, Chennai	EMR-NIF project	0.00
101.	Kiratiktaka	<i>Swertia chirata</i> Buch.-Ham ex Wall.	Whole plant	-	5.000	5.000	CSMCARI, Chennai	IMR project	0.00
102.	Kuberakshi	<i>Caesalpinia bonduc</i> (L.) Roxb.	Seed	-	5.000	5.000	CSMCARI, Chennai	IMR project	0.00
103.	Saliparni	<i>Desmodium gangeticum</i> (L.) DC.	Root	0.500	-	-	Used as museum sample		0.00
104.	Sahacara	<i>Barleria prionotis</i> L.	Root	0.300	-	-	Used as museum sample		0.00
105.	Mahanimba	<i>Melia azadirach</i> L.	Seed	0.500	-	-	Used in Herbal Garden		0.00
106.	Ashvagandha	<i>Withania somnifera</i> Dunal	Seed	0.100	-	-	Used in Herbal Garden		0.00
107.	Aragvadha	<i>Cassia fistula</i> L.	Fruit	1.000	-	-	Used in Nursery Project		0.00
108.	Alabu	<i>Lagenaria siceraria</i> (Molina) Standley	Fruit	1.000	-	-	Used as museum sample		0.00
109.	Mashaparni	<i>Teramnus labialis</i> (L.f.) Spreng.	Whole plant	0.500	-	0.150	RARI, Jammu	IMR project	0.000
110.	Sirisa	<i>Albizia lebeck</i> Roxb.	Fruits	0.500	-	-	-	-	0.200
111.	Mandukparni	<i>Centella asiatica</i> (L.) Urb.	Whole plant	2.000	-	0.300	PCIMH Ghaziabad	Monograph	0.400
112.	Brahmi	<i>Bacopa monnieri</i> (L.) Wettst.	Whole plant	2.000	-	0.300	PCIMH Ghaziabad	Monograph	0.00
113.	Kampilyaka	<i>Mallotus philippensis</i> (Lam.) Müll.Arg.	Fruit	1.500	-	0.300	PCIMH Ghaziabad	Monograph	1.000
114.	Laajvanti	<i>Mimosa pudica</i> L.	Root	1.000	-	0.100	RARI, Pune	IMR project	0.500
115.	Ardrak	<i>Zingiber officinale</i> Roscoe	Rhizome	2.250	-	0.250	PCIMH Ghaziabad	Monograph	0.100
116.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers	Stem	1.000	-	0.250	CARI, Bengaluru	CoE project	0.450
117.	Eranda	<i>Ricinus communis</i> L.	Root	1.000	-	0.250	CCRAS, New Delhi	IMR project	0.400
118.	Punarnava	<i>Boerhavia diffusa</i> L.	Whole plant	1.000	-	0.250	CCRAS, New Delhi	IMR project	0.150
119.	Datura	<i>Datura metel</i> L.	Root	2.000	-	0.100	RARI, Pune	IMR project	0.100
120.	-	<i>Abutilon ramosum</i> (Cav.) Guill. & Perr.	Leaf	2.000	-	0.900	CSMCARI, Chennai	EMR-NIF project	0.500
121.	Dhawana	<i>Grewia tillifolia</i>	Stem Bark	1.000	-	-	-	-	0.200



122.	Bakuchi	<i>Cullen corylifolium</i> (L.) Medik.	Seed	0.200	-	-	Used in Herbal Garden	0.050	
123.	Shalmali	<i>Bombax ceiba</i> L.	Flower	0.500	-	0.250	RARI, Jammu	IMR project	0.150
124.	Palasha	<i>Butea monosperma</i> (Lam.) Taub.	Flower	0.500	-	0.100	RARI, Jammu	IMR project	0.00
125.	Kampillaka	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg.	Fruit	0.500	-	-	-	-	0.200
126.	Jeevanthi	<i>Leptadenia reticulata</i> (Retz.) Wight & Arn.	Aerial part	2.000	-	0.500	CARI, Kolkata	IMR project	0.800
127.	Dhawana	<i>Grewia tenax</i> (Forssk.) Fiori	Stem Bark	1.000	-	-	-	-	0.260
128.	-	<i>Launaea procumbens</i> (Roxb.) Amin	Whole Plant	2.000	-	-	-	Material got infected	0.00
129.	-	<i>Clerodendrum phlomidis</i> L.f.	Stem Bark	2.000	-	-	-	-	0.700
130.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook.f. & Thomson	Whole Plant	2.000	-	-	-	-	1.000
131.	Swarnapatri	<i>Senna angustifolia</i> Mill.	Leaf	2.000	-	-	-	-	0.600
132.	Latakaranja	<i>Caesalpinia crista</i> L.	Seed	0.500	-	-	Used in herbal garden	-	0.200
133.	Mundika	<i>Sphaeranthus indicus</i> L.	Whole Plant	2.000	-	0.550	RARI, Jammu	IMR project	0.00
134.	Kantakari	<i>Solanum virginianum</i> L.	Flower	0.200	-	-	-	-	0.040
135.	Kushmanda	<i>Benincasa hispida</i> Cogn.	Fruit	6.000	-	-	-	Material got infected	0.00
136.	Galjivha	<i>Launaea procumbens</i> (Roxb.) Ramayya & Rajagopa	Whole plant	2.000	-	0.700	CSMCARI, Chennai	EMR project	0.90
137.	Dhawana	<i>Grewia tenax</i> (Frosk.) Fiori	Stem bark	1.000	-	1.000	CSMCARI, Chennai	IMR project	0.00
138.	Dadima	<i>Punica granatum</i> L.	Flower	1.000	-	-	-	-	0.400
139.	-	<i>Drymaria cordata</i> (L.) Willd. ex Schult	Whole plant	2.000	-	0.500	CSMCARI, Chennai	IMR project	0.00
140.	-	<i>Sansevieria roxburghiana</i> Schult & Schult. f.	Live plant	10 Nos.	-	-	-	Used in Herbal Garden	0.00
141.	Aragvadha	<i>Cassia fistula</i> L.	Fruit	2.000	-	-	-	Used in Nursery Project	0.00
142.	Jhandu	<i>Tagetes erecta</i> L.	Flower	2.000	-	-	-	-	0.200
143.	Madhuca	<i>Madhuca longifolia</i> (Koen.) Macbride	Flower	1.000	-	-	-	-	0.250
Total =				215.7	16.5	62.18	-	-	43.23

k) Details of folklore claims documented: Nil

l) Medicinal plants photographs shot during crude drug collection tours during the reporting year 2021-22:

		
Bellary district	Savandurga, near Bengaluru	Chickmgalur district
		
<i>Aristolochia bracteolata</i> -habit	<i>Calotropis procera</i> -habit	<i>Caralluma umbellata</i> -habit
		
<i>Grewia flavescens</i> -branch	<i>Indigofera tinctoria</i> -habit	<i>Leonotis nepetifolia</i> -habit
		
<i>Ocimum tenuiflorum</i> -habit	<i>Opuntia ficus-indica</i> -habit	<i>Opuntia ficus-indica</i> -root
		
<i>Clerodendrum serratum</i> -habit	<i>Ipomoea reniformis</i> -habit	<i>Moringa oleifera</i> -exudate



*Acacia catechu*-Heart Wood



*Bauhinia purpurea*-flower



*Datura metel*-flowers



*Hibiscus subdariffa*-habit



*Leucasaspera*-habit



*Moringaoleifera*-habit



*Nelumbonucifera*-root



*Ocimum tenuiflorum*-flower



*Sesbaniagrandiflora*-flower



*Alstoniascholaris*-stem bark



*Breyniaretusa*-leaf



*Celastruspaniculatus*-fruit















*Neolamarckiacadamba*-stem



*Nerium oleander*-flower



*Sennaauriculata*-flower

		
<i>Tectona grandis</i> -flower	<i>Terminalia bellirica</i> -fruit	<i>Terminalia arjuna</i> -small branches
		
<i>Aegle marmelos</i> -leaf	<i>Achyranthes aspera</i> -habit	<i>Achyranthes aspera</i> -seed
		
<i>Monoon longifolium</i> -habit	<i>Monoon longifolium</i> -leaf	<i>Monoon longifolium</i> -stem
		
<i>Acacia polyacantha</i> -stem	<i>Blepharismaaderaspatensis</i> -habit	<i>Calotropis procera</i> -flower



*Martynia annua*-fruit



*Vignatrilobata*-habit



*Vignatrilobata*-leaf



*Vignatrilobata*-flower



*Vignatrilobata*-fruit



*Vignatrilobata*-seed



*Acacia polyacantha*-stem bark



*Alstonia scholaris*-stem bark



*Caesalpinia bonduca*-seed



*Convolvulus prostratus*-root



*Piper chaba*-stem



*Phyllanthus emblica*-habit






*Phyllanthus emblica*-fructing twig












*Phyllanthus emblica*-fruit



*Saccharum munja*-habitat

		
<i>Saccharummunja-habit</i>	<i>Saccharummunja-root</i>	<i>Selaginellabryopteris-whole plant</i>
		
<i>Bacopamonnieri-plant</i>	<i>Barleria prionotis-root</i>	<i>Cassia fistula-fruit</i>
		
<i>Centella asiatica-whole plant</i>	<i>Desmodium gangeticum-plant</i>	<i>Mallotusphilippensis-fruit</i>
		
<i>Melia azadirach-fruit</i>	<i>Teramnuslabialis-whole plant</i>	<i>Withaniasomnifera-fruit</i>
		
<i>Abutilon ramosum-twigg</i>	<i>Bombax ceiba-flower</i>	<i>Buteamonosperma-flower</i>

		
<i>Caesalpinia crista</i> -fruits	<i>Clerodendrum phlomidis</i> -twig	<i>Grewia tenax</i> -twig
		
<i>Grewia tillifolia</i> -twig	<i>Launaea procumbens</i> -habit	<i>Leptadenia reticulata</i> -twig
		
<i>Mallotus philippensis</i> -fruit	<i>Senna angustifolia</i> -habit	<i>Madhuca longifolia</i> -flower

**m) Identification and Authentication of plant samples during year 2021-22:**

Plant samples submitted by Dr. Mohd Anis Ansari, PG Scholar, Department of Ilmul Saidla, National Institute of Unani Medicine, Bangalore, has been identified and authenticated as:

1. *Cochlospermum religiosum* (L.) Alston belonging to family Bixaceae (RRCBI-10424).
2. *Althaea officinalis* L. belonging to the family Malvaceae (RRCBI mus288)
3. *Apium graveolens* L. belonging to the family Apiaceae (RRCBI-mus289)
4. Plant sample submitted by Saistha Anjum, Department of Pharmacology, AL-Ameen College of Pharmacy, Bengaluru, has been identified and authenticated as *Polyalthia longifolia* (Sonn.) Thwaites belonging to the family Annonaceae (RRCBI-mus196)  
Plant samples submitted by Sudhindra Kini, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru, has been identified and authenticated as
5. *Ocimum basilicum* L. is belonging to the family Lamiaceae (RRCBI - 5774)
6. *Cinnamomum cassia* (L.) J.Presl. is belonging to Lauraceae (RRCBI mus206)
7. *Syzygium aromaticum* (L.) Merr. & L.M.Perry belonging to Myrtaceae (RRCBI-mus108)
8. *Coriandrum sativum* L. belonging to the family Apiaceae (RRCBI-mus221)
9. Plant sample submitted by Mr. Amit Kumar B S, Research Student, Department of Pharmaceutical Chemistry, Government College of Pharmacy, Bengaluru, has been identified and authenticated as *Trachyspermum ammi* (L.) Sprague belonging to the family Apiaceae (RRCBI-mus218)
10. Plant sample submitted by Muhammad Erfan, PG Student, Hillside College of Pharmacy and Research Centre, Bangalore, has been identified and authenticated as *Aloe vera* (L.) Burm.f. belonging to the family Xanthorrhoeaceae (RRCBI-mus109)  
Plant samples submitted by Leena Jaciatha Stephen, Ph.D. scholar, Department of Botany, St. Joseph's college, Bangalore have been identified and authenticated as
11. *Ipomoea cairica* (L.) Sweet belonging to family Convolvulaceae (RRCBI-7309)
12. *Ipomoea hederacea* (L.) Jacq. belonging to the family Convolvulaceae (RRCBI-11750)
13. *Ipomoea beraviensis* Vatke belonging to the family Convolvulaceae (RRCBI-mus296)  
Plant samples submitted by Fasal Shareef NK, P.G. Student, Hillside College of Pharmacy and Research Centre, Bangalore have been identified and authenticated as *Capsicum annum* L. belonging to family Solanaceae (RRCBI-8263)
14. Plant sample submitted by Hemavathi S., PG student, Hillside College of Pharmacy and Research Centre, Bengaluru has been identified and authenticated as *Nelumbo nucifera* L. belonging to family Nelumbonaceae (RRCBI-8427)
15. Plant sample submitted by Naznin Sarkar, PG student, Hillside College of Pharmacy and Research Centre, Bengaluru has been identified and authenticated as *Sesbania grandiflora* (L.) Pers. belonging to the family Fabaceae (RRCBI-mus297)
16. Plant sample submitted by Swapna B., Assistant Professor, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Nicotiana tabacum* L. belonging to the family Solanaceae (RRCBI-8265)  
Plant samples submitted by Ms. Jeevitha R., M.Pharm student, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as
17. *Azadirachta indica* A.Juss. belonging to the family Meliaceae (RRCBI-8970)
18. *Derris elliptica* (Wall.) Benth. belonging to the family Fabaceae (RRCBI-mus298)
19. *Artemisia pallens* Wall. ex DC. belonging to the family Compositae (RRCBI- mus299)  
Plant samples submitted by Mrs. Prabha Hullatti, Assistant Professor, Department of Pharmacology, Bapuji Pharmacy College, Davanagere have identified and authenticated as
20. *Senna auriculata* (L.) Roxb. belonging to the family Fabaceae (RRCBI-9998)
21. *Muntingia calabura* L. belonging to the family Muntingiaceae (RRCBI-12974)



22. Plant sample submitted by Samrachana Dhungana, Department of Pharmacology, PES College of Pharmacy, College, Hanumanthnagar, has been identified and authenticated as *Piper nigrum* L. belonging to the family Piperaceae (RRCBI-4644)
23. The plant sample submitted by Ananya K U, Department of Pharmacology, PES College of Pharmacy, College, Bengaluru has been identified and authenticated as *Delphinium denudatum* Wall. ex Hook.f. & Thomson, belonging to the family Ranunculaceae (RRCBI-mus300)
24. Plant sample submitted by Mrs. T Sravani, Research Scholar, GITAM institute of Pharmacy, GITAM University, Visakhapatnam, has been identified and authenticated as *Adiantum lunulatum* Burm.f. belonging to the family Pteridaceae (RRCBI-4546)  
Plant sample submitted by Dr.Sumanth M.V. Senior Research Associate, Research & Development in Himalaya Wellness Company, Bangalore, were authenticated as
25. *Withania somnifera* (L.) Dunal belonging Solanaceae (RRCBI mus301)
26. *Tinospora cordifolia* (Willd.) Miers belonging to Menispermaceae (RRCBI mus302)
27. Plant sample submitted by Archana N, Sreepriya Sreekumar, Abarna S, Gayathri R, Ruba shree M, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as *Euphorbia hirta* L. belonging to the family Euphorbiaceae (RRCBI - 11714)
28. Plant sample submitted by Pooja U.R, Bindhu B M, Sijo K Philip, Shilpa Shivaram, Nischitha S, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as *Azima tetracantha* Lam. belonging to the family Salvadoraceae (RRCBI - 736)
29. Plant sample submitted by Prashanth M R, Anish leeber, Krishnamoorthy, Sirajudheen, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as *Azadirachta indica* A. Juss. belonging to the family Meliaceae (RRCBI - 8970)
30. Plant sample submitted by Chethan Kayara, Snehamrutha, Azharudheen K, Mohammad Midhlaj, Mohammad Ashique, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as *Ocimum americanum* L. belonging to the family Lamiaceae (RRCBI - 12242)  
Plant samples submitted by Pavan Infant Raj, Aamir Khan, Sudeep K G, Vyshak A P, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as
31. *Ocimum americanum* L. belonging to the family Lamiaceae (RRCBI - 12242)
32. *Azadirachta indica* A. Juss. belonging to the family Meliaceae (RRCBI - 8970)  
Plant samples submitted by Naishan, Hameem Shanik, Shebin rahman. A, Musthaq rahiman, Surya G, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as
33. *Azadirachta indica* A. Juss. belonging to the family Meliaceae (RRCBI-8970)
34. *Aloe vera* (L.) N. Burm. belonging to the family Liliaceae (RRCBI-mus109)
35. *Curcuma longa* belonging to the family Zingiberaceae (RRCBI-mus260)
36. Plant sample submitted by Shrikala K, John Joshy, Aleena K Varghese, Shabinas P K, 8<sup>th</sup> Semester, B. Pharm, T.John College of Pharmacy, Bengaluru, has been identified and authenticated as *Azadirachta indica* A. Juss. belonging to the family Meliaceae (RRCBI - 8970).L. belonging to the family Zingiberaceae (RRCBI-mus260)
37. Plant sample submitted by Chetan Nassa, Choeku, Ejaz Khan, Jahana Parveen, Jayachandran C, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Rosa indica* L. of Rosaceae (RRCBI-mus308)

38. Plant sample submitted by Mohsina Taj, Monisha K C, Monisha S, Monisha M, Mounisha S, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Brassica oleracea* var. *italica* Plenck of Brassicaceae family (RRCBI-mus310)
  39. Plant sample submitted by Yogaraj R, Yuktha H J, Md Sohrab, Navyashree DM, Thanush D, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Basella alba* L. belonging to the family Basellaceae (RRCBI-14266)
  40. Plant sample submitted by Rajenderaa S, Rakesh babu S.N, Riya Khanra, Roghul Priya S, Roopa Shruthi M, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Azadirachta indica* A. Juss. belonging to the family Meliaceae (RRCBI-8970)
  41. Plant sample submitted by Geetha Patel, Harshitha M, Sathi D, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Tinospora cordifolia* (Willd.) Miers belonging to the family Menispermaceae (RRCBI-14991)
  42. Plant sample submitted by Pradeep P, Preethi D, Purushottam M, Rachana B, Rajdeep Kour, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Tagetes erecta* L. belonging to the family Asteraceae (RRCBI-mus138)
  43. Plant sample submitted by Rajenderaa S, Rakesh babu S.N, Riya Khanra, Roghul Priya S, Roopa Shruthi M, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Ocimum tenuiflorum* L. of Lamiaceae (RRCBI-12572)
  44. Plant sample submitted by Mohsina Taj, Monisha K C, Monisha S, Monisha M, Mounisha S, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Brassica oleracea* var. *capitata* (f. *rubra*) belonging to the family Brassicaceae (RRCBI mus 309)
  45. Plant sample submitted by Rajenderaa S, Rakesh babu S.N, Riya Khanra, Roghul Priya S, Roopa Shruthi M, 8<sup>th</sup> Semester, B. Pharm, The Oxford College of Pharmacy, Bangalore, has been identified and authenticated as *Cinnamomum cassia* (L.) J. Presl belonging to the family Lauraceae (RRCBI-mus206)
- Plant samples submitted by Dr. Sumayya Sadia, PG Scholar, Department of Ilmul Saidla, National Institute of Unani Medicine, Bangalore, has been identified and authenticated as:
46. *Dorema ammoniacum* D. Don. of the family Apiaceae (RRCBI-mus305).
  47. *Prunus dulcis* (Mill.) D. A. Webb of family Rosaceae (RRCBI-mus 66)
  48. *Trigonella foenum-graecum* L. of the family Fabaceae (RRCBI -mus105).
  49. *Commiphora wightii* (Arn.) Bhandari of family Burseraceae (RRCBI-mus224)
- Plant samples submitted by Dr. Sabeena Shah, PG Scholar, Department of Ilmul Saidla, National Institute of Unani Medicine, Bangalore, has been identified & authenticated as:
50. *Glycyrrhiza glabra* L. belonging to the family Fabaceae (RRCBI-mus149)
  51. *Ficus carica* L. belonging to the family Moraceae (RRCBI-17613)
  52. *Foeniculum vulgare* Mill. is belonging to the family Apiceae (RRCBI-mus145)
  53. *Cymbopogon jwarancusa* (Jones) Schult. Id family Poaceae (RRCBI-mus307)
  54. *Apium graveolens* L. belonging to the family Apiaceae (RRCBI-mus289)
  55. *Cichorium intybus* L. belonging to the family Asteraceae (RRCBI-mus262)
  56. *Adiantum capillus-veneris* L. of family Pteridaceae (RRCBI-mus303)
  57. *Lavandula stoechas* L. belonging to the family Lamiaceae (RRCBI-mus304)
  58. *Vitis vinifera* L. belonging to the family Vitaceae (RRCBI-mus125)
- Plant samples submitted by Dr. Shakreen Naz, PG Scholar, Department of Ilmul Saidla, National Institute of Unani Medicine, Bangalore, has been identified & authenticated as:
59. *Datura metel* L. belonging to the family Solanaceae (RRCBI-6784)
  60. *Rheum australe* D. Don belonging to the family Polygonaceae (RRCBI-mus265)
  61. *Zingiber officinale* Roscoe belonging to the family Zingiberaceae (RRCBI-mus205)
  62. *Astracantha gummifera* (Labill.) Podlech of family Fabaceae (RRCBI-mus306)

63. Plant sample submitted by Prashanth M E, Department of Pharmacology, Government College of Pharmacy, Bengaluru, has been identified and authenticated as *Vigna unguiculata* (L.) Walp. belonging to the family (RRCBI-12956)
64. Plant sample submitted by Vignesh M, Department of Pharmacology, Government College of Pharmacy, Bengaluru, has been identified and authenticated as *Vigna angularis* (Willd.) Ohwi & H. Ohashi. belonging to the family (RRCBI-13606)  
Plant samples submitted by Varun M, Haral Saurabh Ganpat, Vidhya D, Yashaswini P, Varsha GK, B.Pharm students, Department of Pharmacology, Visveswarapura Institute of Pharmaceutical Sciences, Bengaluru have been identified and authenticated as:
65. *Curcuma longa* L. belonging to family Zingiberaceae (RRCBI-mus260)
66. *Withania somnifera* (L.) Dunal belonging to family Solanaceae (RRCBI-16813)  
Plant samples submitted by Shri. Anil Kumar, Assistant Professor, Department of Pharmacology, Visveswarapura Institute of Pharmaceutical Sciences, Bengaluru have been identified and authenticated as
67. *Crotalaria pallida* Aiton belonging to family Fabaceae (RRCBI-18618)
68. *Acalypha indica* L. belonging to family Euphorbiaceae (RRCBI-18572)
69. *Amaranthus viridis* All. belonging to family Amaranthaceae (RRCBI-17470)  
Plant samples submitted by Dr. Arshiya Sultana, Associate Professor, Department of Amraze Niswan Wa Ilmul Qabalat (OBG), National Institute of Unani Medicine, Bengaluru, has been identified and authenticated as
70. *Cucumis sativus* L. belonging to the family Cucurbitaceae (RRCBI 15310)
71. *Cucumis melo* L. belonging to the family Cucurbitaceae (RRCBI-mus264)
72. *Lagenaria siceraria* (Molina) Standl. of family Cucurbitaceae (RRCBI-mus32)
73. *Portulaca oleracea* L. belonging to the family Portulacaceae (RRCBI-14595)
74. *Malva sylvestris* L. belonging to the family Malvaceae (RRCBI-mus278)
75. *Adiantum capillus-veneris* L. belonging to the family Pteridaceae (RRCBI mus303)
76. *Viola odorata* L. belonging to the family Violaceae (RRCBI-mus311)
77. Plant sample submitted by Rahul K, Sandeep K, Murali N and Asmaa M Daher, Research Scholar, Department of Microbiology and Biotechnology, Bangalore University was authenticated as *Premna integrifolia* L. belonging to the family Lamiaceae (RRCBI-mus313)  
Plant samples submitted by Mr. Lava S. Gowda, Mr. Naveen Kumar B, Mr. Sujith Raju and Ms Pavithral, B. Pharma students, Department of Pharmacognocny, Vivekananda college of Pharmacy, Bengaluru, has been identified and authenticated as
78. *Mimosa pudica* L. belonging to the family Fabaceae (RRCBI-20566)
79. *Tribulus terrestris* L. belonging to the family Zygophyllaceae (RRCBI-19790)
80. Plant sample submitted by Raveena Shree R, Vidhya Y Gowda & Harshitha GB. Department of Pharmacognocny, Vivekananda college of Pharmacy, Bengaluru has been identified and authenticated as *Phyllanthus amarus* Schumach. & Thonn. belonging to the family Phyllanthaceae (RRCBI-19528)  
Plant samples submitted by Dr. Sumanth M.V., Senior Research Associate, Research & Development, Himalaya Wellness Company, Bengaluru have been authenticated as:
81. *Eclipta prostrata* (L.) L. belonging to the family Asteraceae (RRCBI-8810)
82. *Solanum nigrum* L. belonging to the family Solanaceae (RRCBI-1896)
83. *Cinnamomum camphora* (L.) J. Presl belonging to family Lauraceae (RRCBI-mus323)
84. *Achillea millefolium* L. belonging to the family Asteraceae (RRCBI-mus312)
85. *Cyperus rotundus* L. belonging to the family Cyperaceae (RRCBI mus316)
86. *Mimosa pudica* L. belonging to the family Fabaceae (RRCBI-10815)
87. *Curcuma caesia* Roxb. belonging to the family Zingiberaceae (RRCBI-1865)
88. *Senna occidentalis* (L.) Link belonging to the family Fabaceae (RRCBI-5663)
89. *Capparis spinosa* L. belonging to the family Capparaceae (RRCBI mus319)

90. *Zingiber officinale* Roscoe belonging to the family Zingiberaceae (RRCBI mus205)
91. *Cichorium intybus* L. belonging to the family Asteraceae (RRCBI mus324)
92. *Piper nigrum* L. belonging to the family Piperaceae (RRCBI-20302)
93. *Terminalia arjuna* (Roxb. ex DC.) Wight & Arn. of family Combretaceae (RRCBI-11397)
94. *Chrysopogon zizanioides* (L.) Roberty. belonging to the family Poaceae (RRCBI-mus87)
95. *Macrotyloma uniflorum* (Lam.) Verdc. belonging to the family Fabaceae (RRCBI-13600)
96. *Saxifraga stolonifera* Curtis belonging to the family Saxifragaceae (RRCBI mus320)
97. *Boerhavia diffusa* L. belonging to the family Nyctaginaceae (RRCBI-19937)
98. *Asparagus racemosus* Willd. belonging to the family Asparagaceae (RRCBI-19782)
99. *Tribulus terrestris* L. belonging to the family Zygophyllaceae (RRCBI-19790)
100. *Vitex negundo* L. belonging to the family Lamiaceae (RRCBI-19596)
101. *Piper longum* L. belonging to the family Piperaceae (RRCBI mus049)
102. *Tamarix gallica* L. belonging to the family Tamaricaceae (RRCBI mus318)
103. *Solanum virginianum* L. belonging to the family Solanaceae (RRCBI-17219)
104. *Sida cordifolia* L. belonging to the family Malvaceae (RRCBI-3275)
105. *Piper retrofractum* Vahl belonging to the family Piperaceae (RRCBI mus322)
106. *Inula racemosa* Hook.f. belonging to the family Asteraceae (RRCBI mus217)
107. *Rubia cordifolia* L. belonging to the family Rubiaceae (RRCBI-10554)
108. *Tinospora cordifolia* (Willd.) Miers belonging to family Menispermaceae (RRCBI-8976)
109. *Barleria prionitis* L. belonging to the family Acanthaceae (RRCBI-19601)
110. *Withania somnifera* (L.) Dunal belonging to the family Solanaceae (RRCBI-9103)
111. *Fagonia cretica* L. belonging to the family Zygophyllaceae (RRCBI-18403)
112. *Argyrea nervosa* (Burm. f.) Bojer belonging to the family Convolvulaceae (RRCBI-771)
113. *Anethum sowa* Roxb. ex Fleming belonging to the family Apiaceae (RRCBI mus325)
114. *Commiphora wightii* (Arn.) Bhandari belonging to family Burseraceae (RRCBI mus224)
115. *Cedrus deodara* (Roxb. ex Lamb.) G. Don of family Pinaceae (RRCBI mus315)
116. *Coriandrum sativum* L. belonging to the family Apiaceae (RRCBI-16806)
117. *Terminalia chebula* Retz. belonging to the family Combretaceae (RRCBI-11984)
118. *Ricinus communis* L. belonging to the family Euphorbiaceae (RRCBI-18532)
119. *Cassia fistula* L. belonging to the family Fabaceae (RRCBI-20005)
120. *Hedychium spicatum* Sm. belonging to the family Zingiberaceae (RRCBI mus317)
121. *Terminalia bellirica* (Gaertn.) Roxb. belonging to family Combretaceae (RRCBI-17012)
122. *Phyllanthus emblica* L. belonging to the family Phyllanthaceae (RRCBI-16184)
123. *Glycyrrhiza glabra* L. belonging to the family Fabaceae (RRCBI mus327)
124. *Solanum violaceum* Ortega belonging to the family Solanaceae (RRCBI-15906)
125. *Justicia adhatoda* L. belonging to the family Acanthaceae (RRCBI-19141)
126. *Calendula officinalis* L. belonging to the family Asteraceae (RRCBI mus321)  
 Plant samples submitted by Mr. Abhishek Marwari, PhD student, M. M. College of Pharmacy, Maharishi Markandeshwar, Mullana- Ambala, Haryana, has been authenticated as
127. *Bryophyllum pinnatum* (Lam.) Oken. of family Crassulaceae (RRCBI -7692)
128. *Sansevieria cylindrica* Bojer ex Hook. of family Asparagaceae (RRCBI mus314)
129. Plant sample submitted by Mrs. Anjali Garg, M. Pharmacy, M. M. College of Pharmacy, Maharishi Markandeshwar (Deemed to be University) Mullana- Ambala, Haryana, has been identified and authenticated as *Trapa natans* L. of family Lythraceae (RRCBI mus328)
130. Plant sample submitted by Mrs. Renulata, M. Pharmacy, M. M. College of Pharmacy, Maharishi Markandeshwar (Deemed to be University) Mullana - Ambala, Haryana, has been identified and authenticated as *Nyctanthes arbor-tristis* L. of family Oleaceae (RRCBI-19385)  
 Plant samples submitted by Mr. Abhay Pratap Singh, M. Pharm, Vivek College of Technical Education, Bijnor has been identified and authenticated as

131. *Acorus calamus* L. belonging to the family Acoraceae(RRCBI-18890)
132. *Ocimum tenuiflorum* L. belonging to the family Lamiaceae (RRCBI-19505)
133. Plant sample submitted by Nazmeen shah, M. Pharm, Department of Pharmacology, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Euphorbia tirucalli* L. belonging to the family Euphorbiaceae (RRCBI-20528)
134. Plant samples submitted by Sumithra R, M. Pharm, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as:
135. *Phyllanthus emblica* L. belonging to the family Phyllanthaceae (RRCBI-16184)
136. *Cyperus rotundus* L. belonging to the family Cyperaceae (RRCBI-mus316)
137. *Chrysopogon zizanioides* (L.) Roberty. belonging to family Poaceae (RRCBI-mus87)
138. *Eclipta prostrata* (L.) L. belonging to the family Asteraceae (RRCBI-8810)
139. *Hedychium spicatum* Sm. belonging to the family Zingiberaceae (RRCBI-mus317)
140. *Bacopa monnieri* (L.) Wettst. belonging to the family Plantaginaceae (RRCBI-19971)
141. *Saussurea costus* (Falc.) Lipsch. belonging to family Compositae (RRCBI- mus334)  
Plant samples submitted by Ramachandra T Sonawalkar, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as
142. *Syzygium aromaticum* (L.) Merr. & L.M.Perry of family Myrtaceae (RRCBI-mus151)
143. *Zingiber officinale* Roscoe belonging to the family Zingiberaceae (RRCBI-mus205)
144. *Elettaria cardamomum* (L.) Maton belonging to family Zingiberaceae (RRCBI-mus335)
145. Plant sample submitted by Harini L, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Equisetum hyemale* L. belonging to the family Equisetaceae (RRCBI-mus 329)  
Plant samples submitted by Divya B, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as
146. *Camellia sinensis* (L.) Kuntze belonging to the family Theaceae (RRCBI-mus 330)
147. *Coriandrum sativum* L. belonging to the family Apiaceae (RRCBI-mus326)
148. *Piper nigrum* L. belonging to the family Piperaceae (RRCBI-20086)
149. *Elettaria cardamomum* (L.) Maton belonging to family Zingiberaceae (RRCBI-mus335)
150. Plant sample submitted by Eshwar G, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been authenticated as *Artemisia nilagirica* (C.B.Clarke) Pamp. of family Compositae (RRCBI-mus331)
151. Plant sample submitted by Pooja Prasad A, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Salacia chinensis* L. belonging to the family Celastraceae (RRCBI-mus332)
152. Plant sample submitted by Soujanya S, M. Pharm, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Colocasia esculenta* (L.) Schott belonging to the family Araceae (RRCBI-mus333)
153. Plant sample submitted by Harsha R, M. Pharm, Department of Pharmacology, Faculty of Pharmacy, MSRUAS, Bangalore has been identified and authenticated as *Abrus precatorius* L. belonging to the family Leguminosae (RRCBI-19525)
154. Plant sample submitted by Shweta P, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Sonchus asper* (L.) Hill belonging to the family Compositae (RRCBI-17137)
155. Plant sample submitted by Shweta P, Department of Pharmacognosy, Government College of Pharmacy, Bengaluru has been identified and authenticated as *Pluchea tomentosa* DC. belonging to the family Compositae (RRCBI-mus336)
156. Plant sample submitted by Vikram Dilip Suthar, Department of Pharmacognosy, St John's pharmacy college, Bengaluru has been identified and authenticated as *Tragia involucrata* L. belonging to the family Euphorbiaceae(RRCBI-11968)
157. Plant sample(Stem) submitted by Sayan Kundu, Department of Pharmacognosy, St. John's

- Pharmacy College, Bengaluru has been identified and authenticated as *Musa paradisiaca* L. belonging to the family Musaceae (RRCBI-mus342)
- Plant samples submitted by Dr. Rashida Sadath, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore were authenticated as
158. *Terminalia chebula* Retz. (Full fruit) belonging to the family Combretaceae (RRCBI-11984).
159. *Terminalia chebula* Retz. (Fruit rind) belonging to the family Combretaceae (RRCBI-11984).
160. *Terminalia chebula* Retz. (Immature fruit) belonging to the Combretaceae (RRCBI-11984).
161. *Terminalia bellirica* (Gaertn.) Roxb. belonging to the family Combretaceae (RRCBI-17012).
162. *Phyllanthus emblica* L. belonging to the family Phyllanthaceae (RRCBI-16184)
163. Plant sample submitted by Dr. Arfa Begum, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore has been identified and authenticated as *Pimpinella anisum* L. belonging to the family Apiaceae (RRCBI-mus 343)
164. Plant sample submitted by Dr. Taseen Banu, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore has been identified and authenticated as *Juniperus communis* L. of family Cupressaceae (RRCBI-mus344)
- Plant samples submitted by Dr. Momina Siddiqui, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore were authenticated as
165. *Carthamus tinctorius* L. belonging to the family Compositae (RRCBI-mus345)
166. *Pimpinella anisum* L. belonging to the family Apiaceae (RRCBI-mus 343)
167. *Polypodium vulgare* L. belonging to the family Polypodiaceae (RRCBI-mus 346)
- Plant/animal sample submitted by Dr. Nadiya Khanum, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore has been identified and authenticated as
168. *Commiphora myrrha* (Nees) Engl. belonging to the family Burseraceae (RRCBI-mus337)
169. *Astragalus sarcocolla* Dymock belonging to the family Leguminosae (RRCBI-mus285)
170. Bees wax (*Mom*) (RRCBI-mus348)
171. *Pinus roxburghii* Sarg. belonging to the family Pinaceae (RRCBI-mus352)
172. *Shorea robusta* Gaertn. belonging to the family Dipterocarpaceae (RRCBI-mus338)
173. *Shibe Yamani* (Potash alum)- mineral (RRCBI-mus349)
174. *Pistacia lentiscus* L. belonging to the family Anacardiaceae (RRCBI-mus339)
- Plant sample submitted by Dr. Fathima Begum, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore were authenticated as
175. *Rosa damascena* Herrm. belonging to the family Rosaceae (RRCBI-mus263)
176. *Cymbopogon citratus* (DC.) Stapf belonging to the family Poaceae (RRCBI-mus340)
177. *Myrtus communis* L. belonging to the family Myrtaceae (RRCBI-mus341)
178. *Acacia nilotica* (L.) Delile (pods and leaves) belonging to Fabaceae (RRCBI-mus350)
- Plant samples submitted by Dr. Iram Ateeq, PG Scholar, Department of Ilmul Qabalat wa Amraze Niswan, National Institute of Unani Medicine, Bangalore were authenticated as
179. *Rosa damascena* Herrm. belonging to the family Rosaceae (RRCBI-mus263)
180. *Punica granatum* L. belonging to the family Lythraceae (RRCBI-13286)
181. *Acacia nilotica* (L.) Delile (pods and leaves) belonging to Fabaceae (RRCBI-mus350)
182. *Acacia nilotica* (L.) Delile (gum) belonging to the family Fabaceae (RRCBI-mus351)
183. *Cochlospermum religiosum* (L.) Alston belonging to the family Bixaceae (RRCBI-19994)
184. *Symplocos racemosa* Roxb. belonging to the family Symplocaceae (RRCBI-248)
185. *Tamarix gallica* L. belonging to the family Tamaricaceae (RRCBI-mus347)
186. *Butea monosperma* (Lam.) Taub. belonging to the family Leguminosae (RRCBI-4962)
187. Plant sample submitted by Pallavi B.S., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Zingiber officinale* Roscoe belonging to the family Zingiberaceae (RRCBI-mus205)
188. Plant sample submitted by Madhumitha E., VII Semester, St. John's Pharmacy College,

- Bengaluru, has been identified and authenticated as *Lantana camara* L. belonging to the family Verbenaceae (RRCBI-2523)
189. Plant sample submitted by Prema M., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Datura metel* L. of family Solanaceae (RRCBI-6784)
  190. Plant sample (Whole Plant) submitted by Ankita Beniwal, PhD Scholar, MMDU-Mullana, Haryana, has been identified and authenticated as *Nanorrhinum ramosissimum* (Wall.) Betsche of family Plantaginaceae (RRCBI-mus353)
  191. Plant sample submitted by Suma S., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Anethum graveolens* L. belonging to the family Apiaceae (RRCBI-mus354)
  192. Plant sample submitted by Chandan B.K., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Aegle marmelos* (L.) Corrêa belonging to the family Rutaceae (RRCBI-9076)
  193. Plant sample submitted by Surabhi S. M., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Terminalia arjuna* (Roxb. ex DC.) Wight & Arn. belonging to the family Combretaceae (RRCBI-11397)
  194. Plant sample submitted by Lalana M., Kaif Sultan, and Deepak K., VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Citrus reticulata* Blanco belonging to the family Rutaceae (RRCBI-mus355)
  195. Plant sample submitted by Mr. Abhishek Kumar, M. Pharm (Pharmacology) Student, Sunderdeep Pharmacy College, Ghaziabad, Uttar Pradesh has been identified and authenticated as *Morinda citrifolia* L. belonging to the family Rubiaceae (RRCBI-16288)
  196. Plant sample submitted by Priyanka K.C., Kannan M., Tapash Chowhn, VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Tagetes erecta* L. belonging to the family Asteraceae (RRCBI mus138)
  197. Plant sample submitted by Manish S., Shiek Arbaz, Prashanth Gowda, VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Curcuma longa* L. belonging to the family Zingiberaceae (RRCBI mus277)
  198. Plant sample submitted by Mr. Munishama Gowda Y.N., Ph.D. Scholar, Department of Pharmaceutical Chemistry, Government College of Pharmacy, Bengaluru, has been identified and authenticated as *Syzygium aromaticum* (L.) Merr. & L.M.Perry belonging to the family Myrtaceae (RRCBI mus108)
  199. Plant sample submitted by Mr. Gagana S., Student, Department of Pharmaceutical Chemistry, Government College of Pharmacy, Bengaluru, has been identified and authenticated as *Piper nigrum* L. belonging to the family Piperaceae (RRCBI-4644)  
Plant samples (Powder) submitted by Pruthvi nayak V, 2<sup>nd</sup> year M pharm, Department of pharmacology, M S Ramaiah University of applied sciences, Bengaluru, has been identified and authenticated as
  200. *Tamarindus indica* L. belonging to the family Leguminosae (RRCBI-5177).
  201. *Garcinia gummi-gutta* (L.) Roxb. belonging to the family Clusiaceae (RRCBI-7654)  
Herbarium samples submitted by Dr. Sumanth M.V, Senior Research Associate, Himalaya Wellness Company, Bengaluru, have been identified & authenticated as
  202. *Borassus flabellifer* L. belonging to the family Arecaceae (RRCBI-hm001).
  203. *Manilkara zapota* (L.) P. Royen belonging to the family Sapotaceae (RRCBI-hm002)
  204. *Medicago sativa* L. belonging to the family Fabaceae (RRCBI-hm003)
  205. *Mentha spicata* L. belonging to the family Lamiaceae (RRCBI-hm004)
  206. *Moringa oleifera* Lam. belonging to the family Moringaceae (RRCBI-hm005)
  207. *Phyllanthus tenellus* Roxb. belonging to the family Phyllanthaceae (RRCBI-hm006)
  208. *Phyllanthus urinaria* L. belonging to the family Phyllanthaceae (RRCBI-hm007)
  209. *Phyllanthus virgatus* G.Forst. belonging to the family Phyllanthaceae (RRCBI-hm008)

210. *Piper retrofactum* Vahl belonging to the family Piperaceae (RRCBI-hm009)
211. *Psidium guajava* L. belonging to the family Myrtaceae (RRCBI-hm010)
212. *Rosa damascene* Mill. Belonging to the family Rosaceae (RRCBI-hm011)
213. *Solanum nigrum* L. belonging to the family Solanaceae (RRCBI-hm012)
214. *Tridax procumbens* L. belonging to the family Asteraceae (RRCBI-hm013)
215. *Zea mays* L. belonging to the family Poaceae (RRCBI-hm014)
216. Plant sample submitted by Akash N, Lavanya G and Vaishnavi Gowda, VII Semester, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Hibiscus rosa-sinensis* L. belonging to the family Malvaceae (RRCBI-1131)
217. Plant sample submitted by Bhanita Saud, IV Semester, College of Pharmaceutical Sciences, Dayananda Sagar University, Bengaluru has been identified and authenticated as *Muntingia calabura* L. belonging to the family Muntingiaceae (RRCBI-12974)
218. Plant sample submitted by Ashitha Raghu P.K, Research Scholar CHRIST (Deemed to be University), Department of Life Sciences, Bengaluru has been identified and authenticated as *Stevia rebaudiana* (Bertoni) Bertoni belonging to the family Asteraceae (RRCBI-mus356)  
Plant samples submitted by Annika Maria Paul, Research Scholar, CHRIST (Deemed to be University), Department of Life Sciences, Bengaluru has been identified and authenticated as
219. *Justicia adhatoda* L. belonging to the family Acanthaceae (RRCBI-19141)
220. *Cordia dichotoma* G.Forst. L. belonging to the family Boraginaceae (RRCBI-19965)  
Plant samples submitted by Iyappan A., Yendapalli Pavithra, Sawej Saifi Z and Vishwajeet, VIII Semester, St. John's Pharmacy College, Bengaluru, has been authenticated as
221. *Mentha arvensis* L. belonging to the family Lamiaceae (RRCBI-mus111)
222. *Raphanus sativus* L. belonging to the family Brassicaceae (RRCBI-19474)
223. Plant sample submitted by Meghana R. VIII semester Student, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Trachyspermum ammi* (L.) Sprague belonging to the family *Apiaceae* (RRCBI-mus218)
224. Plant sample submitted by Meghana VIII sem. Student, St. John's Pharmacy College, Bengaluru, has been identified and authenticated as *Pimpinella anisum* L. belonging to the family *Apiaceae* (RRCBI-mus343)
225. Plant sample submitted by Mr. Kiran Kumar G. M. Pharm-IV semester Student, College of Pharmaceutical Sciences, Dayananda Sagar University, Bengaluru, has been identified and authenticated as *Syzygium cumini* (L.) Skeels belonging to the Myrtaceae (RRCBI-5418)
226. Plant sample submitted by M Kavita PG Student, Department of Pharmacology, PES University, Bengaluru, has been identified and authenticated as *Cocculus hirsutus* (L.) Diels. belonging to the family Menispermaceae (RRCBI-20120)
227. Plant sample submitted by Keerthi S Arali, PG Student, Department of Pharmacology, PES University, Bengaluru, has been identified and authenticated as *Amaranthus roxburghianus* H. W. Kung belonging to the family Amaranthaceae (RRCBI-mus357)
228. Plant sample submitted by Samyani D.P., Ph. D Scholar, Department of Microbiology and Biotechnology, Bangalore University, Bengaluru has been identified and authenticated as *Furcraea foetida* (L.) Haw belonging to the family Asparagaceae (RRCBI-mus359)  
Plant sample submitted by Shital Manohar Punekar, Ph.D. Scholar, Department of Microbiology and Biotechnology, Bangalore University, Bengaluru has been identified and authenticated as
229. *Rhizophora mucronata* Lam. belonging to the family Rhizophoraceae (RRCBI-20373).
230. *Rhizophora apiculata* Blume belonging to the family Rhizophoraceae (RRCBI-mus358).



**o) Any other information, Please specify:**

Submission of SMPU progress reports to CCRAS Hqrs., New Delhi:

- Prepared and submitted annual progress report of Survey of Medicinal Plants Unit to CCRAS Hqrs. for the period 2020-21.
- Monthly and quarterly reports of SMPU has been prepared and submitted for the year 2020-21.

Technical Review Meeting

- Prepared and presented the status and achievements of IMR projects and one NMPB project during technical review meeting held on 19.04.2021, 27.04.2021&25.01.2022through Google meet organized by CCRAS.
- Participated in Meeting of Coordinator, and Co-cordinators of Cultivation, Pharmacognosy, Medico-Ethnobotanical Survey and Microbiology organized by CARI, Guwahati on 30.10.2021and presented in brief about projects related to Medico-Ethnobotanical Survey at CCRAS Institutions.
- Presented the MEBS- Cultivation project work progress during review meeting of CCRAS-MPR- Cultivation focus group organised by RARI, Pune on 23.11.2021
- Presented and discussed about the MEBS- Anthology project work progress and new concept notes during Review meeting of MPR- MEBS focus group of CCRAS organized by SMPU, CARI, Bengaluru on 29.11.2021
- Attended MPR Meeting on New project proposals presentation organized by MPR Section, CCRAS Hqs on 07.02.2022, 08.02.2022 & 29.03.2022
- Attended MPR meeting on Project budget details organised by CCRAS, New Delhi .on 11.03.2022

Submission of Plant Photographs:

- As per the requirement from CCRAS Hqrs., submitted 10 good quality plant photographs available with SMPU to include in Anthology project.

Administrative work:

- Attended procurement process for HPTLC, nitrogen compressor and other accessories through GeM under Centre of Excellence (CoE).
- Involved in getting Ayurvedic trial medicine analysis of Astanglavana and Srikhandasava under Clinical Research Project on Madatyaya (Alcohol dependence).
- Member of Selection Committee for examination of fire accident and loss occurred at CARI, Bengaluru (O.O. F.No.1-2/2021/CARI/BNG/Estt./22 dated 06.04.2021). Detailed report prepared and submitted to CARI for necessary action
- Attended the meeting for selection of outsourcing agency to engage contractual staff, CARI, Bengaluru.
- Attended work related to name change and creation of account ID for CARI staff in GeM portal.
- Attended duty of 'travelling and accommodation' committee during workshops on "Research proposal writing for grant" and "Sensitization Programme for Sustainable Maintenance of NAMASTE Portal" program organized by CARI, Bengaluru.
- As 'Liaison Officer', verified the details of 'Reservation Roaster' prepared by CARI, Bengaluru (O.O.No.628/2021-22, dated 24.03.2022).
- Ms. Bhavana R, R.A.(Botany) has been involved in traing of biometric and maintenance of monthly attendance of CARI & CARIMMMR employees.

## INTRA MURAL RESEARCH PROJECT-I

Project title : Development of Micro Forest of Medicinal Plants by using Miyawaki Method of Plantation

Principal Investigator : Dr. V. Rama Rao, Research Officer (S-2) Bot.

Co-Investigator(s) : Dr. Raghavendra Naik, Research Officer (Ay.)  
Dr. Bhavya BM, Research Officer (Ay.)

Duration : 2 years

Date of Initiation : April 2019

### Primary objective:

- To conduct experimental trials to create mini forest of medicinal plants by using Miyawaki method
- To raise seedling of selected plants in the nursery
- To conserve ecological status of medicinal plants of Bengaluru region
- To study the feasibility of Miyawaki method for medicinal plants

### Secondary objective:

- To maintain biodiversity of the selected region
- To restore the land of RARIMD garden

### Budgetary details:

(F.No. 3-17/2019-CCRAS/Admn./IMR/Miyawaki/5936, dated 25.03.2019)

Budgetary breakup (year wise):	1 <sup>st</sup> year	2 <sup>nd</sup> Year	Total	Expenditure
Salary	1,38,000	1,80,000	3,18,000	3,17,801
Daily wage laborers as per the rates fixed by labor ministry of state				
Soil manure	1,00,000	32,000	1,32,000	1,11,773
Stationary /printing material	25,000	25,000	50,000	50,098
Contingency	1,50,000	1,50,000	3,00,000	2,90,714
<b>Grand Total</b>	<b>4,13,000</b>	<b>3,87,000</b>	<b>8,00,000</b>	<b>7,70,386</b>

1<sup>st</sup> Installment: Rs. 4,13,000/- released on 27<sup>th</sup> March 2019

(Ref: F.No. General/Expenditure/CCRAS/Hqrs./2018-19/1834 dtd. 27 March 2019)

2<sup>nd</sup> Installment: Rs. 3,87,000/- released on 24<sup>th</sup> August 2020

(Ref: F.No. 3-17/2019-CCRAS/Admn./IMR/Miyawaki/2271 dtd. 24 August 2020)

Total budget received: Rs. 8,00,000/-

1. The protocol viz. pre-preparation, during plants and post-plantation; followed for the experimental and controlled plantation:

### Land Development:

Approximately 2800 sq. ft land available behind the RARIMD admin block was demarcated for development of mini forest through Miyawaki Method of Plantation. The land cleaned for plastic waste and was leveled with help of JCB. Simultaneously, required quantity of biomass (cow dung and vermi-compost 3 tonn each) and cocopeat was procured from local vendors. With help of JCB, up to 2 ft soil excavated at the Miyawaki forest site and biomass was mixed and soil and leveled.

Plantation:

About 1650 plant samplings belonging to 31 species have been planted with 1 to 1.5 ft. gap at the selected site of Miyawaki at RARIMD, Bengaluru in June 2019. Cocopeat is applied as 'top layer' to retain moisture for long time and the entire covered with paddy straw to avoid evaporation of water from sunlight. This will help to maintain moisture content and nutritional profile of the soil. The samplings were provided supporting sticks to withstand heavy winds. Watering done frequently alternative days depending on the weather condition. Weeding was done frequently in the Miyawaki site.

At controlled site, the soil was just loosen and plantation done in conventional method. A gap of 3-4 ft. is maintained between the samplings. No soil manure is provided and the site is left open to sunlight.

- The observations and the pictorial comparison of both the plantation w.r.t. each planted sp. (high resolution photographs from the same distance and angle).

Ten randomly selected saplings of each species were marked for growth observation in experimental plot whereas due to limited number, all the samplings planted under control condition were measured for growth observation. Average sapling heights measured after plantation with 3 month interval.

Among the 31 species planted under experimental conditon, *Bauhinia purpurea* L., *Melia dubia* Cav., *Terminalia arjuna* (Roxb.) Wight & Arn., *Gmelina arborea*Roxb.,*Syzygium cumini* (L.) Skeels, *Ficus racemosa* L., *Ficus religiosa* L.,*Terminalia catappa* L., are showing very fast growth compared to other species.*Pterocarpus marsupium*Roxb.,*Butea monosperma* (Lam.) Taub., *Limonia acidissima* L., *Santalum album* L. are showing very slow growth.

Work summary:

Collected total 1745 saplings belonging to 31 species at nominal rate from forest nurseries located in and around Bengaluru city to plant under Miyawaki Project. Out of these, about 1560 saplings belonging to 31 species planted under experimental conditions whereas 90 saplings belonging to 22 species planted under control condition.

Sl. No.	Sanskrit name	Botanical name	No. of samplings	
			Experimental	Control
1.	Gambhari	<i>Gmelina arborea</i> Roxb.	64	06
2.	Bibhitaki	<i>Terminalia belirica</i> Wall.	85	05
3.	Raktacandana	<i>Pterocarpus santalinus</i> L.f.	77	10
4.	Asana	<i>Pterocarpus marsupium</i> Roxb.	85	05
5.	Jambu	<i>Syzygium cumini</i> (L.) Skeels	105	10
6.	Kakodumbar	<i>Ficus racemosa</i> L.	32	03
7.	Ashvatha	<i>Ficus religiosa</i> L.	33	02
8.	Kanchanara	<i>Bauhinia purpurea</i> L.	22	03
9.	Karanja	<i>Pongamia pinnata</i> (L.) Pierre.	94	06
10.	Simsapa	<i>Dalbergia latifolia</i> Roxb.	73	05
11.	Madhuka	<i>Madhuca longifolia</i> (J.Koenig ex L.) J.F.Macbr.	57	06
12.	Kapitha	<i>Limonia acidissima</i> L.	25	00
13.	Sigru	<i>Moringa oleifera</i> Lam.	33	02
14.	Nimba	<i>Azadirachta indica</i> A. Juss.	96	04
15.	Arjun	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	82	08
16.	Sitaphala	<i>Annona squamosa</i> L.	25	00
17.	-	<i>Swietenia macrophylla</i> King	15	00

18.	Chincha	<i>Tamarindus indica</i> L.	10	00
19.	Mahanimba	<i>Melia dubia</i> Cav.	50	00
20.	Svetacnadana	<i>Santalum album</i> L.	74	01
21.	Saka	<i>Tectona grandis</i> L.f.	39	01
22.	Palasha	<i>Butea monosperma</i> (Lam.) Taub.	50	00
23.	Kajutaka	<i>Anacardium occidentale</i> L.	49	01
24.	Panasa	<i>Artocarpus heterophylla</i> Lam.	28	02
25.	Amra	<i>Mangifera indica</i> L.	24	01
26.	Deshibadami	<i>Terminalia catappa</i> L.	25	00
27.	Amalaki	<i>Phyllanthus emblica</i> L.	72	03
28.	Chirabilva	<i>Holoptelia integrifolia</i> (Roxb.) Planch.	69	03
29.	Amruta	<i>Psidium guajava</i> L.	10	00
30.	Shami	<i>Acacia ferruginea</i> DC.	10	00
31.	Bakula	<i>Mimusops elengi</i> L.	47	03
Total =			1560	90

Present status: Completed (on 26<sup>th</sup> March 2021)

## INTRA MURAL RESEARCH PROJECT-II

Project title : Anthology of Survey Research Outcome from Medico Ethno Botanical Survey(MEBS)  
Principal Investigator : Dr. V. Rama Rao, Research Officer (S-2) Bot.  
Co-Investigator(s) : Dr. Raghavendra Naik, Research Officer (Ay.)  
: Mrs. Nazneen, R.A. (Botany)  
: Ms. Bhavana R, R.A. (Botany)  
: Mrs. Ritu Sinha, R.A. (Botany)  
Duration : 2 years  
Date of Initiation : 15<sup>th</sup> July 2021  
Date of Completion : Ongoing( 14<sup>th</sup> July 2023)  
Primary Objectives :

- To complete the survey gap of MEBS tour conducted since 2014- 2015 to 2018-2019 i.e. missing Photographs/GPS data/ Herbarium sheets/ LHT data (for Photograph/ Plant part)
- To conduct the survey tour for Identification of Un-identified Plant Species during the above survey.
- To prepare the monograph of MEBS data as per prescribed format.

### Budgetary and Expenditure details

S.No	Details	Amount	1 <sup>st</sup> installment	Expenditure
1	TA/DA To meet the lodging & boarding expenses for survey team during field visits	2,00,000	1,20,000	49,371
2	Contingency & Miscellaneous Expenses To meet the expenditure for purchase of computer, tray drier, survey, repair & service, printing, report preparation etc.	3,00,000	1,80,000	2,50,595
	Total	5,00,000	3,00,000	2,99,966

1<sup>st</sup> installment: Rs. 3,00,000/- released on 16<sup>th</sup> July 2019

(Sanction order: F.No. 3-24/2021-CCRAS/Admn/IMR/1782 Dtd. 14.07.2021)

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The study is proposed to complete in 2 years duration for compilation and final preparation of district wise monographs including fieldwork for documentation of photographs and other missing data, if any.

During the reporting period, three MEBS tours were conducted in Bagalkot & Raichur, Vijayapura and Kolar districts and documented about 225 plant photographs to including the final monographs.

Present status: Ongoing

### NMPB funded nursery Project

Project title : Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants  
 Funding Authority : National Medicinal Plants Board, New Delhi  
 Sanctioned budget : Rs. 93,750.00  
 Principal Investigator : Dr. V. Rama Rao, Research Officer (S-2) Bot.  
 Co-Investigator(s) : Dr. Raghavendra Naik, Research Officer (Ay.)  
 Duration : 3 years  
 Date of Initiation : October 2019  
 Expt. date of completion : September 2022

#### Objectives:-

- Survey, collection, propagation and multiplication, distribution and conservation of medicinal plants on sustainable basis.
- Awareness generation, motivation and training of students and farmers for nursery raising and cultivation of demand based medicinal plants.
- Conservation of identified medicinal plants through distribution to local farmers for cultivating in their fields.
- Create an educational center that will allow students, researchers and public to engage with native medicinal flora.
- Network building and collaboration among the various stakeholders dealing with medicinal plants.

#### Budgetary details:

1<sup>st</sup> & final installment: Rs. 93,750/- released on 19<sup>th</sup> October 2019

(Sanction order: F.No. Z.18017/187/Nur/KR-01/2018-19-NMPB, dated 16.10.2019)

Expenditure- Rs. 93, 643/- as on 28.03.2022

Balance – Rs.107 /- remitted to NMPB on 30.03.2022 via DD No. 78077

List of Medicinal Plants to be developed through the nursery project (as per the original proposal):

Sl. No.	Common name	Species name	Family	Target	Saplings raised up to Mar 2022
1.	Jackfruit tree	<i>Artocarpus heterophyllus</i> Lamk.	Moraceae	1000	500
2.	Nimba	<i>Azadirachta indica</i> A. Juss.	Meliaceae	1000	500
3.	Kovidara	<i>Bauhinia purpurea</i> L.	Fabaceae	1000	500
4.	Aragvadha	<i>Cassia fistula</i> L.	Fabaceae	1000	100
5.	Rose wood	<i>Dalbergia sissoo</i> Roxb.	Fabaceae	1000	Nil
6.	Karanja	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	1000	500
7.	Asoka	<i>Saraca asoca</i> (Roxb.) de Wilde	Fabaceae	1000	1500
8.	Gambhari	<i>Gmelina arborea</i> Roxb.	Lamiaceae	1000	500

Work progress (till date):

Sl. No.	Sanskrit Name	Botanical Name	Saplings raised	Saplings distributed	Saplings available
1.	Panasa	<i>Artocarpus heterophyllus</i> Lamk.	500	500	Nil
2.	Nimba	<i>Azadirachta indica</i> A. Juss.	500	500	Nil
3.	Kovidara	<i>Bauhinia purpurea</i> L.	500	500	Nil
4.	Aragvadha	<i>Cassia fistula</i> L.	100	100	Nil
5.	Karanja	<i>Pongamia pinnata</i> (L.) Pierre	500	500	Nil
6.	Asoka	<i>Saraca asoca</i> (Roxb.) de Wilde	1500	816	684
7.	Gambhari	<i>Gmelina arborea</i> Roxb.	500	463	37

Future Work Plan:

Collected seed material for Kovidara, Pongamia, Panasa, Nimba, Aragvadha for cultivation during 2022-23 (upto October 2022). Procured polythin nursery bags. Procurement of red soil, sand and farmyard manure to raise saplings under the proposed project is under progress.

Present status: Ongoing

### III. Summary of the work carried out during the reporting year:

- a) Number of Survey tour/s conducted with area and duration: 03 MEBS tours in Bagalkot & Raichur, Vijayapura and Kolar districts of Karnataka.
- b) Field numbers used in the register : 33 numbers
- c) Number of plant specimens collected : 33 specimens
- d) Number and name of plants identified : 33 plants
- e) Number of Herbarium specimens prepared : 165 specimens
- f) Number of specimens entered in the accession register : -
- g) Number of local tours conducted for collection of raw drugs : 15 tours
- h) Number of museum samples collected : nil
- i) Number of raw drugs collected : 143 crude drugs
- j) Quantity of raw drugs collected : 215.7 (fresh wt.)  
16.5 kg (dry wt.)
- k) Number of raw drugs supplied : 73 crude drugs
- l) Quantity of raw drugs supplied (dry weight) : 62.18 kg
- m) Folk-lore claims collected : nil
- n) Number of photographs shot : 225 photographs
- o) Resource generation (Rs.) : 57,500/-
- p) Publication/s : 02 published  
: 01 communicated



## II. 7.6. & 7.7 DRUG STANDARDIZATION RESEARCH (DSRU)

- a) Brief resume of the work carried out since inception indicating highlights and distinctions on the work done:

The unit is engaged in Chemico-Pharmacognostical studies on single drugs (plant/animal/mineral origin), compound formulations and related literature compilations in order to lay down Pharmacopoeial /Pharmacognostical standards.

Under Ayurvedic Preparation of compound formulations and chemical analysis, 149 formulations have been prepared and chemically analyzed. The chemical analysis involved physico-chemical studies, qualitative and quantitative estimations and chromatographic studies. Chemical analysis on 167 single drugs which are the ingredients of compound formulations, Pharmacognostical studies on 175 single drugs, TLC studies and Powder studies of 39 single drugs from the allotted list have been carried out. Chemical studies include physico- chemical, inorganic, Organic analysis, T.L.C and UV studies. Pharmacognostical studies include micro & macroscopic studies and in some cases powder analysis. Method of manufacture/ preparation has also been chemically standardized for few formulations. About 23 compound formulations were prepared and analyzed for periodical study and for the expiry period / Shelf life study including the effect of packing material, time and light factors on the constituents of the compound formulations. Under the allotted preparation of single drug Pharmacopoeial monograph, pharmacognostical studies (Macroscopic & microscopic characters and powder microscopy with camera Lucida drawings) of 10 drugs have been completed. Likewise quantitative parameters and TLC finger print profiles of drug powder, water -alcohol extract and water extracts of 10 drugs have been completed. Till date, monograph work for 60 compound formulations and 113 single drugs has been prepared and submitted to the Council.

During the reporting period, the following activities were done in the unit:

Sl. No.	Nature of Work	Description
1.	Repairing / servicing of Instruments in the Drug Standardization Research Unit	Some equipment like hot air oven, muffle furnace, digital weighing balance, microscope and double distillation unit in the drug standardization research unit were repaired and made functional.
2.	CoA of trial drugs Ashtanglavana and Srikhandasava under the project Madatyaya (alcohol dependant).	With reference to the instructions received from CCRAS vide letter number 27-41/2016-CCRAS/Tech./H.Q./426, dated - 22.042021, analysis of Ayurvedic Medicines Srikhandasava and Astanglavana under the project Madatyaya (alcohol dependant) were outsourced from following three different agencies: i) Auriga Research Lab, Bengaluru,

		<p>ii) AGSS Analytical and Research Lab. (P) Lab., Delhi,</p> <p>iii) Delhi Test House, Delhi.</p> <p>Reports received from the above mentioned laboratories were verified with the API, for compliance / non compliance, compiled in a format received from Dr. Arjun Singh, AD, Chemistry and submitted to Dr. Srinibas Sahoo, RO, Ayurveda, RARIM&amp;MMR and CCRAS for information &amp; necessary consideration</p>
3.	Procurement, receiving and installation of CAMAG HPTLC SYSTEM	<p>i) Online meeting organized by the Anchrom Pvt. Ltd. on 10<sup>th</sup> May 2021 was attended along with Section Head Dr. RamaRao, in the context of introducing the detailed technical specification and financial considerations along with working procedure of the HPTLC system</p> <p>ii) Uploaded the technical specification of HPTLC SYSTEM in the GeM portal, under the necessary guidance and monitoring of section head Dr. Rama Rao to receive the technical and financial bid for HPTLC SYSTEM from authorized vendors</p> <p>iii) Received the CAMAG HPTLC System in the Institute and monitored the opening / dissembling of this system</p> <p>iv) CAMAG HPTLC system was installed in the wet laboratory by the Engineer / Representative from Anchrom Pvt. Ltd. on 8<sup>th</sup>, 9<sup>th</sup> September and 15<sup>th</sup> September 2021</p>
4.	Training programme for CAMAG HPTLC system	<p>As per the schedule, received on 16<sup>th</sup> September 2021, from Anchrom Enterprises Pvt. Ltd. Mumbai regarding the training of HPTLC system, some chemicals were procured and other necessary arrangements were made</p> <p>Attended the HPTLC training during 21<sup>st</sup> to 25<sup>th</sup> September 2021, under the guidance of trainer Mr. Ramakant Yadav, from Anchrom Pvt.Ltd., Mumbai</p>
5.	Trial of HPTLC instrument and Necessary arrangements for HPTLC laboratory.	<p>Trials of HPTLC instrument was performed with the curacuma longa sample, as received from the representative of Anchrom Laboratory</p> <p>Prepared the list of all requirements i.e. chemicals, glassware, instruments and miscellaneous items for HPTLC laboratory</p>
6.	Necessary arrangements for HPTLC lab	<p>i) For the safe and significant operation of HPTLC instrument, necessary arrangements like aluminum sliding and partition work was planned and got done from the reputed vendor</p> <p>ii) For making the HPTLC lab Dust free, sealing of sliding glass windows in the HPTLC lab was planned and</p>

		<p>got done from the reputed vendors</p> <p>iii) UPS was installed in the HPTLC laboratory for obtaining sufficient back up needed for the HPTLC system</p>
7.	Experimental activities	<p>1) Leaves of <i>Breynia retusa</i> (Bahupraja) leaves (Family - Phyllanthaceae), Stem bark of <i>Acacia polycantha</i> Willd., (Family: Fabaceae) were received from the SMPU section of the institute</p> <p>2) Foreign materials from the above plant materials was removed, washed the stem bark with water, dried the above plant materials in sun light. Powdered the leaves of <i>Breynia retusa</i> and stored in the self-sealing polybag</p> <p>3) Total ash, acid insoluble, Loss on drying and extractive values (aqueous and alcoholic) of <i>Breynia retusa</i> (Bahupraja), Family-Phyllanthaceae, leaves were determined</p> <p>4) HPTLC analysis of chakramuni plant (<i>Sauropus androgynus</i> (L.) Merr.)</p> <p>Test sample of leaf powder of Chakramuni plant (<i>Sauropus androgynus</i> (L.) Merr.) was prepared and Hptlc analysis was performed with the necessary assistance of Ms. Shilpashree, SRF, Chemistry</p>
8.	Procurement of other instruments in DSRU.	<p>i) Some of the authorized agencies / vendors / suppliers were contacted to procure some of the basic equipment like micropipettes, pH meter, centrifuge, digital weighing balance, ultra sonicator and vortex in the drug standardization research unit of the Institute</p> <p>ii) Quotations received from the authorized vendors for above listed equipment were verified, compiled and submitted to store section for further procurement procedure</p>
9.	Procurement of chemicals, glaswares and miscellaneous items in the DSRU.	<p>i) Some of the authorized agencies / vendors / suppliers were contacted to procure some chemicals, glassware and miscellaneous items in the drug standardization research unit of the Institute</p> <p>ii) Quotations received from the authorized vendors for above listed equipment were verified and compiled.</p> <p>iii) Purchase orders prepared and submitted to respective suppliers for supply of the same</p> <p>iv) Received the chemicals, glassware and miscellaneous items as per the purchase orders</p>

10.	Drafting of research paper	Research paper entitled “Pharmacognosy and phytochemical screening of { <i>Benincasa hispida</i> (Thunb.) Cogn.} Seed is preparation
11.	Supply of crude drugs	<p>i) As per the directions received, crude drugs (total nos. 03) were received from the Institute’s herbarium and SMPU and supplied to the CARI Kolkata under the project “Pharmacognostical evaluation of medicinal plants cited in AFI excluding the plants mentioned in the API” with an intimation to DG, CCARS</p> <p>ii) Letters were communicated to CCRAS peripheral units Pune, Gwalior, Thrishur, Jhansi and Arunachal Pradesh for supply of crude drugs 03, 01, 01, 02, 01 respectively under the intimation to DG, CCRAS</p>
12.	Request letter to fill up the vacant positions	A request letter vide letter no. 2-1 / 2021 / CARI/ BNG / RCT/1150, dated - 11.11.2021 was prepared under the necessary guidance of A.D.I/c and communicated to DG, CCARS, New Delhi to fill up minimally required manpower against existing vacancies in the Drug Standardization Research Unit (DSRU) of the Institute, to reestablish the DSRU and also to enable the DSRU for bearing the NABL accreditation and some other standards of Quality Control Laboratories
13.	Notification for providing Quality control services by DSRU	<p>i) A notification vide letter no. 6-1/ CARI / BNG / Tech./2021-22/1147, dated 11.11.2021, was issued under the necessary guidance of A.D.I/c, to invite the relevant stakeholders / entrepreneur to provide them the quality control services of medicinal plant specimens, ayurvedic crude drugs and herbal extracts</p> <p>ii) The above notification was communicated with all the ayurvedic colleges and relevant institutions located in the close vicinity of our Institute and the territory</p>
14.	Proposal for the upgradation of DSRU	With reference to the technical meeting of CCRAS held on 12 <sup>th</sup> January, directions received from the Assistant Director In-charge of the Institute, for the upgradation of Institute’s laboratory facilities and filling the vacant positions, “proposal for the upgradation of DSRU” was prepared under the necessary guidance of A.D.I/c and submitted to CCARS
15.	Necessary arrangements for conducting Pharmacognosy training under DSRU	<p>i) As per the directions received from the Assistant Director In-charge, regarding arranging the training programme in the DSRU on “Pharmacognostical Methods of Drug Standardization” some necessary arrangements like procurement of chemicals, glassware and miscellaneous items were carried out. Installation of software of camera (catcam) in the microscope was also got done from the representative of Catalyst Biotech, Panvel, Mumbai</p> <p>ii) Somereagents (nos. 05) were prepared for carrying out</p>

		training on pharmacognostical standardization and physico-chemical analysis
16.	Attending of Pharmacognosy training	Received preliminary training on Pharmacognosy techniques under the guidance of Dr. TR Shantha
17.	Referencing of some research articles.	For pursuing of research activities in the lab, referencing work of some research articles and journals was carried out
18.	Review of all reports received from CARI Jhansi.	Reports of the CoE projects received from the CARI, Jhansi were reviewed and the important observations were brought into the notice of project head and the other associated staff
19.	Safe disposal of broken glassware and hazardous chemicals.	<p>i) The broken, unused glassware and hazardous chemicals were collected from the Chemistry section, weighed and placed separately in the waste disposal room for further safe disposal of the same.</p> <p>ii) Concerned vendor of RAMKAY group, Bengaluru was contacted and a letter was sent for the safe disposal of broken glassware and hazardous chemicals.</p>
20.	Miscellaneous Activities	<p>i) Drug Standardization Research Unit) department was absolutely non - functional after shifting to the new building, because of which all the commodities in the department were scattered and messy, hence, all the glassware, chemicals and miscellaneous articles kept in the DSRU were removed outside, cleaned and arranged properly with respective labelling for the ease of use and overall maintenance.</p> <p>ii) All the instruments and non-consumable items in the DSRU were verified with the records of store section and updated accordingly.</p> <p>iii) With reference to the email received from email, dated - 3<sup>rd</sup> May 2021, from Dr. A.K. Meena, A.D. Chemistry, CCRAS Unit, Gwalior (MP.), a list of all instruments with relevant details and latest status was submitted.</p> <p>iv) Electricity supply was upgraded in the DSRU for all the equipment to run with sufficient power supply.</p> <p>v) Plumbing work was got done for the easy and efficient operation of double distillation unit and Soxhlet extraction process.</p> <p>vi) Consumption records of chemicals, other consumables and log book to maintain the records of use of equipment was prepared and updated.</p>

**8. Literary Research:** No literary research was undertaken in 2021-22

**9. Family Welfare and RCH etc.:** No projects under taken in 2021-22

**10. List of Institute Ethical Committee**

S.No	Name with Contact no.	IEC status
1.	Dr. B A Venkatesh Prof & HOD, Dept. Of PG Studies in Shalakya Tantra, Sri Kalabyraveshwara Ayurvedic Medical College, Vijayanagar, Bengaluru. e-mail: <a href="mailto:drbavenkatesh@gmail.com">drbavenkatesh@gmail.com</a>	Chairman and Ayurvedic Scientist
2.	Dr. P.M. SatyamurthyHebbar Medical Officer, Govt. Ayurvedic Dispensary, Mukkodlu, Bengaluru (U) Dist. e-mail: <a href="mailto:drhebbar.satya29g@gmail.com">drhebbar.satya29g@gmail.com</a>	Member (Clinician/ Ayurvedic Scientist)
3.	Dr. Vikram S. Prof. & Head. Dept. of Rasashastra&Bhaishajya Kalpana, Sri Sri College of Ay. Sciences and Research, Bengaluru-560082. e-mail: <a href="mailto:drvikramayur@gmail.com">drvikramayur@gmail.com</a>	Member (Rasashastra Scientist)
4.	Dr. (Prof.) Geetha Professor, Dept.of Pharmacology, Bangalore Medical College and Research Institute, Fort, K.R. Road, Bangalore – 560002 e-mail: <a href="mailto:geetha25bmcricri@gmail.com">geetha25bmcricri@gmail.com</a>	Modern Scientist (Clinical Pharmacologist)
5.	Smt. Swayamprabha Advocate, 241, I Flr, Nandi Mansion, Aralegudi compound, Cottonpet road, Bengaluru. E mail: <a href="mailto:swayamprabha.hc@gmail.com">swayamprabha.hc@gmail.com</a>	Member (Legal Expert)
6.	Mrs. Rama Venkatesh Sri Sri Ravi Shankar VidyaMandir Trust, Bengaluru. Email: <a href="mailto:rama.venkatesh@ssrvvm.org">rama.venkatesh@ssrvvm.org</a>	Member (Social Scientist)
7.	Mr. G.Venkatesh 170, Agara Colony, Thataguni (PO), Kanakapura road, Bengaluru-560082. Email: <a href="mailto:comgvenkatesh@gmail.com">comgvenkatesh@gmail.com</a>	Community Representative
8.	Dr. Sulochana Bhat, Asst. Director Incharge, CARI, Bengaluru	Member Secretary

## 11. Library

i) No. of books available up to previous year : 1968

ii) No. of books purchased during the reporting year : 24

Sl. No.	Name of the book	Net amount excluding tax & Postal charges (Rs.)
1.	Swamy's complete manual on establishment and administration.	1480.00
2.	छुट्टीयात्रारियायतनियमोंकासंकलन	190.00
3.	संशोधितवेतननियम, 2016	275.00
4.	कार्यालयपद्धतिनियमपुस्तिका	435.00
5.	ई-कार्यालयपद्धति	500.00
6.	सूचनाकाअधिकार	260.00
7.	सामान्यवित्तीयनियमावली	300.00
8.	Right to information(RTI)	320.00
9.	Office procedure	435.00
10.	आयुर्वेदीयपदार्थविज्ञान	146.25
11.	अनुसंधानपद्धतिएवंस्वास्थ्यसांख्यिकी	126.75
12.	अभिनवशल्यविज्ञान-प्रथमभाग	146.25
13.	अभिनवशल्यविज्ञान – द्वितीयभाग	195.00
14.	नासचिकित्साविज्ञान	61.75
15.	मुख-खंठचिकित्साविज्ञान	58.50
16.	कर्णचिकित्साविज्ञान	35.75
17.	एलोपैथिकआयुर्वेदिकचिकित्सादारा	191.75
18.	चिकित्साकलिका	195.00
19.	रोगीरोगपरीक्षा	178.75
20.	नैदानिकपरिक्षणपद्धति	81.25
21.	नाडीपरीक्षा	16.25
22.	नाडीविज्ञानम	16.25
23.	आयुर्वेदीयअनुसंधानपद्धति	97.50
24.	अनुसंधानपद्धतिपरिचय	191.75
	Total: Rupees five thousand nine hundred and thirty four only	5934.00

## 12. Collaborative studies taken up by the Institute:

### Completed Collaborative Research Projects

#### 12.1. A Randomized Placebo Controlled Prospective Phase II Clinical Study of Ayurvedic coded drug 'AYUSH D' on Glycemic control in Prediabetic Subjects

Coordinating Institute: RARIMD, Bengaluru

##### 12.1.1. Objectives

- Primary Objective: To evaluate the clinical efficacy of 'AYUSH-D' as therapy for glycemic control in the management of pre-diabetes.
- Secondary Objective: To evaluate the clinical safety of 'AYUSH- D' as therapy for glycemic control in the management of pre-diabetes.

12.1.2. Study Design: Randomized Placebo Controlled Double blind Phase -2 Clinical Study.

12.1.3. Sample Size: 264 (66 in each centre)

12.1.4. Approval of IMR-F.No. 27-24/2015-CCRAS/Tech/Hq/589 dt. 26.05.2016

12.1.5. Duration of Study: 30 months

##### 12.1.6. Interventions

- a) Group 1: Diet & Lifestyle modification + AYUSH D (2 tablets of 1 gram each thrice daily) before meals.
- b) Group 2: Diet & Lifestyle modification + Placebo (2 tablets of 1 gram each thrice daily) before meals.

##### 12.1.7. Participating center along with PI:

Sl. No	Name of the Institute	Name of the Principal Investigator	Name of the Co-Investigator
1.	Regional Ayurveda Research Institute for Metabolic Disorders, Bangalore	Dr. Shubhashree M.N Research Officer (Ay.) Dr.Kishore Kumar R., RO (Ay.) Co-PI - Dr. Raveendra K R Prof. of Medicine, BMCRI, Bengaluru.	Dr. C. R. Jayanthi Principal & Professor, Dept of Pharmacology, BMCRI, Bengaluru Dr. RaghavendraNaik Research Officer (Ay.)
2.	All India Institute of Medical Sciences (AIIMS), New Delhi	Dr. Rajesh Khadgawat Professor, Department of Endocrinology & Metabolism (DoEM), All India Institute of Medical Sciences (AIIMS)	Dr. Vikram Naval, Prof., Dept of Medicine, AIIMS, New Delhi Dr. Yashdeep Gupta, Asst. Prof., Dept. of EM, AIIMS, New Delhi. Dr. Amit, CARICD, New Delhi.
3.	RA Podar Ayurved Medical College, Mumbai	Prof. K R Kohli, Director, Directorate of AYUSH, Maharashtra, RA Podar Ayurved Medical College, Mumbai.	Dr. Vyankatesh K. Shivane Mumbai Dr. Manohar Gundetti, RRAP Central Ayurveda Research Institute for Cancer Mumbai
4.	KAHER's Shri BMK Ayurveda	Dr. Basavaraj R Tubaki Professor & Head, Dept of	Dr. Kiran Kumar V Mutnali.



	Mahavidyalaya, Belgavi, Karnataka	Kayachikitsa, KLEU's Shri BMK Ayurveda Mahavidyalaya Belgavi	Assoc. Prof. of Kayachikitsa Dr.AmarPatil, Asst Professor, Dept of Medicine, USM-KLE IMP, Belgavi Karnataka Dr. Rinky Devi Thakur, RO (Ay.), RARIMD Bengaluru
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12.1.8. Date of IEC approval: 15.09.2017

12.1.9. CTRI Registration/Reference (for clinical trials): CTRI/2017/11/010716dt.  
30/11/2017

12.1.10. Date of initiation: 09/10/2018

12.1.11. Budget allocated- Total Sanctioned Budget

Sl. No.	Study Centre	1 <sup>st</sup> Installment	2 <sup>st</sup> Installment*	3 <sup>rd</sup> Installment*	Total
1.	RARIMD Bengaluru	31,11,800/-	13,61,800/-	5,71,200/-	50,44,800/-
2.	AIIMS, New Delhi	16,11,800/-	13,61,800/-	5,71,200/-	35,44,800/-
3.	RA Podar AMC, Mumbai	16,11,800/-	13,61,800/-	5,71,200/-	35,44,800/-
4.	KAHER's BMK AMC Belgavi	15,78,200/-	13,28,200/-	5,54,400/-	34,60,800/-
	Total	79,13,600/-	54,13,600/-	22,68,000/-	1,55,95,200/-

Funds received by RARIMD from CCRAS

- Total sanctioned Budget Amount of 1, 55, 95,200/- (for all installments and all centers as described above) has been received by RARIMD Bengaluru from CCRAS vide ltr.no. 3-3/2017/CCRAS/Admin/PS/949 dt. 10.07.2017. Receipt of fund was on 26.12.2017.

12.1.12. Installment wise release of funds

- Funds disbursed by RARIMD Bengaluru to Study centers

Sl. No.	1 <sup>st</sup> Installment*	Amount	Funds released order	Date
1.	1st (AIIMS New Delhi)	16,11,800/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./333	19.06.2018
2.	1st (RA Podar Mumbai)	16,11,800/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./1035	22.02.2018
3.	1st (KAHER's BMK AM Belgavi)	15,78,200/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./1038	23.02.2018

Sl. No.	2 <sup>nd</sup> Installment	Amount	Date
1.	AIIMS New Delhi	13,61,800/-	17.09.2019
2.	RA Podar Mumbai	13,61,800/-	
3.	KAHER's BMK AM Belagavi	13,28,200/-	

#### 12.1.13. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	deviation Causes (if any)
1	Preparatory Phase	4 months - June– Sept 2018	Achieved	Nil
2	Recruitment phase	14 months – Oct- Nov 2019	Achieved	Nil
3	Follow up phase	8 months - Dec 2019 – July 2020	Achieved	Nil
4	Data analysis phase	4 months - Aug 2020 – Nov 2020	Achieved	Nil

#### 12.1.14. Current status:

Sl. No.	Participating Centre	cases enrolled	cases completed	Drop outs
1.	RARIMD, Bengaluru	65	57	08
2.	AIIMS, New Delhi	11	07	04
3.	RA PodarAMC, Mumbai	33	13	20
4.	Shri BMK AMC, Belagavi,	66	41	25
	Total	175	118	57

#### 12.1.15. Relevant information, if any: Nothing Specific

### 12.2. “A Randomized Placebo Controlled Phase -2 Clinical Study of an Ayurvedic Coded Drug ‘AYUSH D’ in the Management of Type 2-Diabetes Mellitus as add on Therapy to Metformin”

Coordinating Institute: RARIMD, Bengaluru

#### 12.2.1. Objectives:

Primary: To evaluate the clinical efficacy of AYUSH- Das add on therapy to Metformin for Glycemic control in the management of Type 2 Diabetes Mellitus.

Secondary: To evaluate the clinical safety of AYUSH- D as add on therapy to Metformin in type 2 Diabetes Mellitus.

#### 12.2.2. Study Design: Randomized Placebo Controlled Double blind Phase -2 Clinical Study.

#### 12.2.3. Sample Size: 264 (66 in each centre)

#### 12.2.4. Approval of IMR-F.No. 27-24/2015-CCRAS/Tech/Hq/589 dt. 26.05.2016

#### 12.2.5. Duration of Study: 30 months

#### 12.2.6. Interventions

- a. Group 1: Metformin in the dose as optimized to each individual subject at the time of screening will be continued or 500 mg dose upto 3 times a day in drug naïve patients & 2 tablets of AYUSH D 1 gm. each x 3 times /day before food with lukewarm water with Diet & Lifestyle modification for 24 weeks

- b. Group 2: Metformin in the dose as optimized to each individual subject at the time of screening will be continued or 500 mg dose upto 3 times a day in drug naïve patients and 2 tablets of Placebo 1 gm. each x 3 times /day with Diet & Lifestyle modification before food with lukewarm water.

12.2.7. Participating centre along with PI:

Sl. No.	Institute Name	Name of the Principal Investigator	Name of the Co-Investigator
1.	RARIMD Bengaluru and Bangalore Medical college & Research Centre (BMC&RI)	Dr.Shubhashree M.N, RO (Ay.) Dr.Kishore Kumar R., RO (Ay.) Co-PI - Dr.Raveendra K R Professor, Dept of Medicine, BMCRI, Bengaluru	Dr. C. R. Jayanthi Prof. of Pharmac. BMCRI Dr. Bhavya BM, RO (Ay.) RARIMD Bengaluru
2.	All India Institute of Medical Sciences (AIIMS), New Delhi	Dr. Rajesh Khadgawat Professor, Dept. of Endocrinology & Metabolism (Dept. of E & M), All India Institute of Medical Sciences (AIIMS) New Delhi	Dr. Vikram Naval , Prof. of Medicine, AIIMS, New Delhi Dr Yashdeep Gupta, Asst Prof. of E&M, AIIMS, Dr. Amit, RO (Ay.) CARICD, New Delhi
3.	RA Podar Ayurved Medical College, Mumbai	Prof. K R Kohli, Director, Directorate of AYUSH, Maharashtra, RA Podar Ayurved Medical College, Mumbai	Dr.Vyankatesh K. Shivane, Dadar East, Mumbai Dr. Manohar Gundetti, RO (S-2, Ay.) RRAPCARIC, Mumbai
4.	Rajiv Gandhi Government Post Graduate Ayurveda College, Paprola	Dr. Vijay Chaudhary, Prof. of Kayachikitsa, Rajiv Gandhi Government Post Graduate Ayurveda College Paprola, District Kangra, Himachal Pradesh	Dr. Ghansham Dass Mehta, Retd. CMO Government of Himachal Pradesh Dr.Chris Antony, RO (Ay), RARIND Gandhi Bhawan, Mandi

12.2.8. Date of IEC approval: 15.09.2017

12.2.9 CTRI Registration (for clinical trials): CTRI/2017/11/010716 dated 30/11/2017

12.2.10. Date of initiation: 10/10/2018

12.2.11. Budget allocated:

Sl. No.	Study Centre	1 <sup>st</sup> Installment	2 <sup>nd</sup> Installment*	3 <sup>rd</sup> Installment*	Total
1.	RARIMD Bengaluru	31,11,800/-	13,61,800/-	5,71,200/-	50,44,800/-
2.	AIIMS, New Delhi	16,11,800/-	13,61,800/-	5,71,200/-	35,44,800/-
3.	RA Podar AMC, Mumbai	16,11,800/-	13,61,800/-	5,71,200/-	35,44,800/-
4.	RGGPGAC, Paprola	15, 44,600/-	12,94,600/-	5,37,600/-	33,76,800/-
	Total	78,80,000/-	53,80,000/-	22,51,200	1,55,11,200

12.2.12. Installment wise release:

Funds received by RARIMD from CCRAS

Sl. No.	Installment	Amount	Sanction order	Funds received date
1	1st (RARIMD Bengaluru)	31,11,800/-	F. No.3-2/2017- CCRAS/Admin/Metformin/2580 dt. 18.12.2017	20.12.2017
2	1st (AIIMS New Delhi)	16,11,800/-	-do-	
3	1st (RA Podar Mumbai)	16,11,800/-	-do-	
4	1st (RGGPGAC, Paprola)	15, 44,600/-	-do-	
	Total	78,80,000/-		

\*\*2nd Installment of Rs. 37,18,200/- received at RARIMD, Bengaluru. for 3 centers, AIIMS New Delhi, RA Podar Mumbai & RGGPGAC, Paprola on 10-02-2020.

Funds disbursed by RARIMD Bengaluru to Study centers

Sl. No.	1 <sup>st</sup> Installment	Amount	Funds released order	Date
1.	1st (AIIMS New Delhi)	16,11,800/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./333	19.06.2018
2.	1st (RA Podar Mumbai)	16,11,800/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./1035	22.02.2018
3.	1st (RGGPGAC, Paprola)	15, 44,600/-	F. No. 4-1/2018- RARIMD/BNG/Account Misc./1047	26.02.2018

Sl. No.	2 <sup>nd</sup> Installment	Amount	Date
1.	AIIMS New Delhi	12,61,800/-	10.02.2020
2.	RA Podar Mumbai	12,61,800/-	10.02.2020
3.	RGGPGAC, Paprola	11, 94,600/-	10.02.2020

12.2.13. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1.	Preparatory Phase	4 months - June 2018 – Sept 2018	Achieved	Nil
2.	Recruitment phase	14 months - Oct 2018 – Nov 2019	Achieved	Nil
3.	Follow up phase	8 months - Dec 2019 – July 2020	Achieved	Nil
4.	Data analysis phase	4 months - Aug 2020 – Nov 2020	Achieved	Nil

#### 12.2.14. Current status

Sl. No.	Participating Centre	Cases enrolled	Cases completed	Drop outs
1.	RARIMD, Bengaluru	66	54	12
2.	AIIMS, New Delhi	66	57	09
3.	RA PodarAMC, Mumbai	54	28	26
4.	RGGPG Ayurveda College, Paprola	43	33	10
	TOTAL	229	172	57

#### 12.3. "Evaluation of add on efficacy & safety of An Ayurvedic Formulation in the Management of Dengue Fever & Prevention of its complications - A Double Blind Clinical Study"

Coordinating Institute: RARIMD, Bengaluru

Coordinating Officer: Dr.Shubhashree M.N, R.O. (Ay.)

12.3.1. Objectives: Primary Objective: To test the efficacy and safety of the trial formulation.

12.3.2. Study Design: Double blind, Placebo controlled, Prospective Clinical Trial

12.3.3. Sample Size: 150 (75 trial & 75 placebo; both groups receives standard care)  
100 (50 trial & 50 placebo; both groups receives standard care)

12.3.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date: Approval of 4<sup>th</sup> IMR– PEMC, F.No.27-3/2018-CCRAS/Tech./Hq, dated 19<sup>th</sup> June 2018.

12.3.5. Duration of Study: 2 year

12.3.6. Interventions: Patients will receive standard Dengue treatment plus trial drug/placebo 700mg (350mg×2 Tablet), twice daily for 10 days. Randomization has been done by CCRAS

12.3.7. Participating centre along with PI:

SN	Name of participating centre	Name of PI and Co-I
1.	KLEU Shri BMK Ayurveda Mahavidyalaya, Belagavi	Principal Investigator. • Dr. B.S. Prasad, Principal, Co- Investigators • Dr. V. A. Kothiwale, Vice principal, Prof.of General Medicine, Dean, Faculty of science (Inter-disciplinary studies /Research) JNMC, KLE University, Belagavi • Dr. S. L. Hoti, Scientist G, ICMR -National Institute of Traditional Medicine -NITM), Nehru Nagar, Belagavi. • Dr. M.V. Jali, M.D & CEO, Dr. Prabhakar Kore Multispecialty Hospital & Medical Research Centre, Nehru Nagar, Belagavi. • Rekha Patil, Prof & HOD, Dept. of General Medicine, JNMC, Belagavi. • S. Unger, Scientist D, ICMR - NITM), Belagavi. • Dr. Sukumar Nandigoudar, Reader, Dept. of Kayachikitsa, Officer in charge, MRC, BMK Ayurveda Mahavidyalaya, Belagavi

2.	Sri Devaraj Urs Academy And Higher Education and Research Kolar	Principal Investigator <ul style="list-style-type: none"> <li>• Dr.Nitin Kumar Patil, Assoc. Prof and Head Dept. of Integrative Medicine, Shri Sri Devaraj Urs Academy And Higher Education and Research Kolar</li> </ul> Co- Investigators <ul style="list-style-type: none"> <li>• Dr.Shubhashree M.N,RO (Ay.) RARIMD Bengaluru</li> <li>• Dr. Prabhakar K., Prof. of Gen Medicine, SDUMC Lokar</li> <li>• Dr. S L Hoti, Director In-charge ICMR NITM Belagavi</li> <li>• Dr. AVM Kutty, Registrar, SDUAHER, Kolar</li> </ul>
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12.3.8. Date of IEC approval: - 25.03.2017; EC Approved Protocol: BMK/17/ESP/05; Renewal was obtained on 19.02.2019.

Kolar centre: SDUAHER/KLR/CEC/18/2017-18, dated 22nd Jan 2018.

12.3.9. CTRI Registration/Reference (for clinical trials): CTRI/2017/11/010586 Dt. 22.01.2018

12.3.10. Date of initiation: Initiated form 1<sup>st</sup> Sep 2017 (KLE), 1 August 2018 (Sri Devaraj Urs Academy and Higher Education and Research/ Kolar)

12.3.11. Budget allocated:

Sl. No.	Centres	1 <sup>st</sup> Installment	2 <sup>st</sup> Installment	Total
1	ICMR-NITM Belagavi	13, 07,795/-	12,98,200/-	26,05,995/-
2	KLEU Shri BMK Ayurveda Mahavidyalaya, Belagavi	5, 19,020/-	5,06,200/-	10,25,220/-
3	Jawahar Lal Nehru Medical College Belagavi	31, 99,030/-	29, 93, 062/-	61,92,092/-
Total (Belagavi)		50,25,845/-	47,97,462/-	98, 23,307/-
4	Sri Devaraj Urs Academy And Higher Education & Research Kolar	12, 60,000/-	9,99,000/-	22, 59,000/-
Grand Total		62,85,845/-	57,96,462/-	1,20,82,307/-

12.3.12. Installment wise received and released

Funds received by RARIMD from CCRAS

Sl. No.	Installment	Amount in Rs.	Sanction order	Funds received date
1	1 <sup>st</sup> (Belagavi Centre)	50,25,845	F. 3-42/2017/CCRAS/Admin /Dengue/1303 Dt. 02.08.2017	07.08.2017
2	2 <sup>nd</sup> (Belagavi Centre)	47,97,462	F. No. CB/Exp./CCRAS/Hq./2018-19/2000 Dt. 03.04.2019	30.03.2019
3	1 <sup>st</sup> (Kolar centre)*	12, 60,000/-	F. No. 3-14/2017-CCRAS/Admin/Dengue/388, Dt. 28.03.2018	03.04.2018
4	2 <sup>nd</sup> (Kolar centre)*	9,99,000/-	F. No. 3-14/2017-CCRAS/Admin/Dengue/6365, Dt. 01-01-2020.	10-02-2020

Funds disbursed by RARIMD Bengaluru to ICMR-NITM for onward transmission to Belagavi and Kolar centers

Sl. No.	Installment	Amount	Funds released order	Date
1	1 <sup>st</sup> (Belagavi Centre)	50,25,845	F. No. 6-63/2017/RARIMD/BNG/Tech /Dengue/412	10.08.2017
2	2 <sup>nd</sup> (Belagavi Centre)	47,97,462	F.No. 6-14/2017-CCRAS/Admn/Dengue/6086	29.03.1019
3	1 <sup>st</sup> (Kolar centre)	12, 60,000	F. No. 6-63/2018/RARIMD/BNG/Tech. /Dengue/26	09.04.2018
4	2 <sup>nd</sup> (Kolar centre)*	9,99,000/-	F. No. 3-14/2017-CCRAS/Admin/Dengue/6365, Dt. 01-01-2020.	10-02-2020

12.3.13. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved
1.	150 (Belagavi)	24 months	Achieved
2.	100 (Kolar)	24 months	Stopped at 89 due to COVID

12.3.14. Current status: Data collection (clinical intervention) is under progress (Kolar centre).

Sl.No.	Participating Centre	enrolled cases	completed cases	Drop outs
1.	KLEU Shri BMK Ayurveda Mahavidyalaya, Belagavi	150	141	09
2.	Sri Devaraj Urs Academy And Higher Education/ Kolar	89	76	02

12.3.15. Relevant information, if any: Nothing Specific

### Collaborative studies monitored by the Institute

#### 12.4. Name of Project: Validation and Reliability Testing of Ayurvedic Diagnostic Tools

12.4.1. Participating center along with PI: Sri Dharmastala Manjunatheshwara College of Ayurveda and Hospital Hassan, PI- Dr. Girish K J

Sl. No.	Name of the Institute	Name of the Principal Investigator	Name of the Co-Investigator
1.	SDM Hassan	Dr. Girish K J	Dr. Shubashree M N

12.4.2. Date of IEC approval: 04/12/2019

12.4.3. CTRI Registration/Reference (for clinical trials): Not approved

12.4.4. Date of initiation: 13/02/2020

12.4.5. Budget allocated: 17,76,000.00

12.4.6. Installment wise release:

Sr. No.	Study Centre	1 <sup>st</sup> Installment	2 <sup>st</sup> Installment*	3 <sup>rd</sup> Installment*	Total
1.	SDM Hassan	5,92,000.00	1,96,000.00	-	7,84,000.00

12.4.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	deviation Causes (if any)
1	Kasa	Feb-2020 to Oct- 2020	Achieved	---
2	Shwasa	Feb-2020 to Sept-2020	Achieved	---
3	Jwara	Aug-2020 to Sept-2020	Achieved	---
4	Grahani	Sept-2020 to Jan-2021	Achieved	---
5	Prameha	Feb-2021 to May-2021	Achieved	---
6	Pandu	Ongoing	Ongoing	-

12.4.8. Current status (Prameha): Ongoing

Sl. No.	Target	Cases enrolled	Cases completed	Drop outs	Cases continued
1.	30	30	30	01	00

12.4.9. Current status (Pandu): Ongoing

S. No.	Target	Cases enrolled	Cases completed	Drop outs	Cases continued
1.	30	24	23	01	00

12.4.10. Relevant information, if any: Nothing specific

**12.5. Name of Project: "Evaluation of Hepatoprotective activity of PTK as an add on therapy in the patients of Tuberculosis on ATT- A Double blind Randomized control clinical study"**

12.5.1. Participating centre along with PI:

Sl. No.	Name of the participating centre	Name of PI, Co investigators
1	KAHERs Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belagavi – 590003	1. PI- Dr Ashok Patil PhD (Ayu) 2. CoI-Dr Swarda Uppin MD (Ayu)
2	KAHER's JN Medical College, Nehru nagar, Belagavi - 590010	3. CoI -Dr Bhagyashri Patil M.D. (Chest)
3	CARI Bengaluru	4. CoI-Dr. Shashidhar H. Doddamani, RO (Ay.)

12.5.2. Date of IEC approval: 30-7-2021 AND 31-07-2021

12.5.3. CTRI Registration/Reference (for clinical trials): 12-11-2021

12.5.4. Date of initiation: 15-11-2021

12.5.5. Budget allocated:

1. KAHER's Shri BMK Ayurveda Mahavidyalaya, Belagavi- Rs.56,39,830
  2. Central Ayurveda Research Institute (CARI) , Bengaluru -10,50,000
- Grand Total -Rs. 66,89,830/-



12.5.6. Installment wise release:

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1.	Rs.5,50,000/-	Sanctioned order no: 1096/2020-21	25-03-2021	31-03-2021

12.5.7. Chronological timeline & deliverables:

Sl. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	Pre –Trial period	6 month	Achieved	--
2	Recruitment (150 patients)	27 months	ongoing	--

12.5.8. Current status:

Sl. No.	Participating Centre	Target	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	KAHERs Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belagavi - 590003	150	07	--	01	06

12.5.9. Relevant information, if any:

**12.6. Name of Project: “Evaluating the Efficacy of Ayurvedic Intervention as Add on to Conventional Treatment and Explore the Interaction of Epigenetics, Neuro/Gut Biomarkers and Neuroimaging in Pediatric ADHD (Attention Deficit Hyperactivity Disorder)”.**

**12.6.1. Participating center along with PI:**

S.No.	Name of the participating center	Name of PI, Coinvestigators
1	National Institute of Mental Health and Neurosciences, Bengaluru	Principal Investigator Dr John Vijay Sagar. MBBS., MD Professor and Head, Department of Child and Adolescent Psychiatry, NIMHANS, Bengaluru.  Co-Principal Investigator Dr Kishore Kumar R. BAMS., MD., PhD Assistant Professor of Ayurveda, Department of Integrative Medicine, NIMHANS, Bengaluru.  Project Co-Ordinator – Dr Sulochana Bhat. BAMS., MD Assistant Director in-charge,

		<p>Central Ayurveda Research Institute for Metabolic Disorders.</p> <p>Co-Investigator (s)</p> <p>1. Dr Srinibash Sahoo BAMS., MD., PhD Research office (Ayurveda) Central Ayurveda Research Institute for Metabolic Disorders, Bengaluru.</p> <p>2. Dr Umesh C. BAMS., MD Scientist – C (Ayurveda), Department of Integrative Medicine, NIMHANS</p> <p>3. Dr K Gokulakrishnan, BSc., MSc., PhD Assistant professor, Department of Neurochemistry, NIMHANS</p> <p>4. Dr Monojit Debnath. BSc., MSc., PhD Additional professor Department of Human Genetics NIMHANS</p> <p>5. Dr Rajendra K M, MBBS., DPM., MD., DM Assistant professor, Department of Child and Adolescent Psychiatry, NIMHANS</p> <p>6. Dr B N Roopesh. BA., MSc., M Phil., PhD. Additional professor, Department of Clinical Psychology NIMHANS</p> <p>7. Dr Shivakumar V MBBS., PhD Scientist – D Department of Integrative Medicine NIMHANS</p> <p>8. Dr Bharatha Holla. MBBS., MD., PDF. Assistant Professor of Psychiatry Department of Integrative Medicine NIMHANS</p>
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12.6.2. Date of IEC approval: 16.04.2021

12.6.3. CTRI Registration/Reference (for clinical trials): CTRI/2021/07/035308

12.6.3. Date of initiation: 12.01.2022

12.6.4. Budget allocated: 91,18,200/-

#### 12.6.5. Installment wise release:

S. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	First	No.984/2020-21 (F.No. 3-106/2019-CCRAS/Admn./IMR	3/3/2021	31/03/2021

#### 12.6.6. Chronological timeline & deliverables:

Sr. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	Preparation and finalization of case reporting formats.	0-6 Months	Achieved	-
2	Ethics permission	0-6 Months	Achieved	-
3	CTRI Registration	0-6 Months	Achieved	-
4	MOU	0-6 Months	Achieved	-
5	Procurement of Trial Drugs.	0-6 Months	Achieved	-
6	Procurement of lab kits and standardization of the procedures.	0-6 Months	Achieved	-
7	Recruitment of SRF (Ayurveda and life science).	0-6 Months	Achieved	-
8	Purchase of Neuropsychological assessment scales and training.	0-6 Months	Achieved	-
9	Recruitment of the subjects	6-12 months	underway	-

#### 12.6.7. Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	NIMHANS, Bengaluru	09	00	00	09

12.6.8. Relevant information, if any: Amendment for changes in inclusion criteria, exclusion criteria was present to the ethics committee on 22.03.2022 and same has been approved.

### **COLLABORATIVE RESEARCH PROJECTS YET TO BE INITIATED**

**12.7.** Name of Project: A Double blind double dummy prospective randomized controlled study to evaluate the efficacy of classical Ayurveda management versus Methotrexate in Rheumatoid Arthritis (AMRA Study)

#### **12.7.1. Objectives:**

- Primary Objective: To compare the efficacy of Ayurvedic management vs Methotrexate in participants of Rheumatoid arthritis.
- Secondary Objectives: To evaluate the safety of Ayurvedic management in participants of Rheumatoid arthritis.

12.7.2. Study Design: A Double blind double dummy prospective randomized controlled study to evaluate the efficacy of classical Ayurveda management versus Methotrexate in Rheumatoid Arthritis (AMRA Study) in 3 centers..

- Purpose : Treatment
- Level of study :OPD
- Masking : Double blind double dummy
- Control : Controlled
- Timing : Prospective
- End Point : Safety and efficacy
- No. of Groups : Two
- Sample Size: 240 patients (120 in each group)
- Centres: Multicentric.

12.7.3. Sample Size: 240 (Trial group: 120 and Placebo group: 120).

12.7.4. Approval of IMR-PEMC, Annual Action Plan, RFD, etc. along with date: F.No 3-116/2019-CCRAS/Admin/IMR/4783 dated 18<sup>th</sup> Nov 2019

12.7.5. Duration of Study: 2 Years

12.7.6. Interventions:

Group-1 Ayurveda plus Methotrexate ( MTX) placebo

Group-2 Methotrexate (MTX) plus Ayurveda placebo.

*Allopathic Treatment.* Since there will be an array of Ayurvedic approaches for the Ayurvedic physicians to individualize treatment, an equivalent range of MTX (7.5 to 25 mg/wk) will be allowed, according to the following algorithm:

7.5 mg/week for 2 weeks

10 mg//week for 2 weeks

12.5 mg/week for 2 weeks

15 mg/week for 2 weeks

17.5 mg/week for 2 weeks

20 mg/week for 4 weeks

20 mg/week for 4 weeks

22.5 mg/week for 4 weeks

Then: 25 mg/week for the rest of the study

Participants will be managed with internal medicines and oils for external use, like outpatient treatment of RA.

List of the drugs to be used in RA:

1. Agastyarasayanam	19. Yogarajaguggulu
2. Amritharishtam	20. Simhanadaguggulu
3. Avipatthikarachurna	21. Hingvastakachurnam
4. Balaguduchyadi oil	22. Vatariguggulu
5. Chyavanprasham	23. Rasnasaptakakwatha
6. DashamoolaHaritaki	24. Shuntichurna
7. Dashamoolarishta	25. Amruthoththaramkashaya
8. Dhanvantaramthaila	26. Rasnadikashyam
9. IndukanthaGhritha	27. Brihatsaindhvadithaila
10. KaishoraGuggulu	28. Rasnadikashyam
11. Kalyanagulam	29. Indukantamkashaya
12. Kottamchukkadithailam	30. Kokilakshakashaya
13. Lohasavam	31. Manjistadikashaya
14. Narayanathailam	32. Shaddharanachurna
15. Pindathailam	33. Balaguduchyadikashayam
16. Punarnavasavam	34. Brahma rasayanam
17. Trivritthlehyam	35. Chandraprabhavati
18. Vaishwanarachurnam	

12.7.7. Participating centre along with PI:

Sl.No.	Name of the participating centre	Name of PI
1	Central Ayurveda Research Institute, (CARI), CCRAS, Bangalore.	Dr M.N Shubhashree R.O (Ay.) Co-PI:Dr. Vanamali. B. Seetharam, BMC & RI, Bengaluru Co-I: Dr. SH Doddamani, RO (Ay.) Dr. Bhavya BM, RO (Ay.)
2	RRAP Central Ayurveda Research Institute for Cancer (CARIC), CCRAS, Mumbai	Dr.Manohar S. Gundeti Co-PI: Dr. Kuldeep Chaudhary Dr. Pallavi Mundada
3	Aryavaidya Pharmacy, Coimbatore	PI: Dr P R Krishna Kumar, Co-PI: Dr. Somit Dr K G Raveendran

12.7.8. Date of IEC approval: Yet to obtain

12.7.9. CTRI Registration/Reference (for clinical trials): Yet to obtain

12.7.10. Date of initiation: Yet to be initiated

12.7.11. Budget allocated: Rs 1,67,53,000/

12.7.12. Installment wise release:

Sl. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	1,47,32,800	F.No.3-116/2019 CCRAS/Admin/IMR/4783	18 <sup>th</sup> Nov 2019	1 <sup>st</sup> Oct 2019

12.7.13. Chronological timeline & deliverables: To be initiated

12.7.14. Current status: Study is yet to be initiated

12.7.15. Relevant information, if any: Nothing Specific.

## 12.8. Name of Project: Systems Biology approach to delineate molecular signatures of Prakriti in healthy humans

### 12.8.1. Participating center along with PI:

Sl.No.	Name of the participating center	Name of PI, Coinvestigators
1	The university of Transdisciplinary health sciences and Technology	Dr. Poornima HVR (PI) Dr. Ashwini Godbole (Co-I) Dr. Vishnuprasad CN (Co-I)

12.8.2. Date of IEC approval: 22/March/ 2021

12.8.3. CTIRI Registration/Reference (for clinical trials): NA

12.8.4. Date of initiation: 1.11.2021- TDU has initiated preparation of the study from 1.11.2021. Preparation in terms of HR recruitment, equipment purchase, standardization, etc. is being done at TDU.

12.8.5. Screening for a sample collection from CCRAS centers has started from 15.1.2022 as the uttarayana period was the primary requirement for the study to start.

12.8.6. Budget allocated: Rs 3,68,20,066/-

12.8.7. Installment wise release:

Sl.No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	First installment of Rs 2,15,60,033/-	F.no4-1/2020-21/CARI/BNG/ account misc./1430	24.3.2021	24.3.2021

12.8.8. Chronological timeline & deliverables:

Sl. No.	Target	Timeline	Achieved/ Not achieved	Causes of deviation, if any
1.	The signing of MoU	0-3 months of sanctioning of the project	Got delayed due to COVID	Though the project was sanctioned on 24.8.2020, MOU was signed on 16/2/2021. Because of COVID, it got delayed.
2.	IEC approval from TDU	0-3 months of the signing of MOU	Achieved	NA
3.	Recruitment of HR	0-3 months of sanctioning of budget	Delayed	Delay in HR recruitment was done as the collection of samples was delayed at CCRAS centers due to Covid. TDU work starts only after sample collection and transportation from CCRAS centers. To balance that we did not recruit the HR as per the timeline. Recruited the required staff from November 2021
4.	Purchase of required equipment	1 to 4 months after the budget is released	Achieved	Completed

5.	Participant screening and enrolment	4 to 14 months	Not achieved	Yet to be initiated at CCRAS centers
6.	Sample collection and transport to TDU from CCRAS centers	4 to 14 months	Not achieved	Samples not yet received the samples at TDU from CCRAS centers for this work.
7.	Exosome isolation, data collection, sequencing, and processing	4 to 14 months	Not achieved	This will start once the samples are received at TDU.

12.8.9. Current status: Yet to be initiated

12.8.10. Relevant information, if any:

**12.9. Name of Project: Evaluation of AYUSH GMH in the subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD) - A Double Blind Randomized Control Clinical study**

12.9.1. Objectives

- Primary: To assess the efficacy of AYUSH-GMH in the subjects of NAFLD
- Secondary: To assess the safety of AYUSH-GMH in the subjects of NAFLD

12.9.2. Study Design: Masking-double blinded

12.9.3. Sample Size: 100

12.9.4. Approval of IMR-PEMC, Annual Action Plan, RFD etc. along with date:F.No. 3-6/2019-CCRAS/Admn/F.L/5730, dated- 18-03-2019

12.9.5. Installment wise release: 23, 03,200/-, 1<sup>st</sup> Installment released on 29.03.2018

12.9.6. Duration of Study: 3 years

12.9.7. Interventions

Intervention modalities	GROUP-I		GROUP-II	
Intervention	Ayush-GMH (API-Part III;1 <sup>st</sup> Ed.;Pg17-)	Vitamin-E	Vitamin-E	Matching Placebo of AYUSH-GMH
Dose	500mg	400mg	400mg	500mg
Dosage form	Ghanvati	Gel capsule	Gel capsule	Ghanvati
Route of Administration	Oral	Oral	Oral	Oral
Time of Administration	Twice daily after food	Once daily after food	Once daily after food	Twice a day after food
Anupana	Water	Water	Water	Water
Duration of therapy	6 months	6 months	6 months	6 months
Packing Form	Blister pack of 60 capsules	Blister pack of 30 capsules	Blister pack of 30 capsules	Blister pack of 60 capsules

12.9.8. Participating center along with PI:

S. No	Name of the participating centre	Name of Investigators
1.	<p>a. National Institute of Traditional Medicine- ICMR Belagavi</p> <p>b. KAHER BMK Ayurveda Mahavidyalaya &amp; Hospital</p> <p>c. Central Ayurveda Research Institute, Bangalore</p>	<p>Principal Investigators</p> <ol style="list-style-type: none"> <li>1. Dr. Manish Barvaliya, Scientist E (Medical), ICMR-NITM, Belagavi</li> <li>2. Dr. Pradeep Grampurohit, Prof., Dept.of Panchakarma, Shri BMK Ayurveda Mahavidyalaya, Belagavi</li> </ol> <p>Co-Investigators</p> <ol style="list-style-type: none"> <li>3. Dr. Suhas Kumar Shetty, Principal, KAHER Shri BMK Ayurveda Mahavidyalaya, Belagavi</li> <li>4. Dr. Keerthana Suresh, Associate Professor &amp; HOD, Dept of RogaNidana, KAHER Shri BMK Ayurveda Mahavidyalaya, Belagavi</li> <li>5. Dr. Subarna Roy, Scientist G &amp; Director ICMR- National Institute of Traditional Medicine- ICMR, Belagavi</li> <li>6. Dr. Bhavya B.M Research Officer (Ay.), Central Ayurveda Research Institute, Bangalore,</li> </ol>

12.9.9. Date of IEC approval: Approved, dated 26-02-2019

12.9.10. CTRI Registration/Reference (for clinical trials): To be registered

12.9.11. Date of initiation: To be initiated

12.9.12. Budget allocated: 23, 03,200, 1<sup>st</sup> Installment.

12.9.13. Installment wise release: 23, 03,200, 1<sup>st</sup> Installment, F.No. 3-6/2019-CCRAS/Admn/F.L/5730, dated- 18-03-2019

12.9.14. Chronological timeline & deliverables: to be initiated

12.9.15. Current status: Study to be initiated

12.9.16. Relevant information, if any: Nothing Specific

**12.10. Name of Projects: “Double Blind Randomized Placebo Controlled Multicentric Clinical Trial of Ayush M-3 In the Management of Migraine”**

12.10.1. Participating center along with PI:

S. No.	Name of the participating center	Name of PI, Co-Investigators
1	National Institute of Mental Health and Neurosciences, Bengaluru	Principal Investigator Dr. Kishore Kumar R. MD (Ay.), Ph.D (NIMHANS) Assistant Professor of Ayurveda, Department of Integrative Medicine, National Institute of Mental health and Neurosciences (NIMHANS) Bengaluru



		<p>Co-Principal Investigator – 1  Dr Girish Kulkarni M.B.B.S, MD, DM (Neuro),  MNAMS  Professor of Neurology  Department of Neurology  NIMHANS, Bengaluru – 560029</p> <p>Co-Principal Investigator – 2  Dr Umesh C, BAMS, MD, Scientist – C  (Ayurveda), Department of Integrative Medicine,  NIMHANS, Bengaluru.</p>
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12.10.2. Date of IEC approval: 31.03.2021

12.10.3. CTRI Registration/Reference (for clinical trials): REF/2021/08/045980

12.10.4. Date of initiation: yet to be initiated

12.10.5. Budget allocated: 31,86,435/-

12.10.6. Installment wise release:

S. No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	First	F. No. 3-70/2020-CCRAS/Admn/Coll/3421	15 <sup>th</sup> Oct 2020	1 <sup>st</sup> Feb 2022

12.10.7. Chronological timeline & deliverables:

S. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	Preparation and finalization of case reporting formats.	0-6 Months	Achieved	-
2	Ethics permission	0-6 Months	Achieved	-
3	CTRI Registration	0-6 Months	Achieved	-
4	MOU	0-6 Months	Achieved	-
5	Procurement of Trial Drugs.	0-6 Months	Achieved	-

12.10.8. Current status:

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	NIMHANS, Bengaluru	-	-	-	-

12.10.8. Relevant information, if any: Advertisement for recruitment of SRF done and provisional list of candidates appearing for the interview finalized.

**12.11. Name of Project: “Ayurveda therapeutic regimen as on Add-on to optimized conventional management of Parkinson’s disease: An RCT for assessment of Clinical, Cortical excitability, Neuroimmune and Autonomic function parameters”**

12.11.1.Participating center along with PI:

S.No.	Name of the participating center	Name of PI, Coinvestigators
1	National Institute of Mental Health and Neurosciences, Bengaluru	<p>Principal Investigator Dr Pramodh Kumar Pal. MBBS., MD., DNB., DM., FRCP Professor, Department of Neurology, NIMHANS, Bengaluru.</p> <p>Co-Principal Investigator – 1 Dr Raghavendra Naik BAMS., MD, PhD Research officer (Ayu) Central Ayurveda Research Institute</p> <p>Co-Principal Investigator – 2 Dr Umesh C, BAMS, MD Scientist – C (Ayurveda), Department of Integrative Medicine, NIMHANS, Bengaluru.</p> <p>Co-Investigator 1: Dr Sathyaprabha T N MBBS, MD, PhD Professor, HOD, Department of Neurophysiology National Institute of Mental Health and Neurosciences,NIMHANS</p> <p>Co-Investigator 2: Dr Kishore Kumar R, BAMS, MD, Ph.D Assistant Professor of Ayurveda Department of Integrative Medicine National Institute of Mental Health and Neurosciences,NIMHANS</p> <p>Co- Investigator 3: Dr Nitesh Kamble MBBS, MD, DM Associate professor Department of Neurology National Institute of Mental Health and Neurosciences,NIMHANS</p> <p>Co-Investigator 4: Dr Manjunath M V MD, PhD Associate professor Department of Neurovirology National Institute of Mental Health and Neurosciences,NIMHANS</p>

		<p>Co-Investigator 5: Dr Shivakumar V MBBS, PhD Scientist – D Department of Integrative Medicine National Institute of Mental Health and Neurosciences,NIMHANS</p> <p>Co-Investigator 6: Dr Bharatha Holla MBBS, MD, PDF Assistant Professor of Psychiatry Department of Integrative Medicine National Institute of Mental Health and Neurosciences,NIMHANS</p> <p>Co-Investigator 7: Dr Kaviraj Udupa MBBS, MD, PhD, PDF Additional Professor Department of Neurophysiology National Institute of Mental Health and Neurosciences,NIMHANS</p>
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12.11.2.Date of IEC approval: 07.01.2022

12.11.3.CTRI Registration/Reference (for clinical trials): CTRI/2022/01/039803

12.11.4.Date of initiation: Yet to be initiated

12.11.5.Budget allocated: 52,30,308/-

12.11.6.Installment wise release:

S.No.	Installment	Sanctioned order	Date	Date of receipt of fund
1	First	F.No.6-100/2021/CARI/BNG/Tech./Parkinson's/1856.	4/03/2022	9/03/2022

12.11.7. Chronological timeline & deliverables:

S. No.	Target	Time line	Achieved/ Not achieved	Causes of deviation, if any
1	Preparation and finalization of case reporting formats.	0-6 Months	Achieved	-
2	Ethics permission	0-6 Months	Achieved	-
3	CTRI Registration	0-6 Months	Achieved	-
4	MOU	0-6 Months	Achieved	-

12.11.8.Current status:

Sl. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	NIMHANS, Bengaluru	-	-	-	-

12.11.9.Relevant information, if any:List and quantity of Allopathy medications to be procured for the trial finalized

**Important photographs of various activities of CARI during 2021-2022**

**World Environment Day**

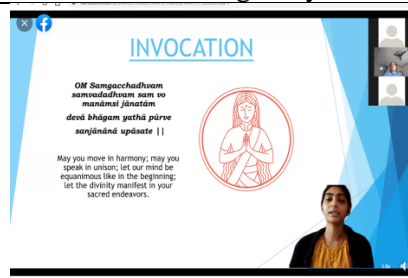


Assistant Director I/c and other staff of CARI, Bengaluru participating during plantation drive on 05.06.2021

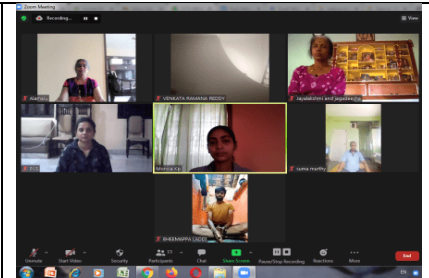
**International Yoga Day 2021**



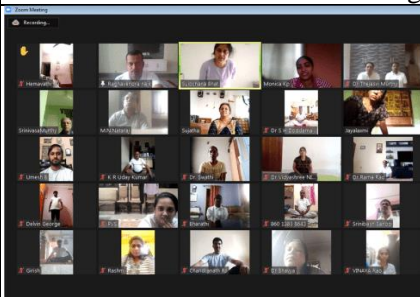
Inauguration by Dr. Ahalya Sharma, Principal, GAMC, Bengaluru



Free online yoga classes



Yoga competition for staff and family members



Practice of Common Yoga Protocol

Lectures organized under International Yoga Day 2021 Programme

Poshan Maah Abhiyaan



Inauguration by Dr Radha T, CMO, CHC, Kaggalipura



Demonstration and practice of Yoga break at office premises



Awareness lectures on nutrition at various places in Bengaluru



Distribution of IEC material and medicinal plants to public



Distribution of nutrition kits and awareness campaign on diet and traditional food practices



Plantation activity in Kaggalipura Community Health Centre



Plantation activity in Agara Grama Panchayat



Plantation & Distribution of saplings at Anganawadi Agara



Awareness talk on Healthy nutrition in kds to mothers at anganwadi, chowdeshwarinagar during Poshan Pakhwada in March 2022 and distribution of traditional foods, fruits to children



Talk on balanced diet and healthy nutrition and diet to OPD patients in March 2022

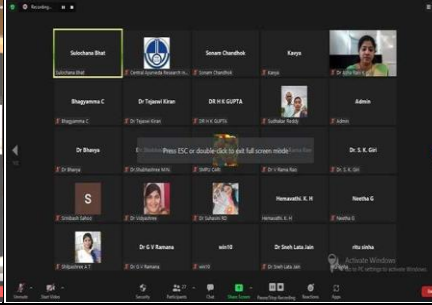
**Azadi Ka Amrit Mahotsav**



Free distribution of prophylactic medicines to general public under Azadika Amrit Mahotsav



Dr. Tejasvi Krishnamurthy delivering lecture



Dr. Asha Rani delivering lecture



Dr. P Sudhakar Reddy delivering lecture

**Webinar Series conducted under Azadi Ka Amrit Mahotsav**



AYUSH Aapke Dwaar – Distribution of Medicinal Plants Saplings under Azadi ka Amrit Mahotsav  
Vigilance Awareness Week 2021



Inauguration of Vigilance Awareness Week 2021 and Pledge by CARI staff



Awareness talk on role of students in making India Corruption free



Debate Competition



Poster presentation competition



Chief Guest Shri. C.Shashikanth delivering Lecture on 'Importance of Vigilance Awareness Week in eradicating corruption'

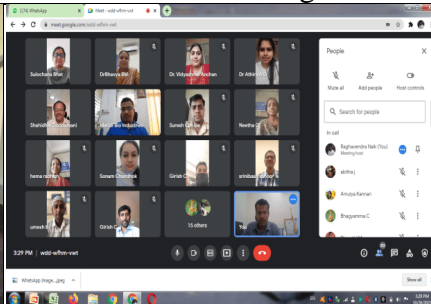


Valedictory function and Prize Distribution

Swachhata Pakhwada Programme 2021



Inauguration of Swachhata Pakhwada at Hospital Block and distribution of soaps and masks on 16.10.2021



Webinar conducted on 'Management of Bio-Medical Waste' by Mr. Pradeep A.J, Manager, Maridi Bio-Industries, Bengaluru on 25.10.2021



Dr. AnchanVidyaVittal, RO (Pathology) delivering talk on 'Management of Bio-Medical Waste generated in Laboratory' to MLT and Lab staff on 22.10.2021

6<sup>th</sup> Ayurveda Day - 2021



Inauguration of the Exhibition of Medicinal Plants and IEC material at Hospital Section of CARI Bengaluru by Dr. Ahalya Sharma, Principal GAMC, Bengaluru on 22.10.2021



DhanvantriPooja at premises of CARI, Bengaluru



Distribution of medicinal plants to students



Distribution of prizes to winners of Ayurveda Day competitions



Cultural Activities during the Ayurveda Day Programme



Awareness lectures and distribution of IEC material under Ayurveda Day program



Distribution of fruits and nutritious food packs to children

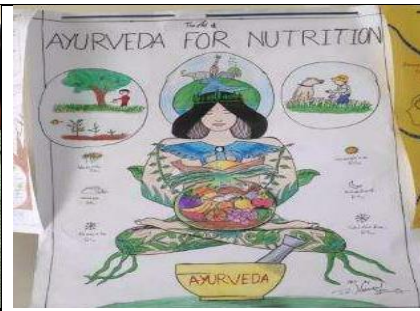


Distribution of medicinal plant saplings





Fireless cooking competition



Display of posters during drawing competition



AYUSH food festival-nutritional food preparation competition



Quiz competition and prize distribution at CARI OPD for general public



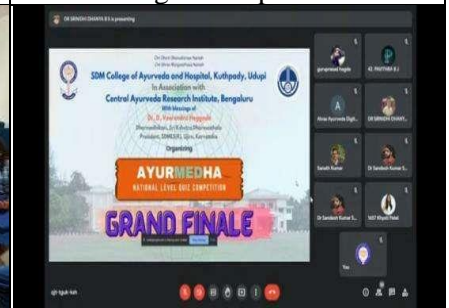
Rangoli competition



Vegetable carving competition



Quiz competitions organized under Ayurveda Day program



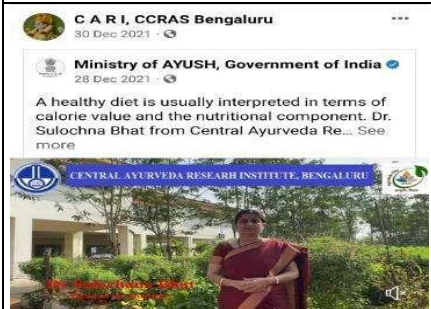
Free Medical Checkup camp in Anekal Taluk on 24.10.2021



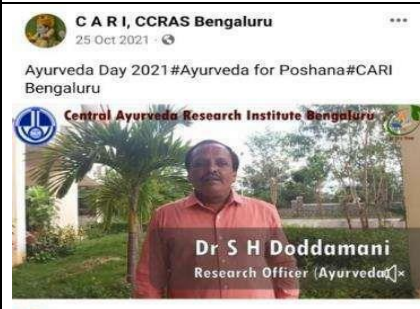
Free Medical Checkup camp in Konanakunte on 10.11.2021



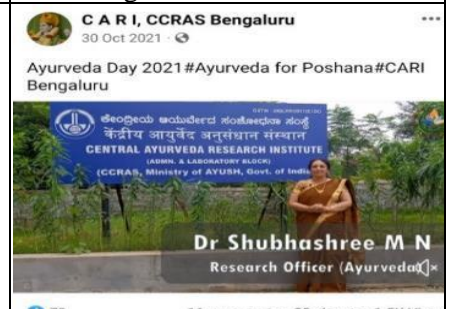
Free Medical Checkup camp in Jigani on 14.11.2021



C A R I, CCRAS Bengaluru  
30 Dec 2021  
Ministry of AYUSH, Government of India  
28 Dec 2021  
A healthy diet is usually interpreted in terms of calorie value and the nutritional component. Dr. Sulochna Bhat from Central Ayurveda Re... See more



C A R I, CCRAS Bengaluru  
25 Oct 2021  
Ayurveda Day 2021 #Ayurveda for Poshana #CARI Bengaluru  
Central Ayurveda Research Institute Bengaluru  
Dr S H Doddamani  
Research Officer (Ayurveda)



C A R I, CCRAS Bengaluru  
30 Oct 2021  
Ayurveda Day 2021 #Ayurveda for Poshana #CARI Bengaluru  
Dr Shubhashree M N  
Research Officer (Ayurveda)

Videos uploaded on the Institute's Official Facebook Page for Awareness through Social Media Platforms



Dr S Sacchidanand, Former Vice Chancellor, RGHS, Bengaluru as Chief Guest



Sri Ramanath PB, Police Inspector, KSISF, Bengaluru as Guest



Webinars on Parampara during Ayurveda Day celebration

7<sup>th</sup> Indian International Science Festival 2021 - Goa



Assistant Director I/C welcoming Hon'ble Minister of AYUSH, Shri. Sarbananda Sonowal



Interacting with students visiting CCRAS stall



Students and public visiting CCRAS Stall

AMRA Investigators Training in Coimbatore in March 2022



Dr. Daniel Furst lead Clinical Investigator of the AMRA Project interacting with the participants.



Workshop on "Research Proposal Writing for Grant"



Workshop on Research Proposal Writing for grant organized on 22<sup>nd</sup> and 23<sup>rd</sup> March 2022.



Workshop on NAMASTE Portal





Workshop on Sensitization Programme on 'Sustainable Maintenance of NAMASTE portal' organized by CARI Bengaluru on 24<sup>th</sup> and 25<sup>th</sup> March 2022.

Various activities conducted under THCRP project during 2021-22



Various awareness programs conducted under SCSP project



Distribution of Ayuraksha kit in HD Kote, Mysore district under THCRP project



Glimpses of activities of Centre of Excellence in Madhumeha



Diabetes OPD



Yoga training to public



Visit to IISc Bengaluru



Diabetes camps



Diabetes awareness to public



Training to BAMS students



CoE Website



Ambulance services



CoE team

## OTHER ACTIVITIES 2021-22

### 13.1. World Environmental Day

CARI, Bengaluru celebrated the World Environmental Day on 5<sup>th</sup> June 2021 to create awareness about the need to protect our environment. During the program, tree saplings such as Neem (*Azadirachta indica* A.Juss), Malabar plum {*Syzygium cumini* (L.) Skeels}, Indian almond (*Terminalia catappa* L.) Champaca {*Magnolia champaca* (L.) Baill ex Pierre}, Mahogany (*Swietenia macrophylla* King), Jack fruit (*Artocarpus heterophyllus* Lam.), Lagerstroemia {*Lagerstroemia speciosa* (L.) Pers.}, Ashoka {*Saraca asoca* (Roxb.) Willd.}, etc. were planted near the hospital block of CARI Campus.

### 13.2. 7<sup>th</sup> International Day of Yoga

As per the directions received from the headquarters, 7<sup>th</sup> International Day of Yoga 2021 was observed at CARI, Bengaluru by following all the COVID protocols. IDY 2021 countdown was inaugurated virtually on 21<sup>st</sup> May 2021. Dr. Ahalya Sharma, Principal, Govt. Ayurveda Medical College, Bengaluru delivered inaugural address as chief guest. In order to create an awareness regarding the benefits of Yoga among general public free online yoga classes were conducted for one month. Total 348 participants from different parts of the country registered for the event. There were various lectures arranged virtually on the role of Yoga for general health during the countdown. State level essay writing and poster making competitions were also conducted for Ayurveda internees, PG scholars, staff and family members of CARI.

On 21<sup>st</sup> June 2021, considering the prevailing COVID- 19 situation the programme was conducted through virtual platform. All the staff members attended live streaming of message from Hon'ble Minister of AYUSH and Prime Minister from 6.30 to 7 AM, followed by the practice of Common Yoga protocol from 7 to 7.45 AM.

### 13.3. IEC meeting

IEC meeting was organized on 24<sup>th</sup> January 2022 for ethical approval of following Research Projects:

1. Impact of Ayuraksha kit in Covid-19 Community Based Prophylactic Study
2. A Prophylactic community based study to assess the impact of Ayuraksha kit in COVID-19
3. Clinical Evaluation of *Lekhaniya Gana Kashaya* and *Arogyavardhini Gutika* in the Management of *Medoroga* (Obesity).

### 13.4. PoshanMaah Abhiyaan- 2021

As per the orders from the headquarters dated 3<sup>rd</sup> September 2021, PoshanMaah Abhiyaan was observed by the Institute. As per the directions received, activities related to Poshan Maah 2021 were conducted under four themes namely, plantation activity in the form of Poshan vatika, Yoga and AYUSH for nutrition, distribution of nutritional kits and awareness regarding the fruits vegetables, traditional food practices and identifying severely acute malnourished children and distribution of Ayurveda medicines. All the officers and

staff of CARI actively participated and conducted awareness programme, camps and outreach activities in Schools/Anganwadi, Panchayat, NGO, Hospitals and community health centres. The Poshan Maah programme was inaugurated by Dr. Radha T, Chief Medical Officer, Community Health Centre, Kaggalipura. An awareness lecture was conducted to staff of the Institute, general public and patients attending OPD. During the programme, more than 1500 people were benefitted. IEC materials regarding importance of diet and nutrition were also distributed to local public.

### **13.5. Azadi Ka Amrit Mahotsav(AKAM)**

As per the directions from CCRAS, dated 6<sup>th</sup> April 2021, CARI celebrated the 75<sup>th</sup> year of independence of India, under “Azadi Ka Amrit Mahotsav” campaign(AKAM), initiated by Ministry of AYUSH, Govt. of India. In this regard, various activities and programmes were organized. As a part of the celebration for the 1<sup>st</sup> quarter, a webinar was organized on 30<sup>th</sup> June 2021. Dr. B.S Shridhar, Joint Director, Department of AYUSH, Karnataka delivered his addressed on “Contribution of Ayurveda during Covid-19 pandemic”. He emphasized on various activities including distribution of Ayurvedic medicine AYUSH-64 and role of Yoga to tackle the Covid-19 pandemic situation in the Karnataka state.

There was also free distribution of Ayurvedic prophylactic medicines like Samshamana vati, Ayush 64, Ashwagandha ghana vati & Ayuraksha kit along with health advisory materials to Ayurveda colleges & general public. The prophylactic medicines were widely distributed to OPD patients, public, schools and Ayurvedic colleges. House to house distribution of medicines was also part of the programme. Distribution of medicinal herbs and public education programmes were also undertaken by the officers of the institute. The awareness health camps and webinar series were conducted under this campaign in association with various organizations such as:

1. Janata Colony, Anekal, Bengaluru on 10<sup>th</sup> October 2021
2. Ramsagar village, Anekal Taluk, Bengaluru on 24<sup>th</sup> October 2021
3. Konankunte cross, Kanakapura road, Bengaluru on 10<sup>th</sup> November 2021
4. Maruthi Nagar, Jigani link Road, Bengaluru on 14<sup>th</sup> November 2021
5. Central Jail Circle, Hosa Road, Electronic City, Bengaluru on 27<sup>th</sup> February 2022
6. Yarardahalli, Bommasandra Industrial Area, Bengaluru on 20<sup>th</sup> March 2022.

### **13.6. Webinar on COVID-19 under AKAM**

As directed by council, email dated 11<sup>th</sup> January 2022, a webinar series was organized under “Action Plan for prophylaxis and management of COVID-19 during 3rd wave” from January 2022 till March 2022 for AYUSH doctors, students, patients & general public. The webinars covered topic on various aspects of COVID-19 diagnosis, management and prevention by including topics such as Advances in investigations for diagnosis of COVID-19, Prevention of COVID-19 under the context of Janapadodhwamsa, COVID-19 preventive initiatives through Ayurveda, Initiatives of CCRAS and MoA for prevention and management of COVID-19 and Importance of Mental health in COVID-19 pandemic which included faculties from Ayurveda and Modern system.



### **13.7. AYUSH AAPKE DWAR (Distribution of Medicinal Plants Saplings) under Azadi Ka Amrit Mahotsav**

Under “AYUSH AAPKE DWAR” campaign, CARI, Bengaluru conducted a program for free distribution of medicinal plant samplings among farmers/households/ and others produced under National Medicinal Plants Board (NMPB) funded Nursery project on 28<sup>th</sup> October 2021. Around 735 saplings were distributed during the month of October 2021 and November 2021.

### **13.8. Vigilance Awareness Week**

Vigilance awareness week was observed from 26<sup>th</sup> October to 1<sup>st</sup> November 2021 with theme “Independent India @ 75: Self Reliance with Integrity”. The programme was inaugurated on 26<sup>th</sup> October 2021 by taking Integrity Solemn pledge and oath by all the officers and staff of the Institute. On 1<sup>st</sup> November 2021 the programme was concluded by an awareness lecture by chief guest Shri. C. Shashikanth, Former Asst. Solicitor General of India, Bengaluru. Prizes and certificates were distributed to all the winners and participants of the event.

### **13.9. Swachhata Pakhwada Programme 2021**

As per the orders from the CCRAS Headquarters, Swachhata Pakhwada 2021 was organized from 16<sup>th</sup> to 31<sup>st</sup> October 2021. Various activities such as public lecture on general hygiene by the doctors of the Institute; cleaning the premises & weeding old files etc., guest lectures, competitions on management and control of use of plastics, display of swachhata messages, slogans to public and distribution of medicinal plants to public and students to create awareness about pollution were carried out.

### **13.10. 6<sup>th</sup> Ayurveda day-2021**

Different activities were conducted from 18<sup>th</sup> October 2021 to 31<sup>st</sup> December 2021. The 6<sup>th</sup> Ayurveda Day was observed on 2<sup>nd</sup> November 2021. Different activities were carried out through OPD, Survey of Medicinal plant unit and other outreach programmes like Tribal Health Care Research Project (THCRP) and Schedule Cast Sub Plan (SCSP) project. There was Medicinal Plant Exhibition in the Hospital section of CARI which was inaugurated on 22<sup>nd</sup> October 2021 by Dr. Ahalya Sharma, Principal, GAMC, Bengaluru. Dhanvantari pooja was conducted at Hospital building on 2<sup>nd</sup> November 2021. Public Awareness Programmes and Lectures on ‘Ayurveda for Nutrition’ and Distribution of Nutritional Food were conducted. IEC Materials were displayed and distributed to general public; Distribution of Medicinal Plants to public, OPD patients in which about 600 medicinal plants were distributed. There were several competitions held like drawing competition, fireless cooking competition, rangoli competition, collage making competition, AYUSH food festival, vegetable carving competition for school students, general public and CARI staff to create awareness. Free medical check-up camps & blood investigation were organized for general public, there were also videos uploaded for public through social media platforms regarding awareness on Ayurveda delivered by the doctors of the Institute. The Institute also organized webinars and guest lectures wherein eminent speakers shared their immense knowledge on Ayurveda.

A virtual brainstorming session on "Scientific Exploration of Potential and Strength of AYUSH Ahar- a Focus on Global Positioning, Marketing & Branding" was organized on 28<sup>th</sup> December 2021 with speakers from CSIR-CFTRI, Mysore; ICMR-NIN, Hyderabad and IIIT Delhi delivered guest lecture virtually.

A webinar on 'Parampara 2021: Traditional Foods and their Role in Nutrition' was organized on 30<sup>th</sup> December 2021. Dr. G. G. Gangadharan, Director, Ramaiah Indic Speciality Ayurveda Restoration Hospital, Bengaluru delivered the key note address. Dr. Shivakumar CS, Assistant Professor at the department of Clinical Nutrition and Dietetics, SDUMC, Kolar delivered a lecture on 'Integrating Modern and Traditional Nutritional Approaches'. Dr. Prasanna Kulkarni, Professor, Department of Swasthvritta, SKAMCH, Bengaluru delivered an address on 'Ayurveda Diet Prescription'. It was followed by virtual oral and poster presentations of the participants on the topic 'Traditional Food Recipes of Karnataka' and 'Ayurveda for Nutrition'.

All the officers and staff of CARI, Bengaluru actively participated throughout the Ayurveda Day programme.

### **13.11. 7<sup>th</sup> Indian International Science Festival 2021**

CARI, Bengaluru & RARIM&MMR, Goa have jointly organized a stall for exhibition in the 7<sup>th</sup> Indian International Science Festival 2021 which was inaugurated by Hon'ble Chief Minister of Goa, Shri Pramod Sawant, Dr. Jitendra Singh, Hon'ble Minister of State (I/c) for Ministry of Science & Technology, Shri. Shripad Naik, Hon'ble Minister of State for Tourism and Ports, Shipping and Waterways of India on 10<sup>th</sup> December 2021. It was organized by VIBHA, New Delhi at Parade Ground, DB Road, Goa. The AYUSH premises comprising CCRAS, CCRUM, CCRH, CCRYN and NMPB were visited by Shri. Sarbananda Sonowal, Cabinet Minister of AYUSH, Govt. of India., Dr. Sulochana Bhat, Assistant Director In-charge, CARI Bengaluru briefed about the CCRAS and AYUSH activities. About 2,500 visitors from various backgrounds such as research scholars, academic students, general public, faculty, exhibitors, etc. have visited CCRAS stall during the event. Free clinics & display of standees, translates indicating various facilities available at CARI, Bengaluru and RARIM & MMR were seen. During valedictory and award ceremony on 13<sup>th</sup> December 2021, Dr. M Ravichandran, Secretary, Ministry of Science and Shri. Jayant Sahasbudhe, National Organizing Secretary of Vijnana Bharathi distributed the awards and certificates to the winners.

### **13.12. Suryanamaskar programme**

As per Council's direction, dated 10<sup>th</sup> January 2022, as an integral part of Azadi Ka Amrit Mahotsava celebration, Suryanamaskar for Vitality was celebrated by CARI Bengaluru and RARIM & MMR, Goa on the holy occasion of Makara Sankranti on 14<sup>th</sup> January 2022. All the officers and staff of the Institute ensured participation in the event by registering them. Further, wide publicity was given among the public to participate in the event by self registration through the portal. Outreach programme Schedule Caste Sub Plan (SCSP) and OPD platforms were utilized to educate the public regarding the Suryanamaskar. A total of

200 participants were part of the Suryanamasakar mass Programme session on 14<sup>th</sup> January 2022 at 7 am event through virtual mode including all the officers, staff of the Institute & public.

### **13.13. Memorandum of Understanding (MoU)**

- A Memorandum of Understanding (MoU) was signed between CCRAS and National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru for execution of project on “Ayurveda therapeutic regimen as on Add-on to optimized conventional management of Parkinson’s disease: An RCT for assessment of Clinical, Cortical excitability, Neuroimmune and Autonomic function parameters” on 27<sup>th</sup> January 2022.
- A Memorandum of Understanding (MoU) was signed between CCRAS and Indian Institute of Science (IISc), Bengaluru for execution of scheme “Centre of Excellence for research and clinical services for Madhumeha (Diabetes Mellitus) on 2<sup>nd</sup> February 2022. Dr. Sulochana Bhat, AD In charge, Dr. Tejaswini C. RO (Ay.), and Dr. Kavya N., Consultant (Ay.) from CARI, Bengaluru represented the CCRAS.

### **13.14. AMRA Investigators Meet**

CARI is the nodal centre of “A Double-blind, Double Dummy, Randomised Controlled Study to Evaluate the Efficacy of Classical Ayurveda Management versus Methotrexate in Rheumatoid Arthritis”. An investigators training of the project was held at AVP Research Foundation, Coimbatore on 7-8<sup>th</sup> March 2022 to orient the investigators and pharmacists on the methodology, adverse event monitoring etc. Vaidya Rajesh Kotecha, Secretary, Ministry of AYUSH, Government of India, delivered inaugural address by highlighting the relevance of clinical trials in the field of Ayurveda. Prof. (Dr.) Rabinarayan Acharya, Director General, CCRAS addressed the gathering by inspiring the investigators and the organizers by gracing the occasion. Dr. Daniel Furst, world’s renowned rheumatologist, also the chief mentor and lead Clinical Investigator of the AMRA Project interacted with participants and taught about joint counts. Research Officers and investigators of this project Dr. Doddamani S.H and Dr. Shubhashree M.N. attended the program from CARI, Bengaluru. Prior to this event an online training was organized on the topic “Good clinical practices” by Dr. Nandini Kumar on 21<sup>st</sup> Feb 2021.

Dr. Daniel Furst along with Dr. Somit visited CARI, Bengaluru to see the facilities available on 10<sup>th</sup> March 2022.

### **13.15. Science Week 2022- Vigyan Sarvatra Pujyate**

As per the orders from the CCRAS Headquarters, dated 21<sup>st</sup> February 2022, a webinar on account of “Science Week 2022- Vigyan Sarvatra Pujyate” was organized virtually on 26<sup>th</sup> Feb 2022 under Azadi Ka Amrit Mahotsav to pay homage to freedom fighters and showcase the country’s achievements in various fields on the 75<sup>th</sup> anniversary of its independence. Dr. B.A. Venkatesh, Former Principal of GAMC, Bengaluru delivered his talk on the topic ‘Ayurveda as Traditional Science’ on the occasion and graced the event.

### **13.16. Workshop on NAMASTE Portal**

CARI, Bengaluru organized a “Sensitization programme on sustainable maintenance of NAMASTE portal” on 24<sup>th</sup> and 25<sup>th</sup> March 2022 in a hybrid mode. Physicians and academicians from the Southern states of India from Ayurveda, Homoeopathy, Unani and Siddha systems were sensitized regarding NAMASTE Portal in their respective systems.

Director General, CCRAS, Prof. (Dr.) Rabinarayan Acharya joined the event virtually and addressed the gathering, explained the intent of the workshop and declared the workshop open. The chief guest Dr. Abdul Wadud, Director, NIUM, Bengaluru elaborated the need of documentation and the importance of the e-portal. There were eminent speakers from Ayurveda, Unani Siddha & Homoeopathy systems. The programme concluded with the collection of feedback form from the participants, certificate and study material distribution to the participants.

### **13.17. Workshop on “Research proposal writing for grant”**

CARI, Bengaluru organized a Workshop on “Research proposal writing for grant” for academicians on the 22<sup>nd</sup> and 23<sup>rd</sup> March 2022. Thirty teaching faculties from various Ayurveda medical colleges of Karnataka participated in the workshop. The Director General of CCRAS, Dr. Rabinarayan Acharya joined the workshop virtually and addressed the gathering, explained the intent of the workshop. The inaugural session was chaired by Dr. Nishteshwar, former HOD and Professor, Dept. of Dravya Guna, IPGT & RA, GAU, Jamnagar and Dr. Ravi Rao, Principal, Karnataka Ayurveda Medical College, Mangalore. There were eminent speakers from various fields of Ayurveda. The programme concluded with the collection of feedback form from the participants, certificate and study material distribution to the participants.

### **13.18. Poshana Pakhwada 2022**

As per the letter from CCRAS, dated 30<sup>th</sup> March 2022, Poshana Pakhwada was celebrated at CARI, Bengaluru. Distribution of fruits and awareness talks on health benefits of nutritious food, traditional food practices were given to anganwadi school children, OPD patients and general public. All the Officers and staff of CARI actively participated in the programme. IEC materials regarding importance of diet and nutrition were also distributed to students and local public.

## हिंदी अनुभाग – वर्ष 2021-22 प्रगति प्रतिवेदन

### प्रस्तावना:

- (i) केन्द्रीय“आयुर्वेद अनुसंधान संस्थानमें राजभाषा हिंदी ”बेंगलूरु ,उत्तरहल्ली मनवर्ते कावल , उपयोग से संबंधित वार्षिक कार्यक्रम का अनुपालन नियमित रूप से किया जा रहा है। संस्थान में राजभाषा कार्यान्वयन समिति का गठन किया गया है। संस्थान में राजभाषा हिंदी से संबंधित कार्यों की देखरेख के - 3-वै (.आयु) अनुसंधान अधिकारी ,गिरि .के.एस .लिए राजभाषा अधिकारी डॉतथा श्रीमती रश्मि कुलकर्णीहैं (सेवा-संविदा) हिंदी सहायक ,। वर्ष के लिए प्रत्येक त्रैमासिक में संस्थान के 22-2021 की नियमित बैठकें आयोजित किया गय ”राजभाषा कार्यान्वयन समिति“ा है। जैसेप्रथम त्रैमासिक में - तृतीय त्रैमासिक में दिनांक ,को 13.09.2021 द्वितीय त्रैमासिक में दिनांक ,को 23.06.2021 दिनांक को आयोजित किया गया है 09.03.2022 को और चतुर्थ त्रैमासिक में दिनांक 10.12.2021।
- (ii) संस्थान में प्रत्येक त्रैमासिक के अंत में राजभाषा हिंदी उपयोग से संबंधितराजभाषा विभाग द्वारा , जारी त्रैमासिक प्रोफार्मा को भरकर ऑनलाइन के माध्यम से राजभाषा विभाग को तथा केन्द्रीय आयुर्वेदीय नई दिल्ली एवं नगर राजभाषा कार्यान्वयन ,मुख्यालय (एस.ए.आर.सी.सी) विज्ञान अनुसंधान परिषद् , (नराकास) समितिकार्यालय बेंगलूरु को प्रेषित किया जाता है।
- (iii) संस्थान में राजभाषा नियम धारा (3) 3के तहत बताए गए नियमों का पूर्ण रूप से अनुपालन हो रहा है। राजभाषा नियम (5) 1976का अनुपालन पूर्ण रूप से किया जा रहा है। संस्थान में प्राप्त हिंदी पत्रों का उत्तर हिंदी में ही भेजा जा रहा है।
- (iv) राजभाषा विभाग द्वारा जारी क्षेत्र में स्थित कार्यालयों के लिए हिंदी पत्रों की प्रगति प्रतिशत के ”ग“ अनुसार संस्थान से नियमानुसार हिंदी पत्रों का प्रगामी प्रतिशत प्रत्येक तिमाही में निरंतर प्रगतिशील है।
- (v) राजभाषा नियम के अंतर्गत स (4) के उपनियम 10 के नियम 1976 संस्थान को आयुष मंत्रालय पत्रांक संख्या ई 11018/1/2013/-आयुष ,.भा.रा-दिनांक के माध्यम से राजपत्रित में 14.09.2015 अधिसूचित किया गया है।

### .1संस्थान में राजभाषा कार्यान्वयन समिति का गठन:

के लिए राजभाषा कार्यान्वयन समिति का गठन 22-2021 संस्थान में वर्ष 1.1सन्दर्भ पत्र संख्या -1 /22-2021/23के ,22-2021/51 कार्यालय आदेश संख्या ,295/.भा.रा/बेंगलूरु/सं.अ.आ.दिनांक के अनुसार गठित की गई है 24.06.2021। जिसके सदस्य इस संस्थान के अध्यक्षहिंदी ,सुलोचना भट्ट .डॉ : दोद् .एच.एस .डॉ :राजभाषा सदस्य ,गिरि .के.एस .डॉ :प्रभारीदमनी .श्रीमती जी ,राघवेन्द्र नाईक .डॉ , ,.श्रीमती ज्योति जी ,नीताएवं हिंदी सहायक श्रीमती रश्मि कुलकर्णी हैं।

प्रभारी के उपस्थिति में करते हैं "हिंदी बैठक" यह समिति प्रत्येक त्रैमासिक में। बैठक में विभिन्न विभागों में हिंदी प्रगति के लिए बढ़ावा देने हेतु ठोस कदम लेने के लिए चर्चा की जाती है। हिंदी कार्यशाला , हिंदी पखवाडा के आयोजन के बारे में चर्चा की जाती है एवं हिंदी कार्यशाला में मुख्य वक्ता और कार्यशाला विषय पर भी चर्चा की जाती है।

## .2संस्थान में राजभाषा हिंदी के तहत आयोजित कार्यक्रम:

संस्थान में परिषद् पत्र संख्या -2019/6-1सीसीआरएएस 2740/भा.रा/एवं -2019/6-1 सीसीआरएएसके अनुसरण में राजभाषा हिंदी के अनुपालन के 2021 सितंबर 07 दिनांक ,2741/भा.रा/ का आयोजन किया "हिंदी पखवाडा" तक 2021 सितंबर 28 से 2021 सितंबर 14 तहत संस्थान में दिनांक गया था।

संस्थान 2.2 में राजभाषा हिंदी के अनुपालनार्थ प्रत्येक त्रैमासिक में का आयोजन किया "हिंदी कार्यशाला" गया था। जैसे-

प्रथम त्रैमासिक में दिनांक को हिंदी कार्यशाला का आयोजन किया गया था 2021 जून 25। कार्यशाला के मुख्य अतिथि डॉकर्मचारियों/रविशंकर ने संस्थान के अधिकारियों . को राजभाषा प्रादेशिक भाषाओं में " विषय के बारे में अपना वक्तव्य प्रस्तुत किया "पूरक होने के लिए सुझाव।

द्वितीय त्रैमासिक में दिनांक को हिंदी कार्यशाला का आयोजन किया गया था 2021 सितंबर 18। कार्यशाला के मुख्य अतिथि श्रीमती सुधा कौशिक ने संस्थान के अधिकारियों/हिंदी एवं हिंदी दिवस का " कर्मचारियों को/ विषय के बारे में अपना वक्तव्य प्रस्तुत किया "महत्त्व।

तृतीय त्रैमासिक में दिनांक को हिंदी कार्यशाला का आयोजन किया गया था 2021 दिसंबर 24। कार्यशाला के मुख्य अतिथि डॉकर्मचारियों/रवीन्द्रन ने संस्थान के अधिकारियों .टी .ं को अन्य भाषियों को हिंदी " विषय के बारे में अपना वक्तव्य प्रस्तुत किया "प्रशिक्षण।

चतुर्थ त्रैमासिक में दिनांक को हिंदी कार्यशाला का आयोजन किया गया था 2022 मार्च 11। कार्यशाला के मुख्य अतिथि श्रीमती बिंदी बी ,ने संस्थान के अधिकारियों/कर्मचारियों को हिंदी/ शिक्षण योजना के उद्देश्य एवं महत्त्वराजभाषा हिंदी की संवैधानिक स्थिति के बारे में अपना वक्तव्य प्रस्तुत किया ,राजभाषा नियम ,।

जो ,प्रत्येक कार्यशाला में राजभाषा विभाग द्वारा जारी विषयों पर प्रशिक्षण दिया गया ,.एस.ए.आर.सी.सी.मुख्यालयनई दिल्ली द्वारा संस ,स्थान मको प्राप्त हुआ था। प्रत्येक कार्यशाला में संस्थान के सभी अधिकारियों/कर्मचारियों ने उत्साहपूर्वक भाग लिया था।।

के लिए संयुक्त हिंदी पखवाडा के अंतर्गत नराकास के तत्वाधान में आयोजित अंतर 22-2021 वर्ष 2.3 इस संस्थान में दिनांक ,कार्यालयीन प्रतियोगिताओं में "कहानी लेखन प्रतियोगिता" को 2021 नवंबर 23 का आयोजन किया गया था।

### .3नगर राजभाषा कार्यान्वयन समिति के बैठक:कार्यशाला में संस्थान द्वारा प्रतिभागित्व/

के 22-2021 को ऑनलाइन द्वारा आयोजित वर्ष 2021 अगस्त 17 नराकास के तत्वाधान में दिनांक 3.1 प्रथम बैठक में इससंस्थान के डॉ .(.आयु) अनुसंधान अधिकारी ,दोहमनी.एच.एस .डॉ ,गिरि .के.एस . हिंदी सहायक ने प्रतिनिधित्व किया था ,राजभाषा अधिकारी एवं श्रीमती रश्मि कुलकर्णी। इस बैठक में वर्ष के वार्षिक कार्यक्रम के बारे में चर्चा हुआ 22-2021।

प्रभारी को/को विशेष रूप से राजभाषा अधिकारी 2021 अक्टूबर 18 नराकास के तत्वाधान में दिनांक 3.2 .प्रभारी सहायक निदेशक एवं डॉ ,सुलोचना भट्ट .ऑनलाइन द्वारा आयोजित बैठक में इस संस्थान के डॉ राजभाषा अधिकारी ने प्रतिनिधित्व किया था ,गिरि .के.एस। इस बैठक में संयुक्त हिंदी पखवाडा के आयोजन के बारे में चर्चा हुआ।

के 22-2021 को ऑनलाइन द्वारा आयोजित वर्ष 2021 दिसंबर 13 नराकास के तत्वाधान में दिनांक 3.3 राजभाषा ,गिरि .के.एस .डॉ ,प्रभारी सहायक निदेशक ,सुलोचना भट्ट .द्वितीय बैठक में इस संस्थान के डॉ हिंदी सहायक ने प्रत ,अधिकारी एवं श्रीमती रश्मि कुलकर्णी निधित्व किया था। इस बैठक में नराकास के वार्षिक अंशदान एवं कावेरी गृह पत्रिका के बारे में चर्चा हुआ।

### .4संस्थान के अधिकारियों:कर्मचारियों द्वारा हिंदी प्रतियोगिताओं में प्रतिभागित्व/

4.1 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 11 नवंबर 2021 को आयोजित सामान्य ज्ञान प्रश्नोत्तरी प्रतियोगिता में इस संस्थान के डॉ. भव्या बी.एम., अनुसंधान अधिकारी (आयु.) एवं मिस सोनम चंधोक, सहायक अनु.अधि. (चिकि. मनो.) ने भाग लिया।

4.2 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 16 नवंबर 2021 को आयोजित निबंध लेखन प्रतियोगिता में इस संस्थान के श्री सुरेश कुमार, अनुसंधान सहायक (रसा.) ने भाग लिया एवं उन्हें प्रोत्साहन पुरस्कार प्राप्त हुआ है।

4.3 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 17 नवंबर 2021 को आयोजित तस्वीर देखकर कहानी लेखन प्रतियोगिता में इस संस्थान के श्री सुरेश कुमार, अनुसंधान सहायक (रसा.) ने भाग लिया।

4.4 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 18 नवंबर 2021 को आयोजित हिंदी भाषण प्रतियोगिता में इस संस्थान के श्री सुरेश कुमार, अनुसंधान सहायक (रसा.) ने भाग लिया एवं उन्हें प्रोत्साहन पुरस्कार प्राप्त हुआ है।

4.5 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 24.11.2021 को आयोजित कविता पाठ प्रतियोगिता में इस संस्थान के डॉ. एस.एच. दोहमनी, अनु.अधि. (आयु.) एवं श्री सुरेश कुमार, अनुसंधान सहायक (रसा.) ने भाग लिया।

4.6 नराकास के तत्वाधान में संयुक्त हिंदी पखवाडा - अंतर कार्यालयीन प्रतियोगिताओं में दिनांक 26 नवंबर 2021 को आयोजित नारा लेखन प्रतियोगिता में इस संस्थान के डॉ. एस.एच. दोहमनी, अनु.अधि. (आयु.) एवं डॉ. भव्या वी.एम., अनु.अधि. (आयु.) ने भाग लिया।

#### **5:संस्थान के पुस्तकालय के लिए पुस्तकों की खरीद .**

5 1.इस वित्तीय वर्ष के तहत हिंदी किताबों की खरीद मेसर्स 22-2021चौकाम्बा ओरिएंटलियाबेंगलूरु से , किए हैं। पुस्तकों की खरीद में रूपए ) -/1,739एक हजार सात सौ उनतालीस मात्रव्यय हुआ है (।

#### **6हिंदी शिक्षण योजना द्वारा /कर्मचारियों द्वारा केन्द्रीय हिंदी प्रशिक्षण उप संस्थान/संस्थान के अधिकारियों .**

##### **आयोजित प्रशिक्षण कार्यक्रममें प्रतिभागित्व:**

6 1.इस संस्थान के श्रीमती ज्योति जी ,.कनिष्ठ श्रेणी लिपिक ने केन्द्रीय हिंदी प्रशिक्षण उप संस्थानहिंदी / शिक्षण योजना द्वारा आयोजित ऑनलाइन प्रबोध प्रशिक्षण में प्रतिनिधित्व किए हैं।

6 2.इस संस्थान के श्रीमती हेमावती के ,.एच.चिकित्सीय प्रयोगशाला टेक्नोलॉजिस्ट ,निलोय बनर्जी .श्री , जूनियर चिकित्सीय प्रयोगशाला टेक्नोलॉजिस्ट ने केन्द्रीय हिंदी प्रशिक्षण उप ,सतीश .फार्मासिस्ट एवं श्री ए हिंदी शिक्षण योजना द्वारा आयोजित ऑनलाइन प्रवीण प्रशिक्षण में प्रतिनिधित्व किए हैं/संस्थान।



**केन्द्रीय आयुर्वेद अनुसंधान संस्थान, बेंगलूरू**  
**(केन्द्रीय आयुर्वेदीय विज्ञान अनुसंधान परिषद, आयुष मंत्रालय, भारत सरकार)**

**वार्षिक प्रगति प्रतिवेदन का सारांश: 2021-22**

**प्रस्तावना**

केन्द्रीय आयुर्वेद अनुसंधान संस्थान, केन्द्रीय आयुर्वेदिक विज्ञान अनुसंधान परिषद (सीसीआरएएस), आयुष मंत्रालय, भारत सरकार के अधीन एक बहु आयामी अनुसंधान संस्थान है, जिसकी स्थापना सन. 1971 में हुई। संस्थान में तीन निम्नलिखित अनुभाग हैं:-

1. चिकित्सीय अनुसंधान इकाई (सी.आर.यु)
2. औषधीय पौधों का सर्वेक्षण इकाई (एस,एम.पी.यु)
3. औषधी मानकीकरण अनुसंधान इकाई (डी.एस.आर.यु)

संस्थानमें ओपीडी के साथ अस्पताल ब्लॉक, 28-बिस्तरों वाली अंतरंग विभाग सुविधा, पंचकर्म, योग, मर्म, प्रयोगशाला, शल्य कर्मागार और अन्य सेवाएं सम्मिलित हैं। प्रशासन ब्लॉक में कार्यालय, पुस्तकालय, भण्डार, व्याख्यान कक्ष और बैठक कक्ष, भोजन प्रयोगशाला, माइक्रोबायोलॉजी, फार्माकोग्रांसी, रसायन, वनस्पति विभाग सम्मिलित हैं।

संस्थानस्थापना होने के बाद से, नियोजित कार्यक्रमों के अनुसार लक्ष्यों को प्राप्त कर रहा है। विज्ञान को बढ़ावा देने में विभिन्न राष्ट्रीय योजनाओं के क्रियान्वयन में संस्थान एक प्रधान रूप में काम कर रहा है। जनता के लिए सेवाएं प्रदान करने के लिए संस्थान के नए परिसर में बाह्य रोगी विभाग और पंचकर्म सुविधाएं सफलतापूर्वक चल रही है।

स्थापना के बाद से, संस्थान द्वारा अब तक 453 वैज्ञानिक लेखों का प्रकाशन किया गया है, 9 मोनोग्राफ का प्रकाशन, 8 पुस्तकों की समीक्षा, संगोष्ठी/कार्यशालाओं में 1146 प्रस्तुतियां और प्रतिभागित्व, दो सर्वश्रेष्ठ प्रकाशनों के लिए नगद पुरस्कार एवं 3 उत्तम वैज्ञानिक लेखों को 3 स्वर्ण पदक प्राप्त हुआ है। संस्थान के ग्रंथालय में 1992 पुस्तकों, महत्वपूर्ण वैज्ञानिक पत्रिकाओं और सी.सी.आर.ए.एस के प्रकाशन उपलब्ध हैं। समीक्षाधीन अवधि के दौरान, संस्थान के वैज्ञानिकों द्वारा 18 शोध पत्रों का प्रकाशन हुआ है, राष्ट्रीय और अन्तरराष्ट्रीय पत्रिकाओं में 08 शोध पत्रों को प्रकाशन की प्रक्रिया में विचाराधीन है। अधिकारियों ने 257 संगोष्ठी, समेलन और बैठकों में भाग लिए हैं। वर्तमान में 64 स्वीकृत पद है जिसमें 23 स्थायी कर्माचारी कार्यरत हैं। इस वित्तीय वर्ष में संस्थान को 4.73 करोड़ का बजट आवंटन प्राप्त हुआ है।

संस्थान ने दिनांक 21 जून को अन्तरराष्ट्रीय योग दिवस, आयुर्वेद दिवस, चार राजभाषा हिंदी कार्यशालाएँ, हिंदी पखवाड़ा, राष्ट्रीय आयुष कार्यक्रम जैसे पोषण माह, पोषण पखवाड़ा, स्वच्छता पखवाड़ा, सतर्कता जागरूकता सप्ताह और आजादी का अमृत महोत्सव के उपलक्ष्य में विभिन्न गतिविधियों का आयोजन किया। कोविड-19 प्रतिबंधों को देखते हुए, इनमें से अधिकांश गतिविधियों को ऑनलाइन माध्यम द्वारा आयोजित किया गया। संस्थान ने मार्च 2022 माह में अनुदान के लिए शोध प्रस्ताव लेखन और नमस्ते पोर्टल के सतत रखरखाव के लिए संवेदीकरण कार्यक्रम जैसे दो कार्यशालाओं का आयोजन किया।

राष्ट्रीय औषधीय पादप बोर्ड, नई दिल्ली द्वारा वित्त पोषित परियोजना "औषधीय पौधों की खेती, संरक्षण और सतत उपयोग के लिए नर्सरी की स्थापना" के तहत उत्पादित लगभग 3380 औषधीय पौधों के नमूनों को 'आयुष आपके द्वार' कार्यक्रम के तहत जनता, विद्यार्थियों, शिक्षकों और किसानों को मुफ्त में वितरित किया गया।

## 1. चिकित्सीय अनुसंधान इकाई (सी.आर.यु)

वर्तमान में, संस्थान में दो बहिरंग विभाग जिसमें, एक चिकित्सीय अनुसंधान इकाई, बलेपेट और दूसरा केन्द्रीय आयुर्वेद अनुसंधान संस्थान, कनकपुर रोड, बंगलूरु में संचालित है। संस्थान निशुल्क औषधि की व्यवस्था के साथ बाह्य रोगी स्तर पर रोगियों के लिए चिकित्सीय सेवाएँ प्रदान करता है। संस्थान रोग निवारक और उपचारात्मक चिकित्सा सुविधाओं सहित, जैवरासायनिक परीक्षण, रक्त परीक्षण, रोग जांच और पंचकर्म चिकित्सा का संचालन करता है। स्थापना के बाद से, चिकित्सीय अनुसंधान के क्षेत्र में संस्थान ने कुपोषण (Malnutrition), अर्श (Haemorrhoids), मनोद्वेग (Anxiety neurosis), तमक श्वास (Bronchial Asthama), व्यान बल वैषम्य (Hypertension), पांडु (Iron deficiency Anaemia) में चिकित्सीय अनुसंधान सम्पूर्ण किया। इसके अतिरिक्त फ्लू जैसी विमारी और फार्मकोविजिलंस पर अवलोकन अध्ययन और वेक्टर जनित रोगों का पर्यवेक्षणीय अध्ययन पूरा किया गया। संस्थान द्वारा इंटर मुल अनुसंधान परियोजनाओं के अंतर्गत वार्धक्य में रसायन (अश्वागंधावालेह, ब्रह्म रसायन और च्यवनप्राश) चिकित्सा का अध्ययन, कष्टार्तव (Dysmenorrhoea), स्थौल्य (Obesity), संधिगत वात (Osteoarthritis Knee), अस्थि क्षय, मधुमेह, तमकश्वास और एक सहयोगात्मक अध्ययन के तहत ब्रेस्ट कैंसर में आयुष-QOL-2C अनुसंधान कार्य पूरा किया गया।

समीक्षाधीन अवधि के दौरान, चिकित्सीय अनुसंधान इकाई ने अनुसंधान परियोजनाओं शीर्षक “ए रैंडमाइज्ड प्लेसबो कंट्रोल्ड प्रोस्पेक्टिव फेज – 2 क्लिनिकल स्टडी ऑफ़ अन आयुर्वेदिक कोडेड ड्रग आयुष डी ऑन ग्लैसिमिक कंट्रोल इन प्री-डायबिटीक सब्जेक्ट्स; ए रैंडमाइज्ड प्लेसबो कंट्रोल्ड प्रोस्पेक्टिव फेज – 2 क्लिनिकल स्टडी ऑफ़ अन आयुर्वेदिक कोडेड ड्रग आयुष डी इन द मैनेजमेंट ऑफ़ टाइप – 2 डायबिटीक मेलिटस ऐड ऑन थेरपी टू मेटफार्मिन; प्रोस्पेक्टिव ओपन लेबल ओब्सर्वेशनल स्टडी टू डॉक्यूमेंट द पोटेंशियल सेफ्टी इश्यूज एंड प्रिस्क्रिप्शन ट्रेंड्स इन सिलेक्टेड रसौषधि; एन ओपन लेबल क्लिनिकल ट्रायल टू क्लिनिकल एफीकेसी एंड सेफ्टी ऑफ़ आयुष ए.जी.टी. इन डैंड्रफ (दारुणक) को पूर्ण किया गया। परियोजना शीर्षक ए रैंडमाइज्ड प्लेसबो कंट्रोल्ड, डबल ब्लाइंड क्लिनिकल ट्रायल टू इवेलुएट इफेक्ट ऑफ़ त्रिकटु इन सबक्लिनिकल हायपोथायरोइडीसम एंड क्लिनिकल इवैल्यूएशन ऑफ़ विडंग चूर्ण एंड व्योषादि गुग्गुलु इन द मैनेजमेंट ऑफ़ मेदोरोग (ओबेसिटी) जारी है। क्लिनिकल इवैल्यूएशन ऑफ़ लेखनीय गण कषाय, आरोग्य वर्धिनी गुटिका इन द मैनेजमेंट ऑफ़ मेदोरोग (ओबेसिटी), एफीकेसी एंड सेफ्टी ऑफ़ आयुर्वेद फार्मूलेशन त्रिकटु इन डिसलिपिडिमीया – ए प्रोस्पेक्टिव रैंडमाइज्ड डबल ब्लाइंड प्लेसबो कंट्रोल्ड ट्रायल प्रारम्भिक अवस्था में है।

संस्थान ने बहु केन्द्रीय/सहयोगात्मक चिकित्सीय अनुसंधान परियोजनाओं की निगरानी कर रहा है – जैसे की ए डबल ब्लाइंड डबल डमी प्रोस्पेक्टिव रैंडमाइज्ड कंट्रोल्ड रिसर्च प्रोजेक्ट ऑन क्लासिकल आयुर्वेद मैनेजमेंट वर्सिस मेथोट्रेक्सीएट इन रुमेटोइड आर्थराइटिस (आम्रा स्टडी); वेलिडेशन एंड रिलायबिलिटी टेस्टिंग ऑफ़ डायप्रोस्टिक मेथेड्स इन आयुर्वेद; इवैल्यूएशन ऑफ़ आयुष जी.एम.एच इन सब्जेक्ट्स ऑफ़ माइल्ड टू मॉडरेट नॉन-अल्कोहोलिक फैटी लीवर डिजीज (एन.ए.एफ.एल.डी)-ए डबल ब्लाइंड रैंडमाइज्ड कंट्रोल्ड क्लिनिकल स्टडी; इवैल्यूएशन ऑफ़ हिपेटो प्रोटेक्टिव एक्टिविटी ऑफ़ पी.टी.के एस एन ऐड ऑन थेरपी इन द पेशेंट्स ऑफ़ ट्यूबरक्युलोसिस ऑन ए.टी.टी-ए डबल ब्लाइंड रैंडमाइज्ड कण्ट्रोल क्लिनिकल स्टडी; इवेलुएटीन्ग द एफिकेसी ऑफ़ आयुर्वेदिक इंटरवेंशन एज ऐड ऑन टू कन्वेंशनल ट्रीटमेंट एंड एक्सप्लोर द इंटरैक्शन ऑफ़ एपिजेनेटीक्स, न्यूरो/गट बायोमार्कर्स एंड न्यूरोइमेजिंग इन पीडियाट्रिक ए.डी.एच.डी (अटेंशन डेफिसिट हायपरएक्टिविटी डिसऑर्डर); सिस्टम्स बायोलॉजी अप्रोच टू डीलीनिंग मॉलिक्यूलर सिग्नैचर्स ऑफ़ प्रकृति इन हेल्दी ह्युमंस; इवेलुएटिंग द एफिकेसी ऑफ़ आयुर्वेद थेरपिस एज ऐड ऑन टू ऑप्टिमाइज़्ड कन्वेंशनल मैनेजमेंट ऑफ़ पार्किन्संस डिजीज: असेसमेंट ऑफ़

क्लिनिकल, न्यूरोफिजियोलॉजिकल, न्यूरोइम्यून एंड न्यूरोइमेजिंग आउटकम्स; एंड डबल ब्लाइंड रैंडमाइज्ड प्लेसबो कंट्रोलड मल्टीसेंट्रिक क्लिनिकल ट्रायल ऑफ आयुष एम-3 इन द मैनेजमेंट ऑफ माइग्रेन।

स्थापना के बाद से, चिकित्सीय अनुसंधान अनुभाग से 3,66,532 रोगियों को चिकित्सीय सेवाओं का लाभ प्राप्त हुआ है। समीक्षाधीन अवधि के दौरान, चिकित्सीय अनुसंधान विभाग के चिकित्सा सेवाओं में 22,003 रोगी(के.आ.अ.सं. परिसर, कनकपुर रोड में 13,838 और बलेपेट, बेंगलूरु में 8,165) लाभान्वित हुए हैं। विशेष चिकित्सा सेवाओं के अंतर्गत, 6039 जरा रोगी लाभान्वित हुए और 741 फ्लू जैसे रोगियों ने चिकित्सा उपचार का लाभ प्राप्त किया। ओपीडी आधारित पंचकर्म उपचारके अंतर्गत कुल 2877 (1708 पुरुष और 1169 महिलाओं) रोगियों को चिकित्सा प्रदान की गई।

संस्थान का चिकित्सीय अनुभाग सार्वजनिक स्वास्थ्य उन्मुख चिकित्सीय अनुसंधान कार्यक्रमों का संचालन करता है। समीक्षाधीन अवधि के दौरान आदिवासी स्वास्थ्य रक्षण अनुसंधान परियोजना (टी.एच.सी.आर.पी) के अंतर्गत 6027 आदिवासी आबादी का सर्वेक्षण किया गया। चिकित्सा शिविरों में 2592 रोगियों ने वैद्यकीय उपचार का लाभ पाया और 6 गावों में 114 यात्राओं के दौरान 11 लोक स्वास्थ्य दावों को दस्तावेजीकरण एवं पुष्टिकरण किया गया। कुल 3983 हिमोग्लोबिन (Hb%) एवं 3367 रैंडम ब्लड शुगर (RBS) रक्त परीक्षण किया गया।

आयुर्वेद मोबाइल स्वास्थ्य देखभाल परियोजना – एस.सी.एस.पी (अनुसूचित जाती उप योजना) के अंतर्गत, समीक्षाधीन अवधि के दौरान, चयनीत 5 गावों में कुल 5940 जनसंख्या का सर्वेक्षण किया गया और चिकित्सीय शिविरों में 1741 रोगियों ने वैद्यकीय उपचार का लाभ पाया। रिपोर्टिंग वर्ष 2021-22 के दौरान 7485 रक्त परीक्षण की गई।

चिकित्सीय अनुसंधान अनुभाग ने बाह्य रोगी विभाग के पंजीकरण, प्रयोगशाला परीक्षण एवं पंचकर्म से रूपए रु 2,73,121/- (दो लाख तिहत्तर हजार एक सौ इक्कीस मात्र) प्राप्त किए हैं।

## 2. औषधीय पौधों का सर्वेक्षण इकाई (एस.एम.पी.यु)

स्वीकृत आईएमआर परियोजना "मेडिको एथनो बॉटनिकल सर्वे (एमईबीएस) के सर्वेक्षण अनुसंधान परिणामों का संकलन" के अनुसार वर्ष 2021-22 के दौरान बागलकोट-रायचूर, विजयपुरा और कोलार जिलों में 03 एमईबीएस यात्राओं के माध्यम से लगभग 275 पौधों की तस्वीरों का दस्तावेजीकरण किया गया था। औषधीय पौधों के अनुसंधान के तहत, आईएमआर परियोजना शीर्षक "ऑइल सीड्स के संदर्भ में आयुर्वेद डायटेटिक्स पर संग्रह" पूर्ण हुआ है। 15 संकलित मोनोग्राफों का अंतिम सुधार प्रक्रियाधीन है। आईएमआर परियोजना शीर्षक "वृक्षारोपण में मियावाकी पद्धति का उपयोग करके औषधीय पौधों के सूक्ष्म वन का विकास" वित्तीय रूप से पूर्ण हुआ है। हालांकि, परियोजना के तहत खेती किए गए पौधों का विकास अबलोकन जून 2022 तक जारी है। राष्ट्रीय औषधीय पादप बोर्ड, नई दिल्ली द्वारा वित्त पोषित ई.एम.आर परियोजना शीर्षक "औषधीय पौधों की कृषिकरण, संरक्षण और सतत उपयोग के लिए नर्सरी की स्थापना" जारी है।

104 पौधों की प्रजातियों से संबंधित 215.7 किलोग्राम ताजा और 16.5 किलोग्राम सूखे औषधीय पौधों (लगभग 143 वनस्पति नमूनों) को बागलकोट, बल्लारी, कोप्पल, बेलगावी, धारवाड, चिक्कमगलूर, हासन जिलों में स्थानीय दौरा के माध्यम से और बेंगलूरु स्थानीय बाजारों से संग्रह की गई। प्रसंस्करण के बाद, 62.2 किलोग्राम के 80 कच्चे औषधीय पौधों के नमूनों को विभिन्न आई.एम.आर/ई.एम.आर अनुसंधान परियोजनाओं के तहत सीएआरआई कोलकाता, सीएआरआई झांसी, सीएसएमसीआरआई चेन्नई, आरएआरआई पुणे, आरएआरआई ग्वालियर, आरएआरआई जम्मू, पीसीआईएमएच गजियाबाद जैसे

विभिन्न सीसीआरएएस संस्थानों और एवीपी कोयंबतूर कोआपूर्ति की गई। शैक्षणिक विद्यार्थियों और अनुसंधान अध्येताओं को वनस्पति नमूनों (कच्चे औषधियों) की पहचान और प्रमाणीकरण की सेवा प्रदान कर रहा है। एस.एम.पी.यु ने 230 नमूनों की पहचान और प्रमाणीकरण के माध्यम से रूपए 57,500/- प्राप्त किए।

### 3. औषधी मानकीकरण अनुसंधान इकाई (डी.एस.आर.यु)

2019 में नए भवन में स्थानांतरण होने के बाद, डीएसआरयू को सीओई के तहत एचपीटीएलसी जैसे उपकरणों की खरीद के साथ उन्नयन किया गया है और टीएलसी, भौतिक-रासायनिक और पाउडर माइक्रोस्कोपी विश्लेषण और डीएसआरयू सहित फार्माकोग्रांस्टिकल अध्ययन पर काम शुरू किया गया है। आवश्यक रसायनों और कच्ची औषधि सामग्री की खरीद का कार्य प्रगति पर है। मूलभूत और आवश्यक उपकरणों की खरीद करके डीएसआरयू उन्नयन के लिए प्रस्ताव तैयार करके, डीएसआरयू में रिक्त पदों को भरने के लिए सीसीआरएएस मुख्यालय को सूचित किया गया है।

#### उत्कृष्टता केंद्र

संस्थान को आयुष मंत्रालय द्वारा मधुमेह में अनुसंधान और नैदानिक सेवाओं के लिए उत्कृष्टता केंद्र के रूप में मान्यता प्राप्त हुई है। तीन साल की अवधि के लिए स्वीकृत कुल धनराशि रु.7,24,80,400/- है, जिसमें से रु.2,88,00,000/- मार्च 2021 में पहली किश्त के रूप में जारी हुआ था। यह योजना अप्रैल 2021 में शुरू हुई थी। कोविड महामारी के कारण प्रथम वर्ष के लक्ष्य को प्राप्त करने के लिए परियोजना की अवधि में एक वर्ष का विस्तार स्वीकृत किया गया था।

इस योजना के तहत, 22 जुलाई 2021 से मधुमेह के रोगियों के लिए एक विशेष ओपीडी संचालित की जा रही है। रोगियों को मुफ्त परामर्श, दवाएं और प्रयोगशाला परीक्षण प्रदान किया जा रहा है। विशेष ओपीडी में इस वर्ष 617 मधुमेह रोगियों (380 पुरुष और 237 महिला) और 1445 अनुवर्तन (918 पुरुष और 527 महिला) को आयुर्वेद और योग चिकित्सा प्रदान की गई है। योजना के तहत 345 रोगियों की निःशुल्क प्रयोगशाला परीक्षण हुए हैं।

संस्थान अस्पताल के आसपास विभिन्न स्थानों पर सात मधुमेह शिविरों को आयोजन किया गया है। मधुमेह, मधुमेह में आहार और योग की उपयोगिता की जागरूकता बढ़ाने के लिए आम जनता के लिए 3 प्रशिक्षण कार्यक्रमों का आयोजन किया गया। सुश्रुत आयुर्वेदिक मेडिकल कॉलेज, बेंगलूरु के विद्यार्थियों के लिए अनुसंधान पद्धति, जैव-सांख्यिकी और मधुमेह के व्यापक प्रबंधन के बारे में एक प्रशिक्षण कार्यक्रम आयोजित किया गया था जिसमें बीएएमएस अंतिम वर्ष के 46 विद्यार्थियों ने भाग लिया।

साहित्य संकलन और विशेषज्ञ राय के आधार पर चार फॉर्मूलेशन का चयन करने के बाद उनका निर्माण और गुणवत्ता नियंत्रण विश्लेषण किया गया है। पूर्व चिकित्सकी और चिकित्सीय अध्ययन प्रोटोकॉल तैयार किया गया है। पूर्व-चिकित्सकी अध्ययन संभावी सहयोगियों की सहायता से संचालित किया जाएगा। भारतीय विज्ञान संस्थान, बेंगलूरु के साथ समझौता ज्ञापन पर हस्ताक्षर हुआ है। तकनीकी सहयोग के लिए अन्य संगठनों के साथ नेटवर्किंग का कार्य प्रगति पर है।

## आज़ादिका अमृत महोत्सव अभियान

भारत की स्वतंत्रता के 75 वर्ष पूर्ण होने के अवसर पर आयुष मंत्रालय, भारत सरकार ने आजादी का अमृत महोत्सव अभियान शुरू किया। के.आ.अ.सं., बेंगलुरु ने आम जनता के लिए स्वास्थ्य सलाहकार सामग्री के साथ-साथ संशमनी वटी, आयुष-64, अश्वगंधा घनवटी और आयुरक्षा किट जैसी आयुर्वेदिक रोगनिरोधी दवाओं का मुफ्त वितरण शुरू किया गया। बाह्य रोगी विभाग के रोगियों, आम जनता, विद्यालय और आयुर्वेदिक कॉलेजों में रोगनिरोधी दवाएं व्यापक रूप से वितरित की गईं। इस अभियान के तहत जागरूकता स्वास्थ्य शिविर और वेबिनार भी आयोजित किए गए।

## अस्पताल एवं प्रयोगशाला प्रत्यायन

परीक्षण और मापांकन प्रयोगशालाओं के लिए राष्ट्रीय प्रत्यायन बोर्ड (एनएबीएल) और अस्पतालों और स्वास्थ्य देखभाल के लिए राष्ट्रीय प्रत्यायन बोर्ड (एनएबीएच) की स्थापना के लिए संस्थान द्वारा कदम उठाए गए हैं। आवश्यक प्रयोगशाला मशीनों को खरीद करके स्थापित किया गया है और प्रयोगशाला परीक्षण प्रक्रियाएं प्रक्रिया में हैं। बाहरी और आंतरिक गुणवत्ता नियंत्रण शुरू किया गया है। दस्तावेज तैयार करने की प्रक्रिया संचालित है।

**CENTRAL AYURVEDA RESEARCH INSTITUTE, BENGALURU**  
**(Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH, Govt. of India)**

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**SUMMARY OF ANNUAL PROGRESS REPORT 2021-22**

**Introduction**

Central Ayurveda Research Institute, under Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, has been functioning in Bengaluru since 1971. The Institute consists of three divisions; viz., (1) Clinical Research unit (CRU), (2) Survey of Medicinal Plants Unit (SMPU) and (3) Drug Standardization Research Unit (DSRU). CARI is consisting of Hospital Block with Out Patient Department (OPD), 28-bedded In Patient Department (IPD) facility, Panchakarma, Yoga, Marma, Laboratory, Pharmacy, Operation Theatre and other services. The Admin Block consists of Office, Library, Store, Seminar Hall, Meeting Hall, Food Laboratory, Microbiology, Pharmacognosy, Chemistry, Botany sections.

Since inception, the institute has been actively participating in achieving targets according to the allotted programs. The scientists are from diverse disciplines working with a focused aim of scientific validation of Ayurveda. The institute is implementing national schemes. The OPD and Panchakarma facilities at new campus are functioning successfully and rendering service to the public.

Since inception, the institute has 453 scientific publications and abstracts, 9 monographs, 8 book reviews, 1146 presentations and participations and has got 3 gold medals, 3 best research papers and incentives for two best publications. The reference library hosts 1992 books, important scientific journals and CCRAS publications for sale. During the reporting year, scientists from CARI have published 18 research articles in national and international journals and 08 are in pipeline. Officers participated in 257 seminars, webinars, conferences, meetings and hands on trainings. Presently there are 23 regular employees working at CARI, Bengaluru against the 64 sanctioned posts. The Institute received a budget allocation of 4.73 Crores.

The institute also organized various activities such as International Yoga Day on 21<sup>st</sup> June, Ayurveda Day, four Rajbhasha Hindi workshops, National AYUSH programmes like Poshana Maah, Poshan Pakhwada, Swacchata Pakhwada, Vigilance Awareness Week and Azadi Ka Amrit Mahotsav (AKAM). In view of COVID-19 restrictions, most of these activities were conducted online. The Institute has organized two workshops on Research Proposal Writing for Grant and Sensitization Programme for Sustainable Maintenance of Namaste Portal in March 2022.

About 3380 medicinal plants samplings produced under National Medicinal Plants Board (NMPB) grant-in-aid project “Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants” were distributed for free of cost to the public, students, teachers and farmers under ‘AYUSH Aapke Dwar’ programme.

**1. Clinical Research Unit (CRU)**

Presently the institute is rendering clinical services through two Out Patient Departments (OPDs), one at Clinical Research Unit (CRU), Balepete and another at CARI

main campus at Off Kanakapura Road, Bengaluru. The institute provides primary health care to patients at outpatient level with dispensing of free medicines. The facilities include preventive and curative medical care, laboratory investigations (routine haematological, biochemical and pathological) Panchakarma treatment & Marma. Since inception, clinical research projects on Kuposhana (Malnutrition), Arsha (Haemorrhoids), Manodwega (Anxiety neurosis), Tamakashwasa (Bronchial Asthma), Vyanabala Vaishmya (Hypertension), Pandu (Iron deficiency Anemia) have been completed. Further, collection of information about claims of prevention and treatment of Vector Borne Diseases, Flu like illness and Pharmacovigilance studies on Ayurvedic medicines have been completed. Intramural Clinical Research Projects (IMCRP) on Rasayana (Aswagandhavalehya and Brahmarasayana in geriatrics), Kashtartava (Dysmenorrhoea), Sthaulya (Obesity), Osteoarthritis Knee, Rasayana effect of Chyavanaprasha, Osteoporosis, Bronchial Asthma and Diabetes Mellitus and A collaborative study of AYUSH QOL-2C in Breast cancer have been completed.

During the reporting period, the CRU has completed Research Projects viz. A Randomized Placebo Controlled Prospective Phase-2 Clinical Study of an Ayurvedic coded drug AYUSH D on Glycaemic control in Prediabetic Subjects; A Randomized Placebo Controlled Phase -2 Clinical Study of an Ayurvedic Coded Drug 'AYUSH D' in the Management of Type 2-Diabetes Mellitus as add on Therapy to Metformin; Prospective Open labelled Observational study to document the potential safety issues and prescription trends in selected Rasaushadhis; An open label clinical trial to evaluate clinical efficacy and safety of AYUSH AGT in Dandruff (Darunaka); A Randomised Placebo Controlled, Double blind clinical trial to evaluate the effect of Trikatu in Subclinical Hypothyroidism; Clinical Evaluation of Vidangachurna and Vyoshadi Guggulu in the Management of Medoroga (Obesity) are ongoing under Clinical Research projects in the institute. Clinical Evaluation of Lekhaniya Gana Kashaya and Arogyavardhini Gutika in the Management of Medoroga (Obesity) and Efficacy and safety of Ayurveda Formulation 'Trikatu' in Dyslipidemia- a Prospective Randomized Double Blind Placebo Controlled Trial are yet to be initiated.

CARI is monitoring Multi Centric/Collaborative Clinical Research Projects (MCCR)- viz: A Double Blind Double Dummy Prospective Randomized Controlled Research Project on classical Ayurveda Management versus Methotrexate in Rheumatoid Arthritis (AMRA Study); Validation and Reliability testing of Diagnostic Methods in Ayurveda; Evaluation of AYUSH GMH in subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD)-A double blind Randomized controlled clinical study; Evaluation of Hepato protective activity of PTK as an add on therapy in the patients of Tuberculosis on ATT – A, Double Blind Randomized control clinical study; Evaluating the efficacy of Ayurvedic intervention as add on to conventional treatment and explore the interaction of Epigenetics, Neuro/gut biomarkers and Neuroimaging in Pediatric ADHD (Attention Deficit Hyperactivity Disorder); Systems biology approach to delineate molecular signatures of Prakriti in healthy humans; Evaluating the efficacy of Ayurveda therapies as add-on to optimized conventional management of Parkinson's disease: assessment of clinical, neurophysiological, neuroimmune and neuroimaging outcomes; and Double Blind Randomized Placebo Controlled Multicentric Clinical Trial of Ayush M-3 in the Management of Migraine.

Since inception the Clinical Research Unit has served 3,66,532 patients. During the reporting period 22,003 patients (13,838 at CARI Campus Kanakapura Road and 8,165 at

Clinical Section Balepete) have been benefited. As a part of special medical services, 6039 geriatric patients, 741 patients with flu like illness were treated. OPD based Panchakarma treatment was provided to 2877 patients including 1708 male and 1169 female.

The unit conducts outreach clinical research programmes with public health orientation. During the reporting period, under Tribal Health Care Research Project (THCRP), 6027 tribal population have been surveyed and 2592 patients were treated. During the visits, 11 folklore claims were documented and validated; total 3983 Haemoglobin (Hb%) tests and 3367 Random Blood Sugar (RBS) tests were done during 114 visits in 6 villages.

Under Ayurveda Mobile Health Care Project- SCSP (Scheduled Caste Sub Plan), total 5940 population have been surveyed and 1741 patients were treated in selected 5 villages and 7485 Investigations conducted during the reporting year 2021-22.

The Clinical Research Unit has generated Rs. 2,73,121/- (Rupees two lakh seventy three thousand one hundred and twenty one rupees only) from OPD registration, laboratory investigations and Panchakarma.

## **2. Survey of Medicinal Plants Unit (SMPU)**

As per the sanctioned IMR project “Anthology of Survey Research outcomes of Medico Ethno Botanical Survey (MEBS)” about 275 plant photographs were documented through 03 MEBS tours in Bagalkot-Raichur, Vijayapura and Kolar districts during the year 2021-22. Under Medicinal Plants Research, IMR project entitled “Compendium on Ayurveda Dietetics with reference to Oil Seeds” completed. Final corrections of the 15 compiled monographs are under process. IMR project entitled “Development of Micro Forest of Medicinal Plants by using Miyawaki Method of Plantation” completed financially. However, growth observation of the plants cultivated under the project is continuing till June 2022. National Medicinal Plants Board grant-in-aid project entitled “Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants” is continuing.

About 143 botanical samples weighing 215.7 kg fresh and 16.5 kg dry material belonging to 104 plant species were collected/procured through local tours in Bagalkot, Bellary, Koppal, Belgaum, Dharwad, Chickmagalur, Hassan districts, surrounding areas of Bengaluru and local markets. After processing, 80 crude drug samples weighting about 62.2 kg were supplied to various CCRAS institutions such as CARI Kolkata, CARI Jhansi, CSMCARI Chennai, RARI Pune, RARI Gwalior, RARI Jammu, PCIMH Ghaziabad and AVP Coimbatore under various IMR/EMR research projects. The department also provided service of identification of botanical samples (raw drugs) for academic and research students and generated Rs. 57,500/- revenue through authentication of 230 samples & sale of medicinal plant saplings.

## **3. Drug Standardization Research Unit (DSRU)**

After shifting to the new building in 2019, the DSRU has been upgraded with purchase of equipment like High Performance Thin Layer Chromatography (HPTLC) under CoE and work has been initiated on pharmacognostical study including Thin Layer Chromatography (TLC), physico-chemical and powder microscopy analysis in the DSRU. Procurement of essential chemicals and crude drug material is under progress. Proposal for upgradation of



DSRU by procuring basic and necessary instruments and by filling the vacant positions in the DSRU was prepared and communicated with CCRAS Hqrs.

### **Centre of Excellence**

The Institute is recognized as Centre of Excellence for Research and Clinical services in Madhumeha (Diabetes Mellitus) by Ministry of AYUSH. The total fund sanctioned is Rs.7,24,80,400/- for a duration of three years of which Rs.2,88,00,000/- was released as first instalment in March 2021. The scheme got initiated in April 2021. An extension of 1 year was sanctioned to reach the first year targets due to COVID-19 pandemic.

Under the scheme, a specialized OPD for patients of Madhumeha has been made functional since 22<sup>nd</sup> July 2021. The patients are being provided with free consultation, medicines and laboratory investigations. The specialized OPD has catered to 617 diabetic patients (380 Male & 237 Female) and 1445 follow-up visits (918 Male & 527 Female) in this year offering Ayurveda and Yoga therapies. 345 patients have had free laboratory investigations under the scheme.

Seven Diabetes camps were conducted at different places around CARI hospital. 3 training programmes were conducted for general public to raise awareness about Diabetes, importance of diet and Yoga in Diabetes. Another training programme was conducted for students from Sushrutha Ayurvedic Medical College, Bengaluru regarding Research Methodology, Biostatistics and Comprehensive management of Diabetes Mellitus which was attended by 46 students of Final year BAMS.

Four formulations have been shortlisted based on literature compilation and expert opinion, manufactured and quality control analysis completed. Preclinical and clinical study protocols were prepared. Pre-clinical studies will be conducted with potential collaborators. Memorandum of Understanding (MoU) has been signed with Indian Institute of Science (IISc), Bengaluru. Networking with other organisations for technical collaborations is in progress.

### **Azadi Ka Amrit Mahotsav (AKAM) Campaign**

In view of 75<sup>th</sup> year of independence of India, Ministry of AYUSH, Govt. of India initiated Azadi Ka Amrit Mahotsav (AKAM) campaign. CARI Bengaluru launched the free distribution of Ayurvedic prophylactic medicines like Samshamana Vati, Ayush 64, Ashwagandha Ghana Vati & AyuRaksha Kit along with health advisory materials to general public. The Prophylactic medicines were widely distributed to OPD patients, public, schools and Ayurvedic colleges. The awareness health camps and webinar series were also conducted under this campaign.

### **Hospital & Laboratory Accreditation**

Steps have been taken to get accreditation from the National Accreditation Board for Testing and Calibration Laboratories (NABL) and National Accreditation Board for Hospitals & Healthcare Providers (NABH). The necessary lab machines have been procured, installed and lab test procedures are in process. External and Internal Quality control has been initiated. The process of documentation is in progress.

**Background note on Intra Mural Research (IMR)/ Multi Centric Collaborative Research Projects (MCCRP)/Outside Funding Research Projects**

Sl. No.	Title	Period	T*	E*	C*	DO*	Remarks
<b>Intra-Mural Clinical Research Programs (IMCRP)/ Multi Centric/Collaborative Projects (MCCRP)</b>							
1.	Randomised Placebo controlled prospective Phase II clinical study of an ayurvedic coded drug AYUSH-D on glycemic control in prediabetic subjects	30 months	66	65	57	08	Completed
2.	Randomised Placebo controlled prospective Phase II clinical study of ayurvedic coded drug AYUSH-D”in the management of type 2 Diabetes mellitus as add on therapy to Metformin	30 months	66	66	54	12	Completed
3.	A prospective Open labeled Observational study to document the potential safety issues and prescription trends in selected Rasaushadhi’s in CCRAS-OPD’s across India	1 year	110	110	98	12	Completed
4.	An open label clinical trial to evaluate clinical efficacy and safety of Ayush AGT in Dandruff (Darunaka)	1 year	50	50	45	5	Completed
5.	Clinical Evaluation of Vidanga churna and Vyoshadi Guggulu in the Management of Medoroga (Obesity) under Annual action plan 2018-19	2 years	50	22	5	00	Ongoing
6.	A Randomized, Placebo-controlled, Double-blind Clinical Trial to Evaluate the Effect of Trikatu in Subclinical Hypothyroidism	2 years	90	03	00	00	Ongoing
7.	Evaluation of Hepatoprotective activity of PTK as an add on therapy in the patients of Tuberculosis on ATT - A Double Blind Randomized control clinical study	2 years	150	07	00	01	Ongoing
8.	Evaluating the efficacy of ayurvedic intervention as add on to conventional treatment and explore the interaction of epigenetics, neuro/gut biomarkers and neuroimaging in pediatric ADHD (attention deficit hyperactivity disorder).	3 years	160	9	00	00	Ongoing
9.	Validation and Reliability testing of Diagnostic Methods in Ayurveda	1 Year					
	a. Prameha		30	30	30	00	Ongoing
	b. Pandu		30	24	23	01	Ongoing

<b>Tribal Sub Plan Programme (THCRP)</b>				
10.	Profiling of Demographic, Health status and Non Communicable Diseases among Schedule Tribe population in selected States across India-a descriptive, cross sectional, Epidemiological study	2021-22	Villages visited: 06 Population covered: 6027 Patients treated: 2592 LHT claims: 11 Total Visits: 114 Investigations conducted:	Completed
11.	A Prophylactic Community Based Study to Assess the impact of Ayu Raksha Kit in COVID-19	2021-22	Villages visited: 6 Target: 2640 Grp A: (Intervention) 2400 Grp B (Cont. group): 240 Enrolled: 2640 Completed: 2545 Drop outs: 95 ADR: 12	Completed
12.	A Prospective Community based Study for the evaluation of Dhatri Loha in the Management of Anaemia (Pandu)	2021-22	Villages visited: 6 Target: 35 Enrolled: 35 Completed: 32 Drop outs: 03	Completed
13.	A Prospective Community based Study for the evaluation of Yogaraja Guggulu, Ashwagandha Churna & Narayana Taila in the Management of Osteoarthritis Knee (Janugata Sandhivata)	2021-22	Villages visited: 6 Target: 35 Enrolled: 35 Completed: 33 Drop outs: 02	Completed
14.	Effectiveness of Ayurveda based diet and lifestyle advocacy on health related quality of life in schedule tribe population in India-a community based, cluster randomized controlled study	2021-22	Villages visited: 6 Target: 70 Grp A: (Intervention): 35 Grp B (Cont. group): 35 Enrolled: 70 Completed: 70 Drop outs: 00	Completed
<b>Scheduled Caste Sub Plan</b>				
15.	Ayurveda Mobile Health Care Project- SCSP (Scheduled Caste Sub Plan)	2021-22	Villages visited: 5 Population covered: 5940 Patients treated:1741 Follow up: 1848 Investigations conducted: 7485 Screening of NCD Anaemia:2597 Malnutrition:344 Diabetes Mellitus:2170 Hypertension: 4481	Completed
16.	A prospective community based study for the evaluation of Punarnavadi Mandura in Anemia (Pandu)	2021-22	Villages visited: 5 Target: 50 Enrolled: 50 Completed: 41 Drop outs: 09	Completed

17.	Effectiveness of Ayurveda based diet and Lifestyle advocacy on health related Quality of life in Schedule Caste population in India- a Community based, cluster randomized controlled study	2021-22	Villages visited: 5 Target: 70 Enrolled: 70 Completed: 70 Drop outs:00 Intervention group: 35 Control group: 35	Completed
18.	A prophylactic community based study to assess the impact of Ayuraksha Kit in COVID-19	2 months	Villages visited: 10 Target: 693 Enrolled: 693 Completed: 693 Drop outs:00 Intervention group: 630 Control group: 63	Completed
<b>IMR (Medicinal Plant Research)</b>				
19.	Development of micro forest of medicinal plants by using Miyawaki method of plantation	3 years 26 March 2019 to 26 March 2022	Miyawaki forest developed in about 3000 sq. ft. area. 1560 native plant species cultivated under experimental group through Miyawaki method of plantation and 90 under control	Completed (observational aspects are to be recorded till June 2022)
20.	Anthology of Survey Research outcomes of Medico Ethno Botanical Survey (MEBS)	2 years 15 July 2020 to 14 <sup>th</sup> July 2023	Target: District wise preparation of monographs on Medico Ethno Botany for Bagalkot, Raichur, Vijayapura, Kolar, Kalaburagi, Bidar, Yadgir, Hassan, Dakshina Kannada and Udupi districts	03 MEBS survey tours conducted (one in each districts of Bagalkot-Raichur, Vijayapura & Kolar. Ongoing
<b>Outside Funded Projects</b>				
21.	Centre of Excellence for Research & Clinical Services in Madhumeha (Diabetes Mellitus)	4 years	Camps (Diabetes): 07 Camps (Yoga): 01 OPD Patients treated: 2062 Lab Investigations: 345 Training programmes conducted (public): 03 Training programmes conducted (Ayurveda students): 01 No. of formulations for preclinical studies: 04 MOU's signed: 01 (IISc)	Ongoing
22.	National Pharmaco vigilance Programme	1 year	Total Misleading Advertisements	Ongoing

			Reported: 105 ADR Reported: 1 CME Conducted /Awareness Program Conducted: 1 Participation in CME as resource persons: 3 Participation in the training program: Articles Published: 2 published, 2 submitted for publication	
23.	NMPB Project on Establishment of Nursery for Cultivation, Conservation and Sustainable Utilization of Medicinal Plants	3 years	4100 samplings belonging to Panasa, Nimba, Aragvadhya, Karanja, Asoka, Kovidara, Gambari produced and distributed to public; 150 saplings are under cultivation	Ongoing

#### **Research Projects sanctioned and to be initiated**

1. Tribal Health Care Research Project for the year 2022-23.
2. A Collaborative Double Blind Double Dummy Prospective Randomized Controlled Research Project on classical Ayurveda Management versus Methotrexate in Rheumatoid Arthritis (AMRA STUDY).
3. MCCRP- Evaluation of AYUSH GMH in subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD)-A double blind Randomized controlled clinical study.
4. Systems biology approach to delineate molecular signatures of Prakriti in healthy humans.
5. Evaluating the efficacy of Ayurveda therapies as add-on to optimized conventional management of Parkinson's disease: assessment of clinical, neurophysiological, neuroimmune and neuroimaging outcomes.
6. Clinical Evaluation of Lekhaniya Gana Kashaya and Arogyavardhini Gutika in the Management of Medoroga (Obesity).
7. Efficacy and safety of Ayurveda Formulation 'Trikatu' in Dyslipidemia- a Prospective Randomized Double Blind Placebo Controlled Trial.
8. Double Blind Randomized Placebo Controlled Multicentric Clinical Trial of Ayush M-3 in the Management of Migraine.
9. Systems Biology approach to delineate molecular signatures of Prakriti in healthy humans.

#### **IMR Clinical/Medicinal Research Projects/concept notes Submitted to Council for approval**

1. A Clinical Trial to evaluate the efficacy of Ayurvedic Interventions in the Management of Mild to Severe Non Proliferative Diabetic Retinopathy w.s.r (Madhumehajanya Drishti Gataroga).
2. Evaluation of therapeutic efficacy and safety of 'Arogyavardhinivati and pippalyadyasava in Non-alcoholic fatty liver disease w.s.r.to Udara: A single arm, pre-post experimental study.
3. A Clinical Study to Evaluate the Efficacy and Safety of Arjunarista in Dyslipidemia.

4. Evaluation of Effect of Ayurvedic Interventions in the Management of Refractive changes associated with type 2 diabetes: A Multicentric Open Label Randomized Placebo Controlled Clinical Trial.
5. Exploring the Association between Prakriti (Body Constitution) and Prevalence of Type 2 Diabetes Mellitus (DM) based on Ayurvedic Prakriti Assessment Scale: A Cross- Sectional Study.
6. Evaluation of Effect of Ayurvedic Interventions in the Management of Refractive changes Associated with Type 2 Diabetes: A Randomized Double Blinded Placebo Controlled Clinical Trial.
7. Comparative clinical study of Chandraprabha Vati and Kaanchanar Guggulu in the management of Vatastheela Mutraghat w. s.r. to Benign Prostatic Hyperplasia (BPH)

#### **Brief details of Publications/Participation/Research Projects**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Number</b>
1.	Research papers published	23
2.	Research papers communicated	2
3.	Scientific presentations/participations	257
4.	Research projects ongoing	09
5.	Research projects completed	14
6.	Research projects to be initiated	08
7.	Research project proposals/concept note submitted	07