



CCRAS ANNUAL REPORT 2018-19
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I. OVERVIEW

1.1 OBJECTIVES OF THE COUNCIL

The Central Council for Research in Ayurvedic sciences (CCRAS), an autonomous body under Ministry of AYUSH, Govt. of India is apex body in India for undertaking, coordinating, formulating, developing and promoting research on scientific lines in Ayurvedic sciences. The activities are carried out through its 31 Institutes/Centres/Units located all over India and also through collaborative studies with various Universities, Hospitals and Institutes. The research activities of the Council include Medicinal Plant Research (Medico-ethno Botanical Survey, Pharmacognosy and Tissue Culture), Drug Standardization, Pharmacological Research, Clinical Research, Literary Research & Documentation. Besides this, Council has conducting outreach activities viz. Tribal Health Care Research Programme, Ayurveda Mobile Health Care programme, Swasthya Rakshan Programme and National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS).

The objectives for which the Central Council is established are:

1. The formulation of aims and patterns of research on scientific lines in Ayurvedic sciences.
2. To undertake any research or other programmes in Ayurvedic sciences.
3. The prosecution of and assistance in research, the propagation of knowledge and experimental measures generally in connection with the causation, mode of spread and prevention of diseases.
4. To initiate, aid, develop and co-ordinate scientific research in different aspects, fundamental and applied of Ayurvedic sciences and to promote and assist institutions of research for the study of diseases, their prevention, causation and remedy.
5. To finance enquiries and researches for the furtherance of objects of the Central Council.
6. To exchange information with other institutions, associations and societies interested in the objects similar to those of the Central Council and specially in observation and study of diseases in East and in India in particular.
7. To prepare, print, publish and exhibit any papers, posters, pamphlets, periodicals and books for furtherance of the objects of the Central Council and contribute to such literature.
8. To issue appeals and make applications for money and funds in furtherance of the objects of the Central Council and to accept for the aforesaid purpose gifts, donations and subscriptions of cash and securities and of any property whether movable or immovable.
9. To borrow or raise monies with or without security or on security mortgage charge, hypothecation or pledge of all or any of the immovable or movable properties belonging to the Central Council or in any other manner whatsoever.
10. To invest and deal with the funds and monies of the Central Council or entrusted to the Central Council not immediately required in such manner as may from time to time be determined by the Governing Body of the Central Council.



11. To permit the funds of the Central Council to be held by the Government of India.
12. To acquire and hold, whether temporarily or permanently any movable or immovable property necessary or convenient for the furtherance of the objects of the Central Council.
13. To sell, lease, mortgage and exchange, and otherwise transfer any of the properties movable or immovable of the Central Council provided prior approval of the Central Government is obtained for the transfer of immovable property.
14. To purchase, construct, maintain and alter any buildings or works necessary or convenient for the purpose of the Central Council.
15. To undertake and accept the management of any endowment or trust fund for donation, the undertaking or acceptance whereof may seem desirable.
16. To offer prizes and grant of scholarships, including travelling scholarships in furtherance of the objects of the Central Council.
17. To create administrative, technical and ministerial and other posts under the Society and to make appointments thereto in accordance with the rules and regulations of the Society.
18. To establish a provident fund and/or pension fund for the benefit of the Central Council's employees and/or their family members.
19. To do all such other lawful things either alone or in conjunction with others as the Central Council may consider necessary or as being incidental or conducive to the attainment of the above objects.
20. To undertake R & D Consultancy projects and transfer of patents on drugs and process to industry.
21. To undertake R & D projects sponsored by industries in public/private sector.
22. To undertake international and interagency collaboration.
23. Utilization of results of research conducted and payment of share of royalties/consultancy fees to those who has contributed towards pursuit of such research.
24. To enter into arrangements with scientific agencies of other countries for exchange of scientists, study tours, training in specialized areas, conducting joint projects etc.
25. To provide technical assistance to Govt./Private agencies in matters consistent with the activities of the Council.
26. To assist Medicinal Plants Board, Government of India in achieving its objectives.
27. To constitute small Management Committees consisting of eminent Scientists/ Physicians of local areas to monitor the R & D activities and suggest remedial measures for the improvement of activities of all Central as well as Research Institutes of the Council.



1.2 ACHIEVEMENTS AT A GLANCE

The Council continued its activities during the reporting period in the areas of Medicinal Plant Research (Medico-ethno botanical Survey, Pharmacognosy and Cultivation), Drug Standardization, Pharmacological Research, Clinical Research and Literary Research & Documentation Programme. The outreach activities comprise of Tribal Health Care Research Programme, Ayurvedic Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP), Swasthya Rakshan Programme, Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) and Ayurvedic Health Centres under North East Plan. Besides this, Health care services through Out-Patient Department (OPD) and In-Patient Departments (IPDs) and Special clinics for Geriatric Health care. Programme wise achievements are as under:

Clinical Research Programme

Intra Mural Clinical Research (IMR)

Under IMR, 13 Clinical Research projects on 12 diseases/conditions viz. Psoriasis, Urolithiasis, Uterine Fibroid, Rheumatoid Arthritis, Haemorrhoids, Osteoarthritis knee, Gout, Osteopenia/Osteoporosis, Obesity, Iron Deficiency Anaemia, Menopausal syndrome & Cognitive Deficit have been completed and 20 IMR Projects on 16 diseases/conditions viz., Allergic Conjunctivitis, Urolithiasis, Cervical Spondylosis, Osteoarthritis knee, Primary Dysmenorrhoea, Gout, Sciatica, Chronic Bronchitis, Fissure, Iron Deficiency Anaemia, Rheumatoid Arthritis, Bacterial Vaginosis, Bronchial Asthma, Ano-rectal Fistula, Allergic Rhinitis & Influenza like illness have been going on.

Collaborative Clinical Research

Under collaborative Clinical Research, 3 projects viz. Clinical study of 'AYUSH Rasayana A & B' in Elderly subjects with AIIMS, New Delhi & BHU, Varanasi; Development of Bio-medical instrumentation for Ksharasutra chamber for preparation of standardized Ksharasutra with IIT, New Delhi and Validation of Prakriti Assessment Questionnaire/Scale with reputed organizations have been completed and 5 projects viz. C1-Oil for wound healing; Clinical study of coded drug in the management of Dengue fever & prevention its complications in collaboration with ICMR; Ayush D for pre-diabetic subjects, Ayush D for Type-II Diabetes Mellitus and Validation & Reliability Testing of Ayurveda Diagnostic Methods with reputed organizations have been going on.

Drug Research Programme

Medicinal Plant Research:

The council has continued Medicinal Plant Research - Medico-ethno-botanical survey conducted 23 tours in selected areas of 6 states during the survey 75 museum samples, 629.5 Kg raw drug collected and documented 450 folk claims. 115 new medicinal plants introduced in demonstrative gardens of Institutes. Besides this, 9 Intra Mural Medicinal Plant Research projects have been completed and 12 projects are going on.



Drug Standardization

Under Drug Standardization, 136 single drugs and 29 compound formulations have been carried out. Besides this, one Intra Mural Drug Standardization Research project has been completed and 10 projects are going on.

Pharmacological Research

Under this programme, one Intra Mural Pharmacological Research Project has been completed and 18 projects are going on.

Literary Research Programme

Under this programme, Medico-historical studies, lexicographic work, contemporary literature and publications related to Ayurveda and modern sciences have been continued. The Council has brought out periodicals viz. Journal of Research in Ayurvedic Sciences and Journal of Drug Research in Ayurvedic Sciences. During the reporting period, 20 books have been published. One Intra Mural Literary Research projects have been completed and 11 projects are going on. Besides this, one collaborative project has been completed and one project is going on.

AYUSH Research Portal - A web based portal for Research publication in AYUSH is successfully continued and the information being updated periodically. Till date 26662 scientific publications have been uploaded.

Outreach Activities

Tribal Health Care Research Programme under Tribal Sub Plan (TSP)

This programme has been executed through 15 CCRAS institutes in 14 states. During the reporting period, the Council has covered a population of 145676 out of which 127683 were tribal people belonging to 183 villages and incidental medical aid has been provided to 61968 patients out of which 52513 patients were tribal people and 208 folk claims/LHTs have been documented.

Ayurveda Mobile Health Care Research Programme under Scheduled Castes Sub Plan (SCSP)

This programme has been executed through 20 CCRAS institutes in 18 states. A total 216275 Scheduled Castes population surveyed, 162 villages/colonies covered through 4744 tours in 18 states and medical aid provided to 120907 scheduled castes patients.

Reproductive and Child Health Care (RCH) Programme under Scheduled Castes Sub Plan (SCSP)

This programme has been executed through 19 CCRAS institutes in 17 states. A total 29372 Population Surveyed, 95 villages covered through 887 Tours and medical aid provided to 12445 women & child out of which 10,106 (Women-8,332, child -1,774) were schedule caste. Besides this, 281 health related awareness activities were conducted during the reporting period.



Swasthya Rakshan Programme

This programme has been executed through 21 CCRAS Institutes in 19 states. A total 162 villages/ colonies covered through 4985 tours and medical aid provided to 149940 patients.

Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) in 3 districts Surendra Nagar (Gujarat), Bhilwada (Rajasthan) & Gaya (Bihar)

This programme has been executed in 3 districts i.e. Surendra Nagar (Gujarat), Bhilwada (Rajasthan) and Gaya (Bihar). A total 24728 patients were enrolled for selected non communicable diseases, 259692 patients were enrolled/ registered for Yoga Classes and 2608 camps were conducted.

Ayurvedic Health Centres under North East Plan

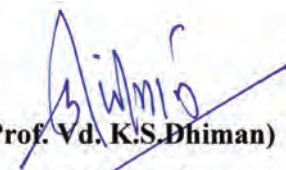
The Ayurvedic Health Centres under NE Plan are functioning at 30 centres in 3 States. In Assam a total 69710 patients were attended at 15 Ayurvedic Health Centres through RARIGID, Guwahati, in Sikkim a total 27736 patients were attended at 6 Ayurvedic Health Centres through RARI, Gangtok and in Arunachal Pradesh a total 26745 patients were attended at 9 Ayurvedic Health Centres through RARI, Itanagar.

IEC Activities

The Council has participated in 42 Arogya Melas, fairs, exhibitions for dissemination of knowledge and awareness of Ayurveda in public and also conducted training programmes, seminars, workshops and conferences at different locations of the Country.

New Delhi

Dated: 1.8.19


(Prof. Vd. K.S. Dhiman)
Director General



II. MANAGEMENT

2.1 Governing Body

The Central Council for Research in Ayurvedic Sciences is a Registered Society under Societies Registration Act XXI of 1860 on 29.07.2011 (Formerly Registered as Central Council for Research in Ayurveda and Siddha on 30th March, 1978). During the period under report ending on 31st March, 2019, the members of Governing Body (reconstituted on 18th June, 2018) of the Council are as under:

- | | | |
|----|--|--|
| 1 | President | Sh. Shripad Yesso Naik, Minister of State (Independent Charge),
Ministry of AYUSH |
| 2. | Vice-President | Vaidya Rajesh Kotecha, Spl. Secretary |
| 3. | Special Secretary & Financial
Advisor, Ministry of Health &
Family Welfare | Smt. Vijaya Srivastava |
| 4. | Joint Secretary (AYUSH) | Sh. PN Ranjitekumar |

Non-Official Members

Eminent Researcher /Teacher /Professional in Ayurveda

- | | | |
|----|--|--------|
| 5. | Prof. M.S. Bhagel,
Former Director, IPGT&RA,
C-101 Unique Towers, Mahal Gaon,
Near Pratap Nagar, Sector 26,
Jaipur | Member |
|----|--|--------|

University/Professors/Researchers

- | | | |
|----|---|--------|
| 6. | Prof. V.K.Joshi,
Head, Deptt. of Dravyaguna,
Faculty of Ayurveda
Institute of Medical Sciences,
BHU, Varanasi. | Member |
| 7. | Prof. Atul Babu Varshnaye,
Associate Prof. Head Rog Nidan Deptt.
Lalit Hari Govt. Post Graduate Ay. College,
Pilibhit (U.P.) | Member |
| 8. | Prof. Dr. S.S. Savrikar
14/8, Govt. Colony, Haji Ali,
Mumbai | Member |



Experts in Ayurveda (other than University Professors/Researchers)

9. Vd, Vinay Velankar, Member
R-22, Varad, Sudarshan Nagar,
MIDC, Dombivali East,
Thane(Maharashtra)
10. Dr. Yogesh Bendala, Member
Flat No.1&2 Srivijay Apptt.
Nilkamal Society, Karve Nagar,
Pune

Experts in Pharmacology

11. Dr. B. Ravi Shankar, Member
438, first floor, Dattagalli, 3rd Stag,
Near Jodi Bevina Mara, Mysore

Experts in Chemistry

12. Dr. Karan Vasistha, Member
Former Head University Institute of
Pharmaceutical Sciences(UIPS),
Chandigarh.

Experts in Botany

13. Dr. H.B. Singh Member
Chief Scientist, Herbology,
AIMIL Pharmaceuticals India Ltd, New Delhi

Experts in Modern Medicine

14. Dr. Ashok L. Kukad, Member
Vivekanand Hospital
Vidya Nagar, Latur

Ex-Officio Member

- 15 Prof. Vd. K.S. Dhiman, Member Secretary
Director General, CCRAS

During the period under report, the 23rd meeting of the Governing Body was held on 18/06/2018.

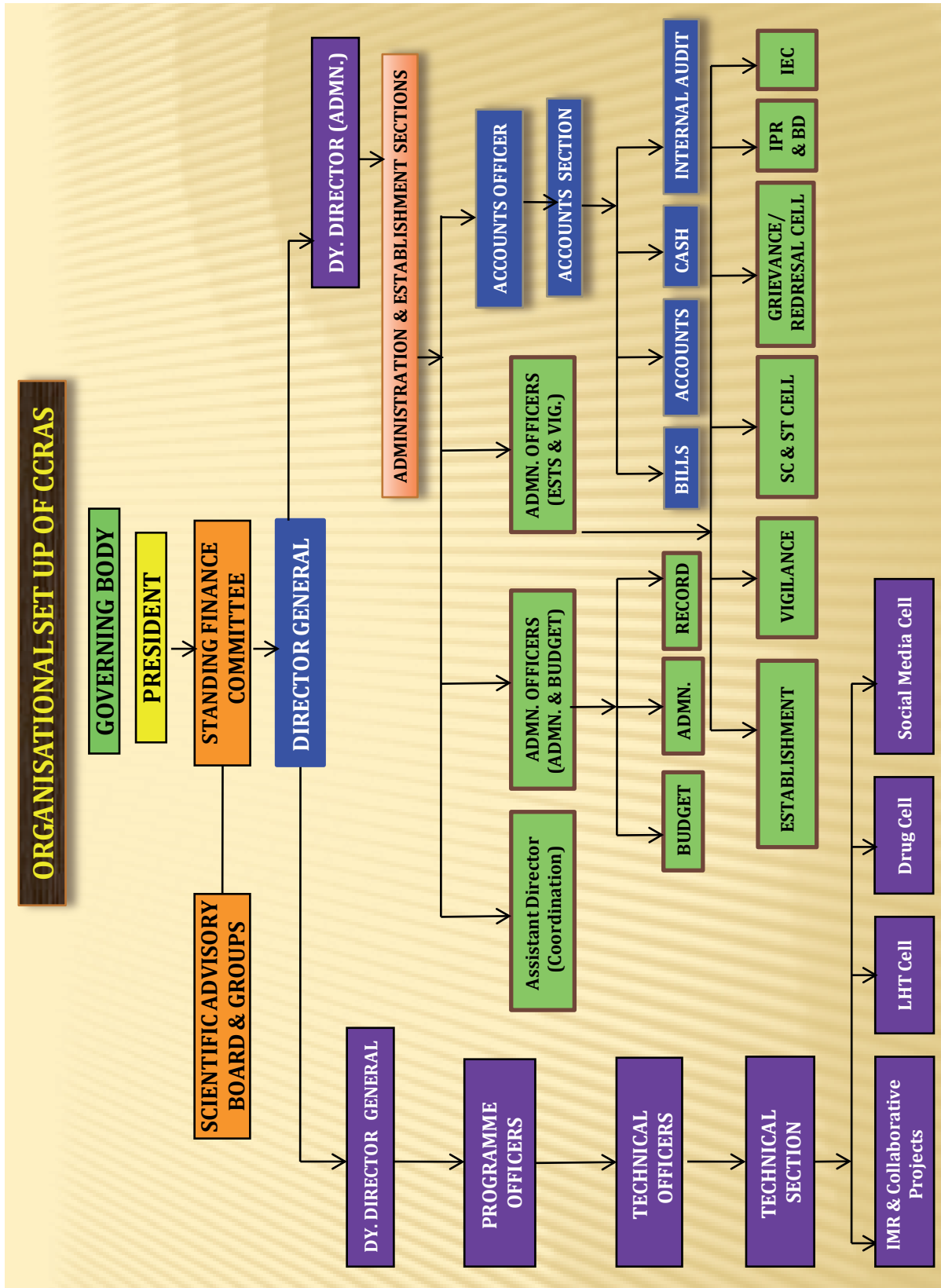


Fig.1: Organizational set up of CCRAS



2.2 Standing Finance Committee

The composition of the Standing Finance Committee was as under:

1	Sh. PN Ranjatkumar Joint Secretary Ministry of AYUSH AYUSH Bhawan, INA, New Delhi	Chairman
2	Financial Advisor or his representative Ministry of Health & Family Welfare New Delhi	Member
3	Prof. M.S.Bhagel, Former Director, IPGT & RA C-101 Unique Towers, Mahal Gaon, Near Pratap Nagar, Sector 26, Jaipur - 302017	Member
4	Prof. Atul Babu Varshnaye, Associate Prof. Head, Rog Nidan Deptt. Lalit Hari Govt. Post Graduate Ay. College, Pilibhit (U.P.)	Member
5	Prof. Vd. K.S.Dhiman, Director General, CCRAS	Member Secretary

During the period under report, the 81st & 82nd meeting of the Standing Finance Committee was held on 21st August, 2018 and 14th February, 2019 respectively.

2.3 Scientific Advisory Board and Scientific Advisory Group

The Scientific Advisory Board (SAB) and Scientific Advisory Groups (SAG) were constituted on 12.8.2018 with the following composition:

Table - 1: Scientific Advisory Board (SAB)

1.	Dr. G.S. Lavekar Former Director General, CCRAS C-51, Air India Apartments Plot No.9, Sector-3, Dwarka, New Delhi - 110078	Chairman
2.	Prof. Dr. Shriram S. Savarikar Former Vice Chancellor GAU, Jamnagar 14/A-3, Govt. Colony, Haji Ali, New Mumbai - 400034	Member
3.	Prof. Dr. M.S. Baghel Former Director, IPGT & RA C-101 Unique Towers, Mahal Gaon, Near Pratap Nagar, Sector 26, Jaipur - 302017	Member
4.	Prof. Manjari Dvivedi Former Professor, Strirog Prasuti, BHU, Varanasi Kalyanika Himalaya Devasthanam Vill. - Kanra Dole, P.O. - Chaikhan, District – Almora, Uttarakhand- 263625	Member



5.	Dr. Sanjeev Sharma Director National Institute of Ayurveda Madhav Vilas Palace, Jorawar Singh Gate, Amer Road, Jaipur - 302002	Member
6.	Prof. Anup Thakar Director Institute of Post Graduate Teaching & Research in Ayurveda, Gujarat Ayurved University, Jamnagar, Gujarat - 361 008	Member
7.	Prof. Dr. Tanuja Manoj Nesari Director, All India Institute of Ayurveda (AIIA) Gautam Puri, Sarita Vihar, New Delhi - 110076	Member
8.	Dr. Prasanna Rao Principal, SDM College of Ayurveda & Hospital, Thanniruhalla, B M Road, Hassan, Karnataka -573201	Member
9.	Dr. M.M. Padhi Former Deputy Director General, CCRAS Plot No.406/951, Pokhariput AG Colony Post - Aerodrome Area, Bhubaneswar - 751020	Member
10.	Prof. Dr. P.K. Prajapati Dean & HoD Dept. of Rasashastra & Bhaishajya Kalpana, All India Institute of Ayurveda, Gautam Puri, Sarita Vihar, New Delhi - 110076	Member
11.	Dr. V. K. Kapoor 1473, Pushpak Complex, Sector - 49B, Chandigarh - 160 047	Member
12.	Dr. V. Ravichandiran Director National Institute of Pharmaceutical Education and Research Chunilal Bhawan, 168, Maniktala Main Road P.O. Bengal Chemicals, P.S. Phoolbagan, Kolkata - 700054	Member
13.	Ms. Vandana Mody Dept. of Phyto-chemistry Vice President CADILA, E/6, Balaji Avenue, Nr. Payal Flats, Judges Bungalows Road, Vastrapur, Ahmedabad - 380015	Member
14.	Dr. Kishor Patwardhan Associate Professor & Head Department of Kriya Sharir, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University (BHU), P.O. Lanka, Varanasi-221005	Member
15.	Prof. Vd. K.S. Dhiman, Director General, CCRAS	Member Secretary

During the period under report, the 8th meeting of the Scientific Advisory Board was held on 12th September, 2018



Table - 2: Scientific Advisory Group (SAG)

I. Literature Research		
1.	Prof. R.R. Dwivedi Ex. Dean I.P.G.T&R.A, GAU Jamnagar, Arogyadham Dhanwantari Aushadhalaya, Dharmashala Road, Natveer pulia, Near Mandir, Hardoi Uttar Pradesh-241001	Chairman
2.	Vaidya Anant B. Dharmadhikari Ex-Director of Ayurved, Maharashtra Sun Paradise, Phase-II, Fire Brigade Lane, Sun City Road, Anandnagar, Building No.S/R/604, Pune - 411051 (Sinhagarh Road)	Member
3.	Dr. Abhijeet Joshi Professor & Head Late Vd. P. G. Nanal Department of Ayurveda Tilak Maharashtra Vidyapeeth Vidyapeeth Bhavan, Gultekadi, Pune - 411037	Member
4.	Vd Santosh Nevpurkar President, Ayurved Vyaspeeth 2, Disha Arcade, Nandigram Colony, Garkheda, Aurangabad, Maharashtra-431009	Member
5.	Prof. Mahesh Kumar Vyas Head, Department of Maulik Siddhant All India Institute of Ayurveda Gautam Puri, Sarita Vihar, New Delhi - 110076	Member
6.	Prof. Dr. Baldev Kumar Vice Chancellor, Shri Krishna AYUSH University Umri Road, Kurukshetra, Haryana	Member
7.	Dr. B. Rama Rao Former Director, H.No. 23-49/3, Netaji Nagar, Dilsukhnagar Hyderabad-500060	Member
8.	Prof. Vd. K.S. Dhiman, Director General, CCRAS	Member Secretary
II. Basic Sciences and Fundamental Research		
1.	Dr. Srikrishan Khandel Retd. Professor, Dept. of Rog Nidana, NIA, Jaipur Arogya Laxmi, D-44, Siddharth Nagar, Malviya Nagar South Jaipur - 302017	Chairman
2.	Dr. Ravishankar B. Former Director, SDM Centre for Research in Ayurveda & Allied Sciences, 438, First Floor, Dattagalli, 3rd Stage, Near Jodi Bevina Mara, Mysore - 570023	Member



3.	Dr. Shriram G. Jyotishi Professor Mahatma Gandhi Ayurveda College, Hospital & Research Centre Wardha, 50,51, Gurukrupa Society, Naik Nagar, Manewada Ring Road, Nagpur, Maharashtra - 440027	Member
4.	Dr. Pankaj V. Wanjarkhedkar 1 st Floor, Chitale Hospital, Opp. Kaka Halwai, Tilak Road, Pune, Maharashtra - 411030	Member
5.	Prof. Dr. V.V. Prasad Former Director, RAV Professor, Dept. of Dravyaguna, J. S. Ayurveda Mahavidyalaya and P.D. Patel Ayurveda Hospital College Road, Nadiad, Gujarat - 387001 Resi: B-502, D-Squares, Kisan Samosa lane, College Road, Nadiad, Gujarat - 387001	Member
6.	Dr. S. Gopakumar Associate Professor & RMO Department of Roganidana, Government Ayurveda College, Pulimoodu, Thiruvananthapuram, Kerala - 695035	Member
7.	Dr. (Mrs.) Jai Kiran Kini Professor, Dept. of Roganidana, YMT Ayu. Medical College & Hospital, Navi Mumbai, 1101, Raunak Park Tower B CHS, Pokharan Road No.2, Konkanipada, Thane (West) - 400610	Member
8.	Prof. Vd. K.S. Dhiman, Director General, CCRAS	Member Secretary
III. Drug Development		
1.	Prof. Anand Choudhary Professor Dept. of Rasashastra & Bsheshajya Kalpana, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University (BHU) P.O. Lanka, Varanasi-221005	Chairman
2.	Dr. Subrata De Former Director, R.M.D. Research & Development Center, Ved Kutir, Momai Nagar, Sheri No.1, Gandhinagar, Jamnagar - 361002	Member
3.	Prof. Meeta Kotecha Professor & Head, Department of Dravyaguna National Institute of Ayurveda, Madhav Vilas Palace, Jorawar Singh Gate, Amer Road, Jaipur - 302002	Member
4.	Dr. Mukund Sabnis President & Head Physician Jeevanrekha Ayurved Chikitsalaya & Research Centre, 87, Snehawardhini CHS Behind Trimurti Chowk, Jawahar Colony, Aurangabad -5	Member



5.	Prof. Brahmeshwar Mishra Professor of Pharmaceutics, & Former Director Department of Pharmaceutical Engineering & Technology, Indian Institute of Technology (BHU), Varanasi - 221005	Member
6.	Prof. R.N. Acharya Professor and Head Department of Dravyaguna, Institute of Post Graduate Teaching & Research In Ayurveda, Gujarat Ayurved University, Jamnagar, Gujarat - 361 008	Member
7.	Prof. Dr. D.V. Kulkarni Professor, Department of Dravyaguna, Government Ayurveda College, Osmanabad Present Address: 4/8, Government Quarters, Anandnagar, Osmanabad - 413501	Member
8.	Prof. Vd. K.S. Dhiman, Director General, CCRAS	Member Secretary
IV. Clinical Research		
	Prof. (Dr.) B.S. Prasad Principal KLE University's Shri BMK Ayurveda Mahavidyalaya Shahapur, Belagavi - 530 009	Chairman
	Prof. Dr. Shivenarian Narsinghlal Gupta Professor & Head Dept. of Kayachikitsa, J. S. Ayurveda College College Road, Nadiad - 387001	Member
	Dr. S.H. Acharya Former Professor, Gujarat Ayurved University, Jamnagar Department of Panchakarma, IPGT&RA, Gujarat Ayurved University, Jamnagar -361008 11, K.P. Shah Wadi, Rameshwarnagar, Jamnagar - 361008 (India)	Member
	Vd. Jayant Devpujari Shrinidhi Ayurved Panchakarma Chikitsalaya, 80, P& T Colony, Opp. Durga Mandir, Pratap Nagar, Nagpur - 440022	Member
	Dr. Manoranjan Sahu Professor Dept. of Shalya Tantra, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University (BHU) P.O. Lanka, Varanasi-221005	Member
	Dr. Tanmay Goswami Acharya ENT Premises, Kunjibettu, Udupi - 576102	Member
	Vd. Prabhakar S. Pawar Former Dean, Faculty of Ayurved & Unani System, MUHS, Nashik, 780, Pushkaraj, Bhagade Mala, Balikashram Road, Ahmednagar - 414003	Member
	Prof. Vd. K.S. Dhiman, Director General, CCRAS	Member Secretary



2.4 Representation of Scheduled Caste/Scheduled Tribe in the Council services and Welfare measures for SC/ST

The Council has been following the orders and guidelines issued from time to time by the Government of India in respect of representation of SC/ST in the services of the Council. The recruitments/promotions are done according to the reservation roster maintained for SC/ST. The Council is having a total strength of employees in different groups as on 31st March, 2019 as under (Table 3):

Table - 3: Number of employees of CCRAS in each category

Group	Number of employees	SC Employees	% of total employees	ST Employees	% of total employees	Remarks
A	286	55	19	25	9	-
B	16	3	19	2	13	-
C (Including erstwhile Group 'D')	517	144	28	63	12	Group-D converted into Group-C
Total	819	202	-	90	-	

The Council is also running Tribal Health Care Research Projects on Ayurveda at 15 Institutes including one at Andaman & Nicobar Islands and Ayurveda Mobile Health Care Programme under Scheduled Castes Sub Plan at 20 Institutes. These projects envisage great scope not only to understand the local health problems and interdependent issues but also to identify and apply/advise the methods and suitable measures to surmount their problems. Besides, some of the Research Institutes/Centres are also located in rural areas and through OPD/IPD of these Institutes/Centres, Tribal Health Care Research Programme, Ayurveda Mobile Health Care Programme, medical relief and health benefits have been extended to a large number of SC/ST population. The budget of the Council stipulated specific allocations for welfare of SC/ST under its plans.

2.5 Budget

Table -4: Budget Breakup

(Rs. in Crore)

Scheme	Budget Estimate 2018-19	Final Estimate 2017-18	Funds released 2018-19	Unspent Balance 2017-18	Provisional expenditure 2018-19
3140 Central Council for Research in Ayurvedic Sciences	252.91	286.41	276.40	91.59	276.18*

*Not final of Annual Account for the year 2018-19



2.6 Official Language Implementation Committee

The Council is having an official Language Implementation Committee under the Chairmanship of the Director General, CCRAS to review the position regarding implementation of official language policy, rules, orders, programmes etc. and to take steps for increasing the pace of use Hindi in the Council. During the period under report, the Committee met on 5th July, 2018; 10th October, 2018; 1st January, 2019 & 29th March, 2019.

2.7 Infrastructural development

1. New building of RARI Ranikhet was inaugurated on 18th April. 2018 by Shri. Shripad Yesso Naik, Hon'ble Minister of State (IC), Ministry of AYUSH, Govt. of INDIA. Other respected dignitaries like Sh. Ajay Tamta, Hon. MoS, Ministry of Textiles; Sh. Karan Singh Mahra, MLA, Ranikhet, Smt. Shomita Biswas, Chief Executive Officer, NMPB, New Delhi and Prof. VD. K.S. Dhiman, Director General, CCRAS were also present on the occasion.



Sh. Shreepad Yesso Naik, Hon'ble Minister of AYUSH, Govt. of India, inaugurated the new Building campus of RARI, Ranikhet, on 18th April. 2018 in the graceful presence of Prof. (Vd.) K.S. Dhiman, D G, CCRAS

2. New building of Regional Ayurveda Research Institute for Skin Disorders (RARISD) Vijayawada, has been inaugurated by Shri Shripad Yesso Naik, Honourable Minister of State (Independent charge), Ministry of AYUSH on 03-05-2018. Prof. Vaidya K.S. Dhiman, Director General, CCRAS, New Delhi, Shri Bonda Uma Maheswara Rao, MLA, Vijayawada Central, Dr. G. Babu, Assistant Director Incharge, RARISD, Vijayawada, Professors of NRS Ayurvedic College & clinicians of Dr. A. L. Govt. Ayurvedic Hospital, Vijayawada, officers and staff of RARISD, Vijayawada attended the function.



Inauguration of RARISD Vijayawada Institute's new building by Shri Shripad Yesso Naik, MOS (Independent charge), Ministry of AYUSH. Prof. Vd. K.S. Dhiman, DG, CCRAS; Shri Bonda Uma Maheswara Rao, MLA, Vijayawda Central

3. The phase one RARIMD, Bengaluru, new campus was inaugurated on 15-02-2019 by Shri D V Sadananda Gowda, Hon'ble Union Minister for Statistics and Programme Implementation, Shri. Shripad Yesso Naik, Hon'ble Union Minister of State (I/C), of AYUSH, Govt. of India, Shri E. Tukaram, Hon'ble Medical Education Minister, Govt. of Karnataka (GOK), Shri. S.T. Somashekar, Honb'le Member of Legislative Assembly, GOK, Yeshwantapura Constituency, Prof. (Vd.) K. S. Dhiman, DG CCRAS, Dr. B. K. Bharali A.D. In-charge and staff of RARIMD, CPWD staff and local public. The New campus consists of 30 bedded Ayurveda Hospital, with Panchakarma, Yoga hall, Laboratory, Operation theatre, canteen, kitchen and other facilities. The Administrative section consists of offices, library, stores, 5 laboratories, Herbarium storehouse and other facilities.



Inauguration of Hospital Block, RARIMD, Bengaluru by Shri D V Sadananda Gowda, Hon'ble Minister for Statistics and Programme Implementation, Shri. Shripad YessoNaik, Hon'ble Minister of State (Independent Charge), Ministry of AYUSH, Shri E. Tukaram, Hon'ble Minister for Medical Education, Govt. of Karnataka and other dignitaries



- Regional Ayurveda Research Centre was established at 135, Ramnagar Road, No. 4 Opp. of Raj Bhandar, Agartala, Tripura. This new centre was inaugurated on 7th March, 2019 by Shri Sudip Roy Barman, Honn'ble Minister, Health and Family Welfare Department, Govt. of Tripura in presence of Prof. Vd. K.S. Dhiman, director General, CCRAS, Shri Ashish Kumar Saha, Hon'ble MLA and Dr. Prafulla Jit Sinha, Mayor, Agartala Municipal Corporation etc.



Inaugural ceremony of CCRAS New Centre at Agartala, Tripura

- Regional Ayurveda Research Centre was established at CMO Building, District Hospital Colony, Dimapur, Nagaland which is notified on 5th Feb, 2019. The work of this Institute monitored by Dr.M.N. Suryawanshi, Assistant Director, RARIGID, Guwahati.

2.8 Organizational set-up

Table - 5: Acronyms of Ayurveda Institutes/Centres

S. No.	Institute/Centre/Unit	Abbreviations
1	Central Ayurveda Research Institute for Cardiovascular Diseases, New Delhi	CARICDND
2	National Ayurveda Research Institute for Panchakarma, Cheruthuruthy	NARIPC
3	Central Ayurveda Research Institute for Hepatobiliary Disorders, Bhubaneswar	CARIHDB
4	Central Ayurveda Research Institute for Drug Development, Kolkata	CARIDDK
5	Central Ayurveda Research Institute for Respiratory Disorders, Patiala	CARIRDP
6	Regional Ayurveda Research Institute for Eye Diseases, Lucknow	RARIEDL
7	Raja Ramdeo Anandilal Podar (RRAP) Central Ayurveda Research Institute for Cancer, Mumbai	CARICM
8	M.S. Regional Ayurveda Research Institute for Endocrine Disorders, Jaipur	RARIECDJ
9	Regional Ayurveda Research Institute for Drug Development, Gwalior	RARIDDG
10	Regional Ayurveda Research Institute for Skin disorders, Vijayawada	RARISDV
11	Regional Ayurveda Research Institute for Mother and Child Health, Nagpur.	RARIMCHN
12	Regional Ayurveda Research Institute for Metabolic Disorders, Bangalore	RARIMDB
13	Regional Ayurveda Research Institute for Life style related Disorders, Trivandrum	RARILSDT
14	Regional Ayurveda Research Institute for Infectious Diseases, Patna.	RARIIDP
15	Research Ayurveda Regional Institute for Gastro-Intestinal Disorders, Guwahati	RARIGIDG
16	Regional Ayurveda Research Institute, Gangtok	RARIG



17	Regional Ayurveda Research Institute, Itanagar	RARII
18	Regional Ayurveda Research Institute for Urinary Disorders, Jammu	RARIUDJ
19	Regional Ayurveda Research Institute for Nutritional Disorders, Mandi	RARINDM
20	Regional Ayurveda Research Institute for Skin Disorders, Ahmedabad	RARISDA
21	Regional Ayurveda Research Institute , Ranikhet	RARIR
22	Regional Ayurveda Research Institute , Jhansi	RARIJ
23	Regional Ayurveda Institute for Fundamental Research, Pune	RAIFRP
24	National Institute of Indian Medical Heritage, Hyderabad	NIIMHH
25	Captain Srinivasa Murthy Regional Ayurveda Drug Development Institute, Chennai	CSMRADDIC
26	Advanced Center for Ayurveda in Mental Health & Neurosciences, Bangalore	ACAMH&NSB
27	Dr. Achanta Lakshmiapati Research Centre for Ayurveda, Chennai	ALRCAB
28	Regional Research Center of Ayurveda, Port Blair	RRCAP
29	National Research Institute for Sowa-Rigpa, Leh	NRISRL
30	Regional Ayurveda Research Centre, Dimapur, Nagaland	RARCN
31	Regional Ayurveda Research Centre, Agartala, Tripura	RARCT

State-wise distribution of peripheral Institutes/Centres

State	Name of the Institutes/Centre
Andhra Pradesh	1. Regional Ayurveda Research Institute for Skin disorders, Payakapuram, Vijayawada- 520015
Arunachal Pradesh	2. Regional Ayurveda Research Institute, Itanagar -791111
Andaman and Nicobar Islands	3. Regional Research Centre of Ayurveda, Port Blair - 744101
Assam	4. Regional Ayurveda Research Institute for Gastro-Intestinal Disorders, Borsojai, Beltola, Guwahati-781028
Bihar	5. Regional Ayurveda Research Institute for Infectious Diseases, D Block, Rajindra Memorial Res., Institute Building, Agam Kuan, Patna-800007
Delhi	6. Central Ayurveda Research Institute for Cardiovascular Diseases, Road No.66, Punjabi Bagh, New Delhi - 110026
Gujarat	7. Regional Ayurveda Research Institute for Skin Disorders, Asarwa, Ahmedabad-380016
Himachal Pradesh	8. Regional Ayurveda Research Institute for Nutritional Disorders , Gandhi Bhawan, Mandi-175001
Jammu & Kashmir	9. Regional Ayurveda Research Institute for Urinary Disorders, JDA Housing Colony, Ban Talab, Rajender Nagar, Jammu-181123
Karnataka	10. National Research Institute for Sowa-Rigpa, Old Leh Road, Leh- 194101 11. Advanced Centre for Ayurveda in Mental Health & Neuro-sciences, Ayurvedic Research Unit, NIMHANS, Hosur Road, Bangalore-560029 12. Regional Ayurveda Research Institute for Metabolic Disorders, Govt. Central Pharmacy Annexe, Ashoka Pillar, Jayanagar, Bangalore-560011
Kerala	13. National Ayurveda Research Institute for Panchakarma, Cheruthuruthy- 679531 14. Regional Ayurveda Research Institute for Life style related Disorders, Poojapura, Trivandrum-695012



- | | |
|----------------|--|
| Madhya Pradesh | 15. Regional Ayurveda Research Institute for Drug Development, Amkho, Gwalior-474009 |
| Maharashtra | 16. Raja Ramdeo Anandilal Podar (RRAP) Central Ayurveda Research Institute for Cancer, RA Podar College, Worli, Mumbai-400018 |
| | 17. Regional Ayurveda Research Institute for Mother and Child Health, NIT Complex, Nandanwan, Nagpur-440009 |
| | 18. Regional Ayurveda Institute for Fundamental Research, Pune- 411038 |
| Nagaland | 19. Regional Ayurveda Research Centre, Dimapur, Nagaland |
| Orissa | 20. Central Ayurveda Research Institute for Hepatobiliary Disorders, Bharatpur, Bhubaneswar-751003 |
| Punjab | 21. Central Ayurveda Research Institute for Respiratory Disorders, Moti Bagh Road, Patiala-147001 |
| Rajasthan | 22. M.S. Regional Ayurveda Research Institute for Endocrine Disorders, Indira Colony, Bani Park, Jhotwara Road, Jaipur-302016. |
| Sikkim | 23. Regional Ayurveda Research Institute, Tadong, Gangtok -737102 |
| Tamil Nadu | 24. Dr. Achanta Lakshmipati Research Centre for Ayurveda, VHS Campus, TTTI Post, Chennai-600113 |
| | 25. Captain Srinivasa Murthy Regional Ayurveda Drug Development Institute, Chennai - 600106. |
| Telengana | 26. National Institute of Indian Medical Heritage, Hyderabad - 500036 |
| Tripura | 27. Regional Ayurveda Research Centre, Agartala, Tripura |
| Uttar Pradesh | 28. Regional Ayurveda Research Institute for Eye Diseases, Indira Nagar, Lucknow-226016 |
| | 29. Regional Ayurveda Research Institute , Jhansi - 284003 |
| Uttarakhand | 30. Regional Ayurveda Research Institute , Thapla, Ranikhet- 263645, Almora |
| West Bengal | 31. Central Ayurveda Research Institute for Drug Development, 4 CN Block, Sector V, Bidhan Nagar, Kolkata-700091 |



Fig.2: Institutional Network of CCRAS



III. TECHNICAL REPORT

1. CENTRE-WISE ACTIVITIES

The following table depicts the involvement of peripheral Institutes/Centres of the Council in the research activities on broad areas viz. Clinical research, Health care services, Tribal health care research Programme, Ayurveda Mobile Health Care Programme, Drug Standardization, Survey of Medicinal Plants, Cultivation, Pharmacognosy, Pharmacology, Literary research etc.

Table -6: Centre-wise major activities (Ayurveda)*

S.No.	Name of Institute	Major Activities/Services
1	Central Ayurveda Research Institute for Cardiovascular Diseases, New Delhi	<p>Clinical research on lifestyle related and Non-communicable disorders focusing on Cardiovascular Diseases</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs) • Special facility for Ksharasutra & Panchakarma • Special Clinics for Geriatric Health Care • Other Activities assigned from time to time. • Training Centre for Clinical Research and Para-medical Subjects • Outreach Activities such as <ul style="list-style-type: none"> ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme etc.
2	National Ayurveda Research Institute for Panchakarma, Cheruthuruthy	<p>Clinical research focusing on validation of Panchakarma procedures especially in Neuromuscular & Musculo-Skeletal Disorders</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs) • Special facility for Panchakarma • Special Clinics for Geriatric Health Care • Panchakarma training • Outreach Activities such as <ul style="list-style-type: none"> ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme • Pharmacological Research & Drug Standardization
3	Central Ayurveda Research Institute for Hepatobiliary Disorders, Bhubaneswar	<p>Clinical research focusing on Hepatobiliary Disorders</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs) • Special Clinics for Geriatric Health Care • Special facility for Panchakarma • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme



S.No.	Name of Institute	Major Activities/Services
4	Central Ayurveda Research Institute for Drug Development, Kolkata	Drug development Research covering <ul style="list-style-type: none">• Pharmacognosy Research• Drug Standardization Research• Pharmacological Research• Clinical Research as per requirement Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs)• Special facility for Panchakarma and Ksharasutra therapy• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme
5	Central Ayurveda Research Institute for Respiratory Disorders, Patiala	Pharmaceutical Research and Clinical Research focusing on Respiratory disorders Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Ayurveda Mobile Health Care Programme under SCSP➤ Swasthya Rakshan Programme etc.
6	Regional Ayurveda Research Institute for Eye Diseases, Lucknow	Clinical research on lifestyle related and Non-communicable disorders focusing on Eye Diseases Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme etc.
7	Central Ayurveda Research Institute for Cancer, Mumbai	Clinical research on lifestyle related and Non-communicable disorders focusing on Cancer Other Activities: <ul style="list-style-type: none">• OPD and IPD Facility• Special Clinics for Geriatric Health Care• Special facility for Ksharasutra• Special facility for Panchakarma & Physiotherapy• Outreach Activities such as<ul style="list-style-type: none">➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme etc.



S.No.	Name of Institute	Major Activities/Services
8	Regional Ayurveda Research Institute for Endocrine Disorders,, Jaipur	<p>Clinical research on lifestyle related and Non-communicable disorders focusing on Endocrine Disorders</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) and In Patient Departments (IPDs) • Special Clinics for Geriatric Health Care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
9	Regional Ayurveda Research Institute for Drug Development, Gwalior	<p>Center for Pre-Clinical Research & Drug Standardization</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Clinical Research • Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs) • Special Clinics for Geriatric Health Care • Training Centre for Pre-Clinical Studies • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
10	Regional Ayurveda Research Institute for Skin disorders, Vijayawada	<p>Clinical Research in Skin Diseases and Vector Borne Diseases</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) and In-Patient Departments (IPDs) • Special Clinics for Geriatric Health Care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
11	Regional Ayurveda Research Institute for Mother and Child Health, Nagpur	<p>Clinical research focusing on Mother and Child Health</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) and In-Patient Departments (IPDs) • Special facility for Panchakarma • Special Clinics for Geriatric Health Care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme



S.No.	Name of Institute	Major Activities/Services
12	Regional Ayurveda Research Institute for Metabolic Disorders, Bangalore	Clinical Research focusing on Metabolic disorders and Dietetics Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Special Clinics for Geriatric Health Care• Botanical survey• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP➤ Swasthya Rakshan Programme
13	Regional Ayurveda Research Institute for Life style related Disorders, Trivandrum	Clinical Research focusing on Life style related Disorders Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme etc.
14	Regional Ayurveda Research Institute for Infectious Diseases, Patna	Clinical research focusing on infectious diseases Other Activities: <ul style="list-style-type: none">• Health care services through Out Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme
15	Regional Ayurveda Research Institute for Gastro-Intestinal Disorders, Guwahati	Clinical Research focusing on Skin disorders, GIT disorders Medico-Ethno-Botanical Survey Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP➤ Swasthya Rakshan Programme➤ Ayurvedic Health Centre under NE Plan etc.
16	Regional Ayurveda Research Institute, Gangtok	Clinical research on lifestyle related and Non-communicable disorders focusing on Gout Other Activities: <ul style="list-style-type: none">• Health care services through Out Patient Department (OPD)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP➤ Ayurveda Mobile Health Care Programme under SCSP➤ Swasthya Rakshan Programme➤ Ayurvedic Health Centre under NE Plan etc.



S.No.	Name of Institute	Major Activities/Services
17	Regional Ayurveda Research Institute, Itanagar	<p>Clinical research on lifestyle related and Non-communicable disorders focusing on Hypertension</p> <p>Medico-Ethno-Botanical Survey</p> <p>Other Activities</p> <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) • Special Clinics for Geriatric Health Care • Demonstrative Medicinal Plants Garden • Outreach Activities such as <ul style="list-style-type: none"> ➤ Swasthya Rakshan Programme ➤ Ayurvedic Health Centre under NE Plan etc.
18	Regional Ayurveda Research Institute for Urinary Disorders, Jammu	<p>Clinical Research focusing on Urinary disorders and Gout</p> <p>Other Activities</p> <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) & IPD • Special facility for Panchakarma • Special Clinics for Geriatric Health Care • Facility of Ksharsutra • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
19	Regional Ayurveda Research Institute for Nutritional Disorders, Mandi	<p>Clinical Research focusing on Nutritional Disorders Respiratory disorders, (Bronchial Asthma) and Rheumatoid Arthritis</p> <p>Other Activities</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) • Special Clinics for Geriatric Health Care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
20	Regional Ayurveda Research Institute for Skin Disorders, Ahmedabad	<p>Clinical Research focusing on Skin Disorders</p> <p>Other Activities:</p> <ul style="list-style-type: none"> • Health care services through Out–Patient Department (OPD) • Special clinics for Geriatric Health care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme etc.



S.No.	Name of Institute	Major Activities/Services
21	Regional Ayurveda Research Institute , Tarikhet, Ranikhet	Medico-Ethno-Botanical Research Other Activities: <ul style="list-style-type: none">• Health care services through Out–Patient Department (OPD)• Demonstrative Medicinal Plants Garden.• Musk Deer Breeding
22	Regional Ayurveda Research Institute Jhansi	<ul style="list-style-type: none">• Central herbarium• Medico Ethno Botanical Survey• Production Pharmacy Other Activities: <ul style="list-style-type: none">• Demonstrative Medicinal Plants Garden.• Demonstrative crude drugs repository• Authentication of the plant specimens
23	Regional Ayurveda Institute for Fundamental Research, Pune	<ul style="list-style-type: none">• Basic & Fundamental Research in Ayurveda• In-vitro Pharmacology testing.• Proteomics and metabolomics. Other Activities: <ul style="list-style-type: none">• Demonstrative Medicinal Plants Garden.• Pharmacognosy Research• Plant Tissue Culture• Molecular Biology Research
24	National Institute of Indian Medical Heritage, Hyderabad	<ul style="list-style-type: none">• Literary Research and documentation• Revival and retrieval of texts from ancient manuscripts and rare books• Search and collection of information descriptive notes, editing and publication of rare medical manuscripts/ books on AYUSH• Documentation• Ayurveda Encyclopedia• Museum on History of Medicine• Referral library on AYUSH systems of medicine and modern medicine.• AYUSH Research Portal• Outreach Activities such as<ul style="list-style-type: none">➤ Tribal Health Care Research Programme under TSP
25	Captain Srinivasa Murthy Regional Ayurveda Drug Development Institute, Chennai.	<ul style="list-style-type: none">• Drug Standardization Research.• Pharmacognosy,• Pharmacological Research• Center for Survey of Medicinal Plants.
26	Advanced Centre for Ayurveda in Mental Health & Neurosciences, Bangalore	<ul style="list-style-type: none">• Clinical Research on Mental disorders• Health care services through Out Patient Department (OPD) and In-Patient Departments (IPDs)• Special Clinics for Geriatric Health Care• Outreach Activities such as<ul style="list-style-type: none">➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP



S.No.	Name of Institute	Major Activities/Services
27	Dr. Achanta Lakshmi pati Research Centre for Ayurveda, Chennai	Clinical Research on life-style related & non communicable diseases Other Activities: <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) • Special Clinics for Geriatric Health Care • Outreach Activities such as <ul style="list-style-type: none"> ➤ Tribal Health Care Research Programme under TSP ➤ Ayurveda Mobile Health Care Project & RCH Project under SCSP ➤ Swasthya Rakshan Programme
28	Regional Research Centre of Ayurveda, Port Blair	<ul style="list-style-type: none"> • Tribal Health Care Research Other Activities: <ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) • Special Clinics for Geriatric Health Care.
29	National Research Institute for Sowa-Rigpa, Leh	<ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD) • Tribal Health Care Research Programme under TSP • Medico-Ethno-Botanical Survey • Cultivation of Medicinal Plants • Literary Research & Documentation
30	Regional Ayurveda Research Centre, Dimapur, Nagaland	<ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD)
31	Regional Ayurveda Research Centre, Agartala, Tripura	<ul style="list-style-type: none"> • Health care services through Out Patient Department (OPD)

Some Programmes/Projects are changeable which will be reported from time to time.



2. MEDICINAL PLANTS RESEARCH

The Medicinal Plant Research comprises of 3 components *viz*; (A) Medico-Ethno Botanical Survey (B) Cultivation & *in-vitro* Propagation (C) Botanical Standardization. The details are as under:

2.1. MEDICO-ETHNO BOTANICAL SURVEY PROGRAMME

Central Council for Research in Ayurvedic Sciences (CCRAS) has been involved in Survey and Documentation of Medicinal plants used in Ayurveda system of medicine through its 6 peripheral Institutes. The survey units of the Council have surveyed selected phyto-geographic region across the country as per the objectives of the sanctioned IMR projects. During these survey tours various Medicinal plants were collected and preserved as Herbarium and Museum specimens.

The survey team also collects and supply authentic raw drug samples for studies under various projects inside and outside the Council including the projects under Central Scheme of Ayurvedic Pharmacopoeia Committee (APC). Herbarium and Museum centers located in various Institutes of CCRAS are being used as reference centers for UG/PG/M.Phil/Ph.D students and Researchers for correct identification/ authentication of their plant specimens or raw drug materials. Further, the folk-claims collected during the exploration work provide lead for validation and effective development of drugs based on traditional knowledge and not from any codified system of medicine.

Herbarium centers of four peripheral institutes of CCRAS have got International recognition as these are listed in the INDEX HERBARIORUM and accredited with acronyms by the New York Botanical Garden.

Table-7: Name of the Institutes and respective Herbarium acronyms

Name of the Institutes	Herbarium acronym
Regional Ayurveda Research Institute, (RARI) Ranikhet	RKT
Regional Ayurveda Research Institute, (RARI) Jhansi	JHS
Regional Ayurveda Research Institute for Metabolic Disorders, (RARIMD) Bengaluru	RRCBI
Regional Ayurveda Research Institute, (RARI) Itanagar	ARRI

During the year 2018-2019, Medico-Ethno-Botanical Survey programme has been taken under Intra Mural Research (IMR) Scheme and projects has been sanctioned to 6 Institutes *viz*; Regional Ayurveda Research Institute for Metabolic Disorders (RARIMD) Bengaluru, Research Ayurveda Regional Institute for Gastro-Intestinal Disorders (RARIGID) Guwahati, Regional Ayurveda Research Institute (RARI) Itanagar, Regional Ayurveda Institute for Fundamental Research (RARIFR) Pune, Regional Ayurveda Research Institute (RARI) Jhansi and Regional Ayurveda Research Institute (RARI) Ranikhet. Under the project 23 survey tours have been conducted in various parts (Detailed in Table-8) Dakshina Kannada and udupi Districts of Karnataka, Sunaikuchi, Hatibagara, and Khulahat Reserve Forest areas in Morigaon District of Assam, North and Unakoti districts of Tripura, Hoshangabad Raisen, Shajapur and Betul forest divisions of Madhya Pradesh, Almora forest division Uttarakhand,



Jawhar, Shahapur division of thane Forest Circle of Maharashtra state. A total number 1,408 of plant specimens have been collected and 2,387 herbarium sheets have been prepared. Apart from this, 450 folk-claims along with associated traditional knowledge were also collected after interaction with the local people during the survey tours. 629.5 Kgs (fresh wt.) of raw drugs were collected, and 543.59 Kg. (dry wt.) were supplied to various Institutes for Research and development work. 75 museum samples were also collected during the above tours. During the survey tours, 1,974 photographs of Medicinal Plants have been taken, which will be figured in the final documentation of medicinal plant wealth of respective region.

Table-8: Details of Area Surveyed and Specimens Collected During 2018 - 2019

Name of the Peripheral Institute	No. of survey tours conducted and survey areas	No. of Species collected	No. of Herbarium specimens prepared	No. of museum samples collected	Raw drugs Collected (Fresh wt. in.kg)	Raw drugs supplied (dried wt.in.kg)	Photographs collected	Folk claims collected
1. RARIMD Bengaluru	4 Survey programme of Dakshina Kannada and udupi Districts of Karnataka	497	497	4	19.000	6.520	414	46
2. RARIGID Guwahati	4 Survey programme of Sunaikuchi, Hatibagara, and Khulahat Reserve Forest areas in Morigaon District of Assam	196	437	11	435.000	491.900	124	13
3. RARI Itanagar	4 Survey programme of North and Unakoti districts of Tripura.	406	833	7	149.350	36.890	342	124
4. RARI Jhansi	4 Survey programme of Hoshangabad Raisen, Shajapur and Betul forest divisions of Madhya Pradesh	36	74	Nil	Nil	Nil	577	29
5. RARI Tarikhet	4 Survey programme of Almora forest division Uttarakhand	97	134	2	16.600	1.380	341	63
6. RARIFR Pune	3 Survey programme of Jawhar, Shahapur division of thane Forest Circle of Maharashtra state.	176	412	51	9.550	6.900	176	175
Grand Total	23	1,408	2,387	75	629.500	543.590	1,974	450



2.2. CULTIVATION & IN-VITRO PROPAGATION

For demonstrative cultivation of Medicinal plants belonging to different agro-climatic zones, the Council is maintaining four demonstrative gardens situated at RAIFR Pune, RARI Jhansi, RARI Ranikhet, and RARI Itanagar. These gardens are as *ex-situ* conservation sites for important germplasm and collection place of medicinal plants including several rare, endangered and threatened species. Different study programmes viz. adaptability, growth pattern, flowering, fruiting and suitable maturity time studies of drugs part etc. and supplying of authentic drug materials for various research programmes are being carried out. These studies will provide protocol in framing strategies for conservation and sustainable utilization of highly valuable medicinal plants. The live plants act as specimen for referencing and correct identification of the medicinal plants. The work done in the field of cultivation in all the gardens of CCRAS for demonstration purpose along with *in vitro* studies of medicinal plants is mentioned in table-9.

Table 9: Details of Area, Species cultivated / Maintained and Raw Drug Collected / Supplied from the Gardens of CCRAS

S.No.	Particulars	RAIFR, Pune	RARI, Jhansi	RARI, Itanagar	RARI, Ranikhet		Consolidated Reports
					Tarikhet Garden 3 acre	Chamma Garden 1 acre	
1	Total area of the land, Presently under Cultivation	4 Acres	10 Acres	12.5 acres			30.5 acres
2	Number of Species Maintained in the Garden	371	238	50	173	74	906 species
3	Number of Species Newly Introduced in the Garden	91	10	01	9	4	115 species newly introduced in the herbal garden of the Institutes for demonstration purposes.
4	Raw Drugs Collected from the Garden	34.809 kg	403.350 kg	40.65 kg	Nil		478.764 Kg.
5	Raw Drugs Supplied from the Garden	21.850 kg	91.0 Kg.	5.85 kg	Nil		118.7 kg, Drugs were supplied for various research works to different institute of the council.
6	Agro-trials/or <i>in vitro</i> propagation techniques	Studies on <i>in-vitro</i> propagation techniques on 3 species of Brihat-Panchmoola	Nil	None	Nil		<i>In vitro</i> propagation on, three species (preferably tree species of Brihat-Dashmula drugs) viz. Gambhari, Patala, Bilwa, Shyonaka and Agnimantha were taken up for studying, their response and abilities to produce shoots/callus by using Tissue culture techniques. In above selected Plants culture, multiple shoots were observed. In continuation with earlier program Endangered Plant like Iswari, Vrikshadani (Bandak), Manjishtha, were also screened in similar ways.



2.3. BOTANICAL STANDARDIZATION

Apart from this, the Council is engaged in development of macroscopic and microscopic standards for identification of a single drugs based on detailed information depend upon habit and anatomical characters for crude drugs. For establishing the botanical identity of the drug along with their substitutes and adulterants, CCRAS have taken up the Pharmacognostical Investigations of the drugs widely used in Ayurveda in its peripheral units. The work done in the field of Botanical Standardization on 19 formulations/drugs with special reference to Pharmacognostical studies is mentioned in table-10.

Table 10: Details of Botanical Standardization studies carried out

S. No.	Allocated Programme	Name of the Institute	Name of Species / ingredients/ Part used	Studies carried out
CARIDD, Kolkata:				
1	Swara Shulghan Vati (SSV) Powder	Kolkata	SSV formulation	Macroscopy, organoleptic studies, Powder microscopy of drugs.
2	Swami Vajrarup Kavach (SVK) Powder	Kolkata	SSV formulation	Macroscopy, organoleptic studies, Powder microscopy of drugs.
3	AYUSH-82 formulation	Kolkata	<ul style="list-style-type: none"> • Compound formulation (3 batches) • Ingredients (<i>Mangifera indica</i> L., <i>Momordica charantia</i> L., <i>Gymnema sylvestre</i> R.Br., <i>Syzygium cuminii</i> (Linn.) Skeels) 	Macroscopy organoleptic studies, powder microscopy along with camera lucida drawings of both formulation and individual ingredients of formulation.
4	AYUSH GG Tablet	Kolkata	<ul style="list-style-type: none"> • Compound formulation • Intermediate product • Ingredient (<i>Tribulus terrestris</i> L.) 	Macroscopy organoleptic studies, powder microscopy along with camera lucida drawings of individual ingredient, intermediate product and compound formulation
5	AYUSH-AG Tablet	Kolkata	<ul style="list-style-type: none"> • Compound formulatin • Intermediate product • Ingredients (<i>Withania somnifera</i> Dunal. <i>Asparagus racemosus</i> Willd. <i>Phyllanthus emblica</i> Willd.) 	Macroscopy organoleptic studies, powder microscopy along with camera lucida drawings of compound formulation, its ingredients and intermediate product.
6	<i>Varunaadi Kwatha Churna</i>	Kolkata	<ul style="list-style-type: none"> • Compound formulation • Ingredients (<i>Bergenia ciliata</i> (Haw.) Sternb., <i>Zingiber officinale</i> Roxb., <i>Tribulus terrestris</i> L. and Guda) 	Macroscopy organoleptic studies, powder microscopy along with camera lucida drawings



7	<i>Pathyadi Kwatha Churna</i>	Kolkata	<ul style="list-style-type: none"> Compound formulation Ingredients (<i>Terminalia chebula</i> Retz., <i>Terminalia bellirica</i> Roxb., <i>Phyllanthus emblica</i> Willd., <i>Tinospora cordifolia</i> (Willd.) Miers., <i>Swertia chirata</i> Buch.Ham., <i>Curcuma longa</i> L., <i>Azadirachta indica</i> A. Juss.) 	Macroscopy organoleptic studies, powder microscopy along with camera lucida drawings
8	<i>Balachatur-bhadrika Churna</i>	Kolkata	<ul style="list-style-type: none"> Compound formulation Ingredient (<i>Cyperus rotundus</i> L., <i>Piper longum</i> L., <i>Aconitum heterophyllum</i> Wall. ex. Royle, <i>Pistacia chinensia</i> Burgo) 	Macroscopy, organoleptic studies, powder microscopy along with camera lucida drawings.
9	<i>Apamarga Kshara</i> formulation	Kolkata	<ul style="list-style-type: none"> Single formulation (Ingredient (<i>Achyranthes aspera</i> L.)) 	Macroscopy, organoleptic studies, powder microscopy along with camera lucida drawings of ingredient and formulation
10	<i>Haritaki Churna</i>	Kolkata	Single formulation (<i>Terminalia chebula</i> Retz.)	Macroscopy, organoleptic studies, powder microscopy
11	<i>Chandrasoor Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
12	<i>Rasna Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
13	<i>Sharpunkha Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
14	<i>Pippali Churna</i>	Kolkata	Single formulation (<i>Piper longum</i> L.)	Macroscopy, organoleptic studies, powder microscopy
15	<i>Yastimadhu Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
16	<i>Kalmegh Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
17	<i>Mahanimba Churna</i>	Kolkata	Single formulation	Macroscopy, organoleptic studies, powder microscopy
RAIFR, Pune:				
18	Pharmacognosic evaluation of crude drugs performed	Pune	<ul style="list-style-type: none"> <i>Cordia macleodii</i> Hook <i>Syzygium cumini</i> (L.) Skeels <i>Cissus quadrangularis</i> L. 	Macroscopy, organoleptic studies, powder microscopy along with camera lucida drawings.
RARIDD, Gwalior:				
19	Analysis of ayurvedic formulation	Gwalior	<ol style="list-style-type: none"> <i>Terminalia belerica</i> (Gaertn) Roxb. <i>Operculina turpethum</i> L. Silva Manso <i>Terminalia chebula</i> Retz. <i>Zingiber officinale</i> Roxb. <i>Piper nigrum</i> Linn. <i>Piper longum</i> Linn. <i>Plumbago zeylanica</i> Linn. <i>Achyranthes aspera</i> Linn. 	Macroscopy, , powder microscopy along with camera lucida drawings



2.4. Intra Mural Medicinal Plant Research Projects

In order to create acceptable scientific evidence on Ayurvedic formulations, Intra Mural Research Projects (IMR) has been taken up in the field of medicinal plants research. The work done under IMR projects during the reporting period is mentioned under the heading entitled “Medicinal Plants Research Projects”. During the reporting period, the work on 21 IMR Projects including 5 IMR projects on Medico-Ethno- Botanical Survey Programme are done out of them, 9 completed (5 projects on SMPU and 4 others) and 12 projects are going on . The details are as under:-

Apart from these, the National Medicinal Plants Board has sanctioned 2 projects viz. Establishment of National Raw Drug Repository at RARI, Jhansi & Establishment of Nursery Development at various gardens of CCRAS Institutes viz. CARIDD Kolkata, RARI Jhansi, RARI, Itanagar, CARIRD, Patiala (in the extension center at GADVASU, Ludhiana) and CARIHD Bhubaneswar which are under progress.

2.4.1. DNA based fingerprinting to understand genetic variations and phyto-chemical analysis of selected medicinal plants.

Background in brief: For the assessment of the genetic diversity of the important medicinal plants, RAPD polymorphism technique is an effective tool. DNA fingerprinting refers to the use of techniques based on the polymerase chain reaction (PCR) which is utilized for the amplification of DNA to reveal the specific DNA profile for a particular organism which is as unique as a fingerprint. Fingerprints will be developed for the assessment of the interrelation between the genes present.

Objectives:

- To use RAPD based DNA fingerprinting technique for the authentication of plants
- To analyze phytochemical parameters of the medicinal plants.

Date of initiation: 10th March, 2014

Duration of Study: Three years

Participated centre along with PI: RAIFR, Pune.

PI: Dr. S.D. Pawar

Current status:

- The revised progress Report after modifications (suggested by external expert) has been submitted and publications in the peered journals are in progress.

2.4.2. Studies on development of agro techniques of two important medicinal plants of Laghu Panchmool

Background in brief: The project proposal is prepared to develop the agro techniques and comparative studies of the two important species of LaghuPanchmoola with the aim of the development of a complete protocol on propagation and cultivation techniques of two species to reduce the burden of demand and supply of the drug in the market.



Objectives:

- To develop nursery technique to raise the seedlings or saplings from seed and cuttings.
- To access the effect of different soil types on growth and performance of selected plants.
- To evaluate the effect of different organic manure on growth and performance of selected plants.
- To study the effect of shade and sunlight on growth and yield of selected plants.
- To find out the ideal conditions for plantation and harvesting of the selected plants.
- To determine the effect of soil types, manures and climatic conditions on physico-chemical parameters
- To study sustainable harvesting and its effect on the survival rate of the plants and to develop a complete agro-technique protocol for selected medicinal plants.

Date of initiation: 4th October, 2013

Duration of Study: Three Years

Participated centre along with PI: RAIFR, Pune

PI: Dr. A.M. Gurav R.O, RAIFR, Pune.

Current status:

- The experimental work as per the objectives of the project has been carried out along with the development of agro-technique protocol for selected medicinal plants. The vetting of the submitted draft report is under progress by subject experts.

2.4.3. Selection of salt-tolerant cell lines and Regeneration of salt tolerant plantlets of Prishniparni (*Uraria picta* (Jacq.) Desv) and Shalaparni (*Desmodium gangeticum* (L.) Dc.

Background in brief: The project is proposed to develop in vitro salt tolerant calli and plantlets of *Prishniparni* (*Uraria picta* (Jacq.) Desv. and *Shalaparni* (*Desmodium gangeticum* (L.) DC.) as both the important plant species are extensively used in several Ayurvedic preparations as: Dashmoolarista, Dashmoolkwatha, Dashmoola Taila etc. It was evident from the available literature that there is no standard salt tolerant protocol developed for the selected medicinal plants.

Objectives:

- Development of a protocol for the callus culture and somatic embryogenesis.
- Selection of salt tolerant calli by repeated subculture and salt tolerant plantlets of selected plants.
- To conduct seed germination trials on different concentration of NaCl and other salts solutions.
- Hardening of plantlets by suitable method and testing of plantlets for their salt-tolerance limit and capacity, in the field.
- Comparison of the salt –tolerant plantlets with salt sensitive plantlets *in-vivo* grown seedlings of



selected plants with respect to morphometric and few selected phytochemical parameters.

Date of initiation: 21st April, 2014

Duration of Study: Three Years

Participated centre along with PI: RAIFR, Pune

PI: Dr. A.M. Gurav.

Current status:

- The experimental work as per the objectives of the project has been carried out along with the hardening of the plants in the field. The final analysis of the data along with the protocols in the project is under progress.

2.4.4. Development of Pharmacopoeial Standards of Traditionally Used Ayurvedic Formulations

Background in brief : Under this project Institute received five polyherbal formulations to develop pharmacopoeial standards and standardization work on Chatur Bhadra kwath churna, Laghu Sudarshan churna and Vyoshadi churna, Narayan Churna and Tribhuvan kirti ras.

Objective: Developing standards of Ayurvedic formulations

Date of initiation: 19.09.14

Duration of Study: Two Years

Participated centre along with PI: CARIRD, Patiala

PI: Sh. Harjeet Singh

Current status:

SOP's of 5 formulations viz; Chaturbhadra kwath churna, Laghu Sudarshan churna, Vyoshadi churna, Narayana churna and Trivubhan kirti rasa have been completed and preliminary draft report is under progress.

2.4.5. Development of Data Bank on Ethnobotanical research and cross cultural study on sociology of reproductive health care of tribal societies involving medicinal plants across North east India

Background in brief: The folklore medicinal values of plant species so far reported by the studies have although been claimed with high reliability, but adequate attention has yet to be paid for their validation of folklore medicinal claims of such plants available to the region. Credibility of folklore claims are thus planned to analyze on the basis of Cross-cultural studies of reported medicinal plants across major tribal societies with the help of quantitative statistical methods. For the present project, eight major tribes of the region are selected as per their distributional records with high degree of cohabitation in different states of North east India. Their sociology on reproductive health care involving medicinal plants is attempted to be analyzed with quantitative approach, so that a concrete



conclusion can be drawn in a step towards applied Ethnobotany.

Objectives:

Primary:

- To develop a data bank covering literatures on ethno-botanical research from NE India
- To survey sociology of reproductive health care involving medicinal plants of eight major tribes across North east India

Secondary:

- To compile species wise medico-ethnobotanical claims
- To conduct quantitative cross cultural studies of folk claims of reproductive health care

Date of initiation: 23rd May, 2016

Duration of Study: Three Years

Participated centre: RARIGID, Guwahati

PI: Mr. Devanjal Bora

Current status:

- Folk claims of Reproductive health care from 29 references are arranged in tabular format.
- Gaurbari, Haflong, Chotowave, Gunjung, Digrik villages were surveyed in Dima-Hasao district of Assam where Dimasa tribe are found to be prominently inhabited. Other tribes co-residing them are Heme, Hmar, Kuki, Biate, Hrangkhoh etc. During survey, 104 nos. of Respondents were interviewed where 03 nos. of Information of Folk Healers were used and 05 nos. of Medicinal Plants recorded from the concerned tribe for use against medicine.
- In the prevailing disease category, dominant disease condition is Body Pain (44.11%), followed by Stomachs Pain (37.25%), Gastric (34.31%) and Joint pain (20.59%) and others.
- 39.21% population have visited any Traditional Healer for the reproductive treatment; 27.45% used to do religious activity for the reproductive health and 25.49% have used to do such type of activity or rituals involving medicinal plants.
- Total 18 plants have come up from the survey as used regularly in households of Dimasa tribe for enhancement of their reproductive health.

2.4.6. IMR-CAD -Compendium of Ayurveda Dietetics with reference to Oil Seeds

Background in brief: The present project is aimed to prepare comprehensive documentation of Ayurveda Dietetics viz. Oil Seeds. Published information Botany, Chemistry and Ayurvedic aspects with respect to Ayurveda Dietetics will be collected from various sources. Data from all the available sources (from electronic and physical sources) will be compiled as per the model CTD format



developed.

Objectives:

- Compilation of data on oil seeds used in Ayurveda dietetics from approved Ayurvedic literature listed in the Drugs and Cosmetics Act, Govt. of India with respect to its Ayurveda properties and ancient descriptions.
- Compilation of updated Agro-botanical, Taxonomical, Pharmaceutical, Pharmacognostical, Phytochemical, Nutritional and Nutraceutical data from standard available literature (electronic and physical sources).
- Segregation of collected information pertaining to each oil seed as per model CTD format.
- Publication of compendium as per the model CTD format.

Date of initiation: May 2018

Duration of Study: Three Years

Participated centre: RARIMD, Bangalore

PI: DR. V. Rama Rao

Current status:

- During the reporting period total 15 medicinal plants were allotted for preparing compendium report (botany, chemistry and ayurvedic information). Compilation work related to botany and chemistry part pertaining to 5 medicinal plants (*Ricinus communis* L., *Brassica juncea* (L.) Czern., *Linum usitatissimum* L., *Cocos nucifera* L., *Pongamia pinnata* (L.) Pierre} have been completed. Compilation of Ayurvedic information regarding Eranda (*Ricinus communis*. L.) is under progress.

2.4.7. Development of pictorial database of economically important parts of selected medicinal plants of RAIFR, Pune (Tree species).

Background in brief: The medicinal plants are fundamental to treatment in Ayurveda. But there are certain difficulties in identification viz. many species are considered in name of Rasna, Pashanabheda Murva etc. across India. A thorough morphological understanding from the basics of Namarupa Vigyan of Dravyaguna is the need of the hour. The present project will aid in enriching the existing data on medicinal plants. It also helps in redefining of controversies related to certain plants.

Objectives:

- Identification of medicinal plants cultivated/grown in the Institute garden.
- Morphological studies of plants cultivated/grown in the Institute garden
- Field photography of whole plant and the part used at different stages.
- Preparation of herbarium/Museum of the plant part and specimen
- Photography of parts of the medicinal plant at high resolution (During different stages of drying)



- To establish distinguishing, diagnostic characteristics for differentiation among selected drugs and their substitutes/adulterants

Date of initiation: 01/04/2018

Duration of Study: Two Years

Participated centre: RAIFR, PUNE

PI: Dr. Gajendra B. Rao

Current status:

- 21 plants have been covered till end of current session as per objective. Remaining work (54) will be achieved in ongoing session. Data analysis and interpretation is in progress.

2.4.8. Development of *in-vitro* and *in-vivo* propagation protocol of two important medicinal plants used by the tribal.

Background in brief:

Tissue culture is prerequisite for conservation and multiplication of any plant material through direct and indirect organogenesis. Due to having totipotency properties in plants tissue it can be grown in the organ and complete plantlets through various explants. So, these two plants have been selected for the development of *in vitro* and *in vivo* propagation protocol using various explants.

Objectives:

- To develop *in vitro* and *in vivo* propagation protocol on ***Dahipalas- Cordia macleodii* Hook** and ***Rohitaka- Aphanamixis polystachya* (Wall.) Parker**
- To develop *in vitro* plantlets by using different explants.
- To assess the effect of different phyto-hormones on different explants on shoot formation.
- To evaluate the effect of various growth regulators on root induction.
- To assess the effect different concentrations of growth regulators and planting medium on root induction from cuttings.
- To acclimatize the *in vitro* grown plants in the lab and field.

Expected Date of initiation: 01/04/2019

Duration of Study: Three Years

Participated centre along with PI: RAIFR, PUNE

PI: Dr. A.M. Gurav

Current status:

- The project has been sanctioned.



2.4.9. Exploration, acclimatization and *in-vitro* propagation of medicinal plants being used under the name *Agnimantha*

Background in brief: The present study is being proposed to conduct scientific evaluation on two species of *Premna* and one species of *Clerodendrum* which are generally used under the name of *Agnimantha*. There are various therapeutically important and potent formulations which are prescribed and manufactured out of the drug *Agnimantha*.

Objectives:

- Exploratory execution of Drugs/medicinal plants from recognized institutes/ wild sources, ascertaining Botanical identity through correct identification of the plants.
- Mass propagation and preliminary phytochemical investigations on in vitro grown product and conservation of rare and endangered medicinal plants in botanical gardens/poly houses /green houses.

Date of initiation: 15th April, 2014

Duration of Study: Three years

Participated centre along with PI: RAIFR, Pune

PI Name: Dr. Gajendra Rao

Current status

- The primary objectives of the project have not been achieved, so in view of this, the project has been extended for another one-year to complete the primary/secondary objectives of the project.

2.4.10. Digitization of Herbarium Sheets and Development of Digital Herbarium at Regional Ayurveda Research Institute, Jhansi.

Background in brief: The Institute under CCRAS is engaged in preparing database of medicinal plants of India and also developing digital herbarium with an incorporation of all necessary information of the digital herbarium sheets. The project highlights the activities at National and International level especially for those who keen to know about herbarium, medicinal plants, their occurrence and cultivation mode etc.

Objectives:

- The target of digitizing approximate 8000 herbarium sheet from designated five survey unit namely RARI, Ranikhet, RARI, Itanagar, RARI, Jhansi, RARIGID, Guwahati, RARIMD, Bangalore
- Up gradation of the existing software will be upgraded to need the requirement.
- A digitized database will be launched and a booklet/User manual may be published for information of stakeholders as ready reference.
- The botanical nomenclature currently in vogue will be reflected in all contacts for better understand of the stakeholders



- The gaps and lacunae if any through the course will be field suitable including the information related to passport data depending upon geographical variation.

Date of initiation: 01/04/2018
Duration of Study: Two Years
Participated centre: RARI, Jhansi
PI: Dr. Sanjeev Kumar Lale

Current status:

- Updating the information of Herbarium sheets to be digitized is under process. Total 1817 sheets scanned (756 from RARIMD, Bangalore, 440 sheets from RARI, Jhansi) 621 sheets which were from other institutions were mistakenly scanned because the project was in its initial stage and these institutions were not in this project. Total 336 sheets edited from RARI, Jhansi. The botanical names have been given to all the images and if the old name were changed, the accepted new name was given along with the old name as synonyms.

2.4.11. Authentication of selected crude drugs through pharmacognostical evaluation collected from various markets of India

Background in brief: Medicinal plants with high trade in medicinal value are depleting due to over-exploitation and other factors which results in increase demand of genuine raw drugs. Therefore, there is a gap between demand and supply of raw drugs and the result of this leads to adulteration and substitution for genuine crude drugs. The proposed study will also serve to identify the best raw drug market in India from where the best crude drugs could be collected.

Objectives: To authenticate the crude drugs of different markets of India and also dwell upon their geographical origin and distribution, botanical description, part/s used, therapeutic uses, season of collection, stage of plant and adulteration by studying their macroscopic, organoleptic/sensory, microscopic characteristics (Camera Lucida drawings along with photomicrographs of microscopic characters) and physico-chemical identities of powdered drugs.

Date of initiation: 01/02/2017
Duration of Study: Three Years
Participated centre: CARIDD, Kolkata
PI: Ms. Sreya Dutta

Current status:

- During the reporting period, macroscopy, powder microscopy with camera lucida drawings, photomicrographs of 160 crude drugs (923 samples) and physico- chemical study of all market samples of 110 crude drugs have been completed.



2.4.12. Developing Pharmacognostical Standards for some Ambiguous Ayurvedic Drugs (Sandigdha Dravyas) Appearing in the Ayurvedic Formularies, Parts I to III.

Background in brief: The Ayurvedic Formularies give list of authentic drugs and their parts for use in the formulations. There are several drugs which have been given alternatives or substitutes in the Formularies themselves. Since there is a possibility of abuse of the drugs by adulteration which is necessary to develop standards which enables stakeholders to get the drugs intended in the formulation.

Objectives:

- To carry out detailed Morphological and Micro-morphological and anatomical studies of the selected drugs through microscopy
- To establish distinguishing, diagnostic characteristics for differentiation among selected drugs and their substitutes/adulterants
- To establish diagnostic characteristics of the selected drugs in their powdered form
- To carry out comparative TLC/HPTLC studies to differentiate from adulterants/substituent
- To add to the Reference Substances Museum and Herbarium of CSMRADDI

Date of initiation: 26/6/2018

Duration of Study: Two Years

Participated centre: CSMRADDI, Chennai

PI: Dr. G. Nartunai

Current status:

- Plant specimens received under the proposed plants from different units of CCRAS are 26. Macro-microscopic studies on 7 plant species (*Marsdenia tenacissima*, *Chonemorpha macrophylla*, *Sansevieria roxburghiana*, *Solanum torvum*, *Solanum anguivi*, *Alpinia galanga* and *Alpinia calcarata*) completed.
- TLC/HPTLC studies on Murva (*Marsdenia tenacissima*, *Chonemorpha macrophylla* and *Sansevieria roxburghiana*) Kulanjan (*Alpinia galanga*), Granthimula (*Alpinia calcarata*), Brhati (*Solanum torvum*, *Solanum indicum*) has been completed.
- Complete monograph of one drug on Murva (*Marsdenia tenacissima*, *Chonemorpha macrophylla* and *Sansevieria roxburghiana*) prepared and sent to council for evaluation.

2.4.13. Qualitative authentication of selected market samples of crude drugs available in various markets of India

Background in brief: To develop quality standards of the selected crude drugs available in various markets of India, based on Pharmacognostic study in terms of diagnostic Microscopic and Physico-chemical parameters of the powder characters of these selected crude drugs and compare the same



with the authentic samples. Thus, a reliable scientific data on genuinens of the crude drugs sold in the markets can be obtained for the end users. The aim of the present study is to develop quality specification of crude drug based on Identity, purity and strength.

Objectives:

- Procurement of authentic and market samples from various localities.
- To study the macroscopic, organoleptic/sensory characters of both the drugs (collected and market samples).
- Powder drug analysis along with Camera lucida drawing of diagnostic characters of both the samples.
- Photomicrographs of microscopic character of powdered drugs analysis and if possible of sections.
- Estimation of physico-chemical parameters.
- To carry out the TLC and preliminary phytochemical screening
- Comparison of the generated data.

Date of initiation: 31st March 2018

Duration of Study: Three years

Participated centre: RARIUD Jammu (for botanical section) and CSMRADDI Chennai (For chemical profiling of the samples)

Current status:

- During the period under report Macro-microscopical and powder study of 27 authentic raw drugs; Macroscopy of 5 raw drugs and studies on 59 market samples of corresponding authentic drugs have been completed. The raw drugs studied, comprised of 14 authentic seed drugs and their 19 market samples; 9 fruit drugs and their 18 market samples; 4 leaf drugs and their 3 market samples; 2 root drugs and their 18 market samples; 1 stem bark and its market sample; 1 whole plant and its market sample; 1 fruit peel and its market sample. TLC/ HPTLC finger print development have been carried out for 21 plants.

2.4.14. Development of Agro-technique for High Altitude Endangered Medicinal plants of Trans-Himalaya.

Background in brief: Trans-Himalayan region of Ladakh exhibits a great diversity in soil vegetation, and topography. Himalayan mountains exhibits accelerated degradation of environment and natural resources, un-sustainability of current resource thus putting it in an alarming rate. This calls on focusing on multiple goal centered strategies for in-situ and ex-situ conservation of natural resources by using a systematic cultivation technique. To study the different cultivation techniques in Ladakh condition we divided our project in three different deliverables which will be achieved in three consecutive years as mention below:



Objectives:

- To study the cultivation techniques of commercially viable and endangered medicinal plants of Himalayan regions.
- To develop nursery of some commercially viable medicinal plants of Himalayan regions and freely distribute to the link farmers for cultivation of field.
- To cultivate commercially viable and endangered medicinal plants of Himalayan regions in herbal garden.
- Documentation of cultivation techniques of Himalayan medicinal plants and standardization of cultivation techniques.

Date of initiation: 16.04.2018

Duration of Study: 3 Years

Participated centre: NRIS, Leh

PI: Dr. Padma Gurmet

Current status:

- During the period ground preparation, construction of green house & trench etc. have been completed.
- Collection of 13 nos. of medicinal plants seed/germplasm were completed.
- Preliminary and germination trials using various methods have been studied.
- Cultivation of 6 medicinal plants initiated and regular examination is under progress on monthly interval basis.

2.4.15. Pharmacognostical Evaluation of Medicinal Plants cited in Ayurvedic Formulary of India excluding the plants mentioned in Ayurvedic Pharmacopoeia of India

Background in brief: The project was initiated to achieve the target of selected plants (in total of 60 medicinal plants) for carrying out the Pharmacognostical Evaluation of medicinal plants cited in Ayurvedic formulary of India excluding the plants mentioned in Ayurvedic Pharmacopoeia of India. Total five units are engaged in this programme viz; CSMRADDI Chennai; CARIDD Kolkata; RAIFR Pune; RARIMD, Bangaluru and RARIDD, Gwalior.

Objectives: The purpose is to identify/authenticate the plants, botanical description, part/s used, season of collection, stage of plant and adulteration. To study their macroscopic characters, microscopic characteristics of powdered drugs, to provide photomicrographs of microscopic characters of powdered drugs, to determine their physico-chemical identities (loss on drying at 105°C, total ash, acid-insoluble ash, alcohol-soluble extractive and water-soluble extractive).



Duration of Project:	One (01) year
Date of initiation:	31 st January, 2018
Participated Centers:	CSMRADDI Chennai; CARIDD Kolkata; RAIFR Pune; RARIMD, Bangaluru and RARIDD, Gwalior

Current Status:

- The study on 40 medicinal plants has been carried out for the macroscopy, microscopy, camera lucida drawings, photomicrographs, and physico-chemical parameters and same has been compiled. Study on rest of the plants are under progress.

2.4.16. Experimental Development of Microforest of Medicinal Plants by using Miyawaki Method of Plantation at Gardens of CCRAS

This is the first ever initiative made by CCRAS on the behalf of M/o AYUSH by launching of the project entitled “AUSHADH ARANAYAM” on the occasion of 3rd Ayurveda Day 2018 launched by Honourable MoS (IC) AYUSH as Intra-mural research projects entitled, “Experimental Development of Micro forest of Medicinal Plants by Using Miyawaki Method of Plantation” at different in-house gardens of CCRAS viz. RAIFR, Pune; RARI, Jhansi; RARI, Ranikhet; and RARIMD, Bengaluru.

Brief Background: This has been adopted after **Japanese Botanist; Akira Miyawaki** who had developed plantation technique to create forest using native plants species. By this method natural forest can be develop within 8 to 10 years. Based on this 30-50 native medicinal plants species are being planted in the area of 1 square meter; Plantation is being irrigated at a regular interval or upto 3 years. After experimental trials, the Miyawaki method will be adopted in agroclimatic zones of the Country.

Objectives:

Primary objective:

- To conduct experimental trials to create micro forest of medicinal plants by using Miyawaki method.
- To develop forest of medicinal plants under controlled condition without Miyawaki method for comparison.
- Study of growth pattern of medicinal plant species grown under experimental trial and controlled condition as per standard protocol.
- Comparative Analysis of growth pattern with control group.
- Live photographs of medicinal plant species at different stages of growth.
- To develop standard agro technique protocol using Miyawaki method for different medicinal plants forest.



Secondary objective:

- To conserve ecological status of medicinal plants of respective phytogeographical region.
- To study the feasibility of Miyawaki method for medicinal plants.
- To maintain biodiversity of the selected region.
- To restore the land of Institute garden.

Training on Miyawaki Forest Development has been given to all associated PI's and co-PI's of the Institutes at RARIMD, Bengaluru from 6-16 Dec.2018.

A. RAIFR, PUNE:

Date of initiation: 05/11/2018

Duration of Study: Two Years

Participated centre: RAIFR, Pune

PI: Dr. Arun M. Gurav

Co-PI: Dr. Rasika H. Kolhe, Dr. Shyam Baboo Prasad

Current status:

- Selection of experimental site and excavation of 330 sq. meter pit has been completed. 75 pits of 2x2x2 feet, have been prepared and preparation of 50 pits for control plantation are in progress.
- Procurement of soil, cow dung, vermin-compost/ compost, rice husk, rice straw, cocopit etc have been done.
- Collection of seed, seedlings, raising of plants by cuttings and through seeds have been done. Observations on raised plants are going on.

B. RARI, JHANSI:

Date of initiation: 01/11/2018

Duration of Study: Two Years

Participated centre: RARI, Jhansi

PI: Dr. Neelima Sharma

Co-PI: Dr. Anil Mangal

Dr. Jagdish Arya



Current status:

- Demarcation and digging of two plots of 15x10 m² has been done. In experimental area one pit of 3ft. depth is dug in 150 sqm and 3 pits in each sqm. Total 450 pits are prepared. While in control area beds of 4x4 sqm are prepared. 72 pits each of 1ft. x 1ft. at a distance of 2 ft. have been prepared.
- Arrangement for water for irrigation; procurement of Nourishment material, water retaining material and perforating material has been completed.
- Procurement and preparation of 35 saplings of Nine species are in sprouting stage.

C. RARI, RANIKHET:

Date of initiation:	31/10/2018
Duration of Study:	Two Years
Participated centre:	RARI, Ranikhet
PI:	Dr. Deepshikha Arya
Co-PI:	Dr. Sanjiv Kumar, Dr. M.S. Rawat & Dr. Harit Kumari

Current status:

- The pits for plantation have been dug. Soil has been collected and sent for testing.
- Procurement of soil nurshing materials i.e. Manure, Rice husk, straw, Vermi-compost, saw husk, jaggery have been completed. Bamboo sticks for support of plant have also been procured.
- Collection of the medicinal plant species for plantation have been started and simulatenously raising of the same.

D. RARIMD, BENGALURU:

Expected Date of initiation:	April 2019
Duration of Study:	Two Years
Participated centre:	RARIMD, Bengaluru
PI:	Dr. V. Rama Rao
CoI:	Dr. Raghavendra Naik & Dr. Bhavya

Current status:

- The project has been sanctioned.



2.5 Other Projects (Projects Sanctioned by National Medicinal Plants Board (NMPB), Ministry of AYUSH, Govt. of India, New Delhi)

2.5.1. Establishment of National Raw Drug Repository (NRDR) at RARI, Jhansi.

Background in brief:

A project entitled “Establishment of National Raw Drug Repository” has been sanctioned by the NMPB, Ministry of AYUSH, Govt. of India, New Delhi to CCRAS and the project has to be established/initiated at its peripheral Institute i.e. Regional Ayurveda Research Institute, Jhansi. The objectives of the project are as follows:

Objectives:

- To act as collection centre for raw drugs supplied by RDR situated at different agro climatic zones of the country.
- To act as an accredited reference library cum institution for authentication of raw drugs
- To act as storage and preservation of Botanical Reference Substance (BRS)
- To establish standard protocols and keys for identification and authentication of raw drugs used in the herbal industries.
- To Provide Botanical Reference Substance (BRS) on payment basis.
- To Provide Herbarium specimen on payment basis.
- To Provide Certificate of Analysis (COA) of the raw drugs supplied by Industry/Researchers on payment basis.
- To act as an educational centre for training and disseminating general awareness about the importance of authenticated raw drugs material.

Total Sanctioned Budget: Rs. 9,93,86,000/-

Date of initiation: March, 2019

Duration of Study: Five years

Participated centre: RARI Jhansi

Current status:

- Appointments of sanctioned man-powers for the project is in pipeline.
- Construction of Building/ Infrastructure has been proceeded.



2.5.2. Establishment of Herbal Garden and Nursery centre at CCRAS institutes funded by NMPB

Background in brief: National Medicinal Plants Board (NMPB) sanctioned a project entitled “Establishment of Herbal Garden and Nursery centre at CCRAS institutes” to enhance the awareness regarding the cultivation of medicinal plants among the local farmers. These saplings will be distributed for free to the farmers in their respective regions. They will be sensitized about utilization of plants and their good agricultural and cultivation practices so that they can grow these plants properly. Initially total five units are engaged in this programme viz; CARIDD Kolkata, RARI Jhansi, RARI, Itanagar, CARIRD, Patiala (in the extension center at GADVASU, Ludhiana) and CARIHD Bhubaneswar.

Objectives:

- Collection of mother stock medicinal plants of from different parts of India as per seasonality during EMB survey and Institute medicinal plant garden
- Raising of saplings and hardening of medicinal plants
- Medicinal plants saplings for distribution for planting

Date of initiation: February, 2019

Duration of Study: One year

Participated centre: CARIDD Kolkata, RARI Jhansi, RARI, Itanagar, CARIRD, Patiala (in the extension center at GADVASU, Ludhiana) and CARIHD Bhubaneswar.

Current status:

- Collection of mother stock medicinal plants of from different sources is under progress.
- Raising of saplings and hardening of medicinal plants is also initiated.



3. Drug Standardization Research

3.1. Drug Standardization

Standardization is an essential step to ensure the quality of Ayurvedic drugs. Confirmation of identity, quality, purity, and detection of adulterants are the major objectives of standardization. One of the prime activity of the Council is Quality assessment of the single drugs and compound formulations and their method of preparation (standard operating procedures) through five Drug Standardization units, viz. Captain Srinivasa Murthy Regional Ayurveda Drug Development Institute, Chennai (CSMRADDI) (NABL accredited lab), Central Ayurveda Research Institute for Drug Development, Kolkata (CARIDD), Central Ayurveda Research Institute for Respiratory Disorders, Patiala (CARIRD), Regional Ayurveda Research Institute for Drug Development, Gwalior (RARIDD) and National Ayurveda Research Institute For Panchakarma, Cheruthuruthy (NARIP). The drugs and formulations required under different projects (Coded, IMR, Claim drugs etc.) for clinical trials, pharmacological studies etc. have been analyzed for confirmation of identity and quality of drugs as per Pharmacopoeial standards/development of standards.

During the reporting period, 1 IMR project has been completed, 10 IMR projects are going on out of them 4 projects are initiated during the reporting period. 136 single drugs (batches/samples) along with 29 compound formulations (Churna/Kwatha-Churna/Taila/ Avleha /Arista /Asava / Coded/Claim drugs etc.) have been standardized/ analyzed for quality parameters and other activities in the current year.

The shelf life studies of six formulations (samples/batches) have been continued during the current year. Furthermore, selected analytical parameters were carried out for intra and inter laboratory comparison for continuation of NABL accreditation. Some samples have also been analysed through DTL certifications. The details of the work are given below.

3.2. Intra Mural Drug Standardization Research Projects

3.2.1. Shelf life study of Churna

- 1. Objectives:** To determine the shelf life of various Churna prepared as per Ayurvedic Classics, Churna by adding preservatives and Churna prepared as per classics and conventional method.
- 2. Duration of Study:** 3 years.
- 3. Participated centre along with PI:** CARIRD, Patiala and RARI, Jhansi
PI: Dr. Biresh Kumar Sarkar
- 4. Date of initiation :** April 2015
- 5. Current status:** Completed.
- 6. Summary of Project:** The formulations viz. Ashwagandha Churna, Ashwagandha Churna (With Preservative), Balachaturbhadrika Churna, Balachaturbhadrika Churna (With Preservative), Panchsam Churna, Panchsam Churna (Without Salt), Panchsam Churna (With Preservative),



Talishadya Churna, Talishadya Churna (With Preservative) & Talishadya Churna (Without Sugar) were prepared and kept in stability chamber for stability studies for Twenty four months at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study) or stability study.

3.2.2. Comparative Evaluation of Market Formulations of Some Ayurvedic Guggulu for Quality assessment.

- 1. Objectives:** Quality assessment of market formulations of some Ayurvedic Guggulu.
- 2. Duration of Study:** 2 years
- 3. Participated centre along with PI:** RARIDD, Gwalior
- 4. PI:** Dr. Bhavana Srivastava
- 5. Date of initiation :** 01.07.2018
- 6. Current status:** Going on.
- 7. Summary of Project:** Out of 75 formulations selected for the study 51 formulations have been procured. Pharmacognostical parameters, physico-chemical analysis (ash value, acid insoluble ash value, water soluble extractive, alcohol soluble extractive, loss on drying and pH), total phenolic content and total flavonoid content, aflatoxin analysis and microbial analysis of 35 Guggulu formulations have been completed.

3.2.3. Chemical Profiling of Seven Ayurvedic Plant Drugs (Stem bark/ Root and Small branches /Aerial parts) by HPLC/GC-MS/LC-MS and other related techniques

- 1. Objectives:** Comparison of physico-chemical analysis and Comparative phyto-chemical screening of official parts vs renewable proposed parts. Extraction of the all official parts and renewable proposed parts of seven plants (stem bark/root and small branches/aerial parts) will be carried out by soxhlet extraction with different solvents of increasing polarity (n-hexane, chloroform, ethyl acetate and alcohol). Its comparative finger print development/ profile development of above extracts using any of the sophisticated analytical instruments such as HPTLC/ HPLC/ GC-MS/ LC-MS etc on the basis of feasibility.
- 2. Duration of Study :** 2 years
- 3. Participated centre along with PI:** CSMRADDI, Chennai
PI: Dr. Ch. Venkata Narasimhaji
- 4. Date of initiation:** 31st Mar 2018.
- 5. Current status:** Going on.
- 6. Summary of Project:** Literature review of proposed plants for chemical constituents, methods of analysis with various analytical instruments and isolation etc., are under progress. The procured raw plant materials for 12 no's of samples were dried and powdered. Physico-chemical parameters



for samples of official and proposed parts namely *V. negundo*, *D.gangeticum*, *A. marmelos* and *C. fistula* were carried out. Phyto-chemical analysis for samples of *C. fistula* is under progress. HPTLC finger print profiling of *V. negundo* and *D. gangeticum* were completed. HPLC finger print profiling for *D. gangeticum* and *Aegle marmelos* are under progress. GC-MS of some of the extracts of *V. negundo* are carried out and *D. gangeticum* and some of the extracts of *V. negundo* GC-MS analysis are initiated.

3.2.4. Effect of Shodhan procedures on Chemical profiling of Ayurvedic drugs of plant origin (Visa Drvya) mentioned under Schedule E-1 of D&C Act, 1940

1. Objectives: Standardization of after Shodhan drugs and process.

2. Duration of Study: 2 years

3. Participated centre along with PI: CSMRADDI, Chennai

4. PI: Dr. Ajay Kumar Meena

5. Date of initiation: 5.7.2018

6. Current status: Going on

7. Summary of Project: Procurement and identification of six raw drugs is completed. Procurement of marker compounds is completed. Shodhan Process for Visamusti (*Strychnos nux-vomica* L.) seeds, Langali (*Gloriosa superba* L.) tuber, Jayapala (*Croton tiglium* L.) seeds and *Datura metel* (Seeds) was completed. Comparative analysis of physico-chemical parameters for Visamusti (*Strychnos nux-vomica* L.) seeds, Langali (*Gloriosa superba* L.) tuber and Jayapala (*Croton tiglium* L.) seeds, Gunja (*Abrus precatorius* L.) seeds before and after shodhan process was completed. Preparation of successive extracts of Hexane, Ethyl Acetate, Chloroform and Ethanol and individual extracts of Ethanol and Chloroform for Visamusti (*Strychnos nux-vomica* L.) seeds, Jayapala (*Croton tiglium* L.) seeds and Langali (*Gloriosa superba*) tuber before and after shodhan Process was completed. Quantification of Brucine from Visamusti (*Strychnos nux-vomica* L.) seeds and Colchicine from Langali (*Gloriosa superba* L.) tuber by HPLC in before and after shodhan process was completed. Development of Chromatographic profiles by HPLC for Visamusti (*Strychnos nux-vomica* L.) seeds and Langali (*Gloriosa superba* L.) tuber before and after shodhan process was completed. Chemical profiles of Jayapala (*Croton tiglium* L.) seeds is under progress. Development of Chromatographic finger print profiles by HPTLC for Visamusti (*Strychnos nux-vomica* L.) seeds before and after shodhan process is under progress.

3.2.5. Qualitative and Quantitative analysis of markers/PRS & Shelf life study of Ayush-D Tablet and Ayush PE eye drop formulations (prepared trial drugs)

1. Objectives: Standardization of formulations namely AYUSH-D Tablet and Ayush PE eye drop. Identification and Development of Comparative Chromatographic profiles of formulations and its ingredients with respective Marker /PRS. Quantitative estimation of concerned PRS/Markers in formulations and its ingredients. Shelf life study of Ayush-D Tablet and Ayush PE eye drop



formulations.

2. **Duration of Study:** 2 years
3. **Participated centre along with PI:** CSMRADDI, Chennai
4. **PI:** Dr. Ajay Kumar Meena
5. **Date of initiation:** 5.7.2018
6. **Current status:** Going on
7. **Summary of Project:** Selection of SRF completed, procurement of marker compounds is under progress. Standardization of AYUSH-D Tablet & Ayush PE eye drops formulation is completed. Shelf life study of Ayush-D Tablet (Zero day to 4th quarter) and Ayush PE eye drops (Zero day to 3rd quarter) is completed. Quantification of Withaferin A in *Withania coagulans*, Berberine Chloride in *Berberis aristata*, Emodin in *Rheum emodi*, Ellagic acid in *Syzygium cuminii*, Pterostilbene in *Pterocarpus marsupium* and Ayush-D formulation by HPLC is completed. Identification and Comparative HPTLC Chromatographic finger print profiling of Ayush-D formulation and *Berberis aristata* with respective Marker Berberine Chloride, *Syzygium cuminii* Linn. with respective Markers Ellagic acid and Gallic acid, *Pterocarpus marsupium* with respective Markers Pterostilbene and *Rheum emodi* with respective Marker Emodin is completed. *Withania coagulans* with respective Marker Withaferin A is under progress.

3.2.6. Qualitative and Quantitative analysis of Markers/PRS & Shelf life studies of Carctol - S Capsules, Ayush-SL Tablets and Ksharasutra formulations (prepared trial drugs)

1. **Objectives:** Standardization of formulations namely Carctol - S Capsules, Ayush - SL Tablets and Ksharasutra. Identification and Quantitative estimation of concerned PRS/Markers in formulations and their ingredients. Shelf life studies of Carctol- S Capsules, Ayush- SL Tablets and Ksharasutra formulations.
2. **Duration of Study:** 2 years
3. **Participated centre along with PI:** CSMRADDI, Chennai
4. **PI:** Dr. Ajay Kumar Meena
5. **Date of initiation:** 18/03/2019
6. **Current status:** Initiated
7. **Summary of Project:** Standardization of Carctol - S Capsules, Ayush-SL Tablets completed and Ksharasutra formulations under progress.

3.2.7. Development of quality standards and SOP's for Triphala kwath churna (AFI, Part-III



6:62)

- 1. Objective:** Evaluation of Quality control parameter of raw ingredients and formulation according to API, manufacturing of Formulation according to AFI & preparation of SOP based on entire work done.
- 2. Participated centre along with PI:** CARIDD, Kolkata
- 3. Duration of Study:** 01 Year
- 4. PI:** Mrs. Manosi Das
- 5. Date of initiation:** 27.12.18
- 6. Current status:** Initiated
- 7. Summary of Project:** Botanical standardization (both Microscopy & Macroscopy) work of Amlaki (*Phyllanthus emblica*) - Pericarp have been completed. Chemical standardization work of Amlaki (*Phyllanthus emblica*) - Pericarp (Going on). Physico- chemical parameters of Amlaki (*Phyllanthus emblica*) - Pericarp have been completed. HPTLC work of Amlaki (*Phyllanthus emblica*) - Pericarp is going on. Heavy metals, Pesticide residues, Microbial load and Aflatoxins analysis is going on.

3.2.8. Development of quality standards and SOP's for Sarpagandha Mishran (AFI, Part-III 6:62)

- 1. Objective:** Evaluation of Quality control parameter of raw ingredients and Formulation, manufacturing of Formulation and dosage form & preparation of SOP of the manufacturing of formulation.
- 2. Participated centre along with PI:** CARIDD, Kolkata
- 3. Duration of Study:** 6 Months
- 4. PI:** Mr. Kalyan Hazra
- 5. Date of initiation:** 07.03.2019
- 6. Current status:** Initiated
- 7. Summary of Project:** Plant materials were authenticated as per the API standard through macroscopical and microscopical studies. Authenticated plant materials were subjected to different chemical testing to get it done as per API standards. Samples were found to be free from heavy metals, aflatoxins, specific pathogens and pesticidal residues. Physicochemical parameters along with pH of aq. suspension have been done. Manufacturing of the formulation has been initiated.



3.2.9. Shelf life study of Vati

- 1. Objectives:** To determine the shelf life of various Vati prepared as per Ayurvedic Classics, various Vati by adding excipient & Vati prepared as per classics and conventional method.
- 2. Duration of Study:** 4 years.
- 3. Participated centre along with PI:** CARIRD, Patiala and RARI, Jhansi
PI: Dr. Biresh Kumar Sarkar
- 4. Date of initiation :** April 2015
- 5. Current status:** Going on.
- 6. Summary of Project:** The formulations -Eladi Gutika & Eladi Gutika (With excipient) are prepared and kept in stability chamber for stability studies for Thirty three months in stability chamber at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study). Other formulations- Lavangadi Vati, Lavangadi Vati (With excipient), Arka Vati & Arka Vati (With excipient) are prepared and kept in stability chamber for Thirty months in stability chamber at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study). The reference sample of all finished formulation is also kept in deep freezer at $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$ temperature and analysed for stability parameters.

3.2.10. Shelf life study of Ghrita

- 1. Objectives:** To determine the shelf life of various Ghrita prepared as per Ayurvedic Classics and as per different methods mentioned in classics.
- 2. Duration of Study:** 3 years.
- 3. Participated centre along with PI:** CARIRD, Patiala and RARI, Jhansi.
PI: Dr. Biresh Kumar Sarkar
- 4. Date of initiation :** April 2015
- 5. Current status:** Going on (Stability Studies is completed, Compilation data is under process).
- 6. Summary of Project:** The formulations viz. Go-Ghrita (Non-Murcchita), Go-Ghrita (Murcchita), Dadimadi Ghrita (A), Dadimadi Ghrita (B), Triphala Ghrita (Non-Murcchita) & Triphala Ghrita (Murcchita) are prepared and kept for stability for twenty four months in stability studies chamber at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study) and the reference sample of these formulations have been also kept in deep freezer at $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$ temperature and analysed for stability parameters. Comparison and compilation of data on shelf life study of Ghrita project is under process.

3.2.11. Shelf life study of Taila

- 1. Objectives:** To determine the shelf life of various Taila prepared as per Ayurvedic Classics, various Taila by adding excipient and to compare the shelf life of various Taila prepared as per classics (Murcchita and non-murcchita) and by adding excipient.



2. **Duration of Study:** 4 years.
3. **Participated centre along with PI:** CARIRD, Patiala and RARI, Jhansi.
PI: Dr. Biresh Kumar Sarkar
4. **Date of initiation:** April 2015.
5. **Current status:** Going on.
6. **Summary of Project:** The formulations- Til Taila (Non-murcchita), Til Tail (Murcchita) are prepared and kept in stability chamber for stability studies for Twenty one months in stability chamber at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study). The formulation- Kshirbala Tail(Non-murcchita), Kshirbala Taila (Non-murcchita with excipient), Kshirbala Taila (Murcchita), Kshirbala Taila (Murcchita with excipient) are prepared and kept in stability chamber for stability studies for Eighteen months at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study). The formulation- Balaguduchyadi Taila (Non-murcchita), Balaguduchyadi Tail (Non-murcchita with excipient), Balaguduchyadi Taila (Murcchita) & Balaguduchyadi Taila (Murcchita with excipient) are prepared and kept for stability studies for Fifteen months in stability chamber at temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and humidity $60\% \pm 5\%$ (real time study). The reference sample of all finished formulation is also kept in deep freezer at $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$ temperature and analysed for stability parameters.

3.3 Standardization of Single Drugs & Compound Formulations

3.3.1. Single Drugs

Summary: Studies on 136 (batches/samples) single drugs have been analyzed at RARIDD, Gwalior, CARIRD, Patiala, CSMRADDI, Chennai and CARIDD, Kolkata and NARIP, Cheruthuruthy for Quality assessment (Physico-chemical parameters/HPTLC).

Table- 11: Details of Standardization of Single Drugs

S.No.	Name of the Drug	Institute
1	<i>Vitex negundo</i> L. (Nirgudi); <i>Piper longum</i> L. (Pipali); <i>Berberis aristata</i> DC. Leaf; <i>Boerhavia diffusa</i> L. Leaf; <i>Boerhavia diffusa</i> L. Stem bark; <i>Brassica compestris</i> L. Leaves; <i>Brassica compestris</i> L. Flower; <i>Bergenia ciliate</i> Root; <i>Bombax ceiba</i> Flower; <i>Bombax ceiba</i> Root; <i>Butea monosperma</i> L. Fruits; <i>Boerhavia verticilata</i> Whole plant;	RARIDD Gwalior, 12 single drug
2	<i>Desmostachya bipinnata</i> Kusha; <i>Piper longum</i> (Pippali) Fruit; <i>Terminalia chebula</i> (Haritaki) Fruit; <i>Zingiber officinale</i> (Sunthi); <i>Crateva religiosa</i> (Varuna); <i>Bergenia ligulata</i> (Pasanabheda); <i>Eugenia jambolana</i> (Jambu beeja); Mukta shukti Bhasma; <i>Aglaiia elaeagnoidea</i> (Priyangu); Koakatika; Mandura Bhasma; <i>Mangifera indica</i> L.(Amrabeeja), Endocarp; <i>Momordica charantia</i> (Karavellaka veeja), Seed; <i>Gymnema sylvestre</i> (Gudmarapatra), leaf; <i>Achyranthes aspera</i> (Apamarga); <i>Sesamum indicum</i> (Tila taila), seed; Jaggery (Guda); Sikh; Gandhaka; Tankan; <i>Moringa oleifera</i> (Shigru); Karpura; <i>Curcuma longa</i> (Haridra); <i>Azadirachta indica</i> (Nimba).	CARIDD, Kolkata, 24 single drug



3	Muktashukti; Swarnamakshika ; Iron Sulphate; Mumijo (Shilajit); Old Jaggery, (Purana Gud); <i>Sesamum indicum</i> (Black Til).	CSMRADDI. Chennai,06 single drug
4	<i>Phyllanthus emblica</i> (Amalaki); <i>Terminalia chebula</i> (Harad); <i>Terminalia bellirica</i> (Bahera); <i>Glycyrrhiza glabra</i> (Mulethi); <i>Withania somnifera</i> (Ashvagandha); <i>Tribulus terrestris</i> (Gokshura); <i>Aegle marmelos</i> (Bilva) Fruit Pulp; <i>Zingiber officinale</i> (Sunthi); <i>Piper longum</i> (Marica) Root; <i>Piper longum</i> (Marica) Stem; <i>Symplocos</i> (Lodhra); <i>Mucuna pruriens</i> (Kaunch) Seed; <i>Fagonia cretica</i> Linn. (Dhanvayasah) W.P.; <i>Fumaria parviflora</i> Lam. (Parpat) W.P; <i>Cyperus rotundus</i> (Musta) Rhizome; <i>Strychnos nux-vomica</i> (Kuchla) Seed; <i>Aconitum ferox</i> (Vatsanava); <i>SWERTIA chirayita</i> (Chirayata) W.P; <i>Adhatoda zeylanica</i> (Vasa) Leaves; <i>Cyperus scariosus</i> (Nagarmotha); <i>Pistacia chinensis</i> (Karkatshringi) Gall; <i>Ricinus communis</i> (Erandmul) Root; <i>Pluchea lanceolata</i> (Rasna) Leaf; <i>Boerhavia diffusa</i> (Punarnava) Root; <i>Cassia fistula</i> (Amaltas) Fruit pulp; <i>Cedrus deodara</i> (Devadaru); <i>Saussurea costus</i> (Kustha) Root; <i>Azadirachta indica</i> (Neem) St. Bark; <i>Acorus calamus</i> (Vaca); <i>Cassia tora</i> (Chakwad) Seed; <i>Cuminum cyminum</i> (Swet Jiraka); <i>Psoralea corylifolia</i> (Bakuchi); <i>Embelia ribes</i> (Vidanga); <i>Trachyspermum ammi</i> (Ajwain); <i>Berberis aristata</i> (Daruharidra); <i>Trachyspermum ammi</i> (Ajmod); <i>Glycine max</i> (Soya); <i>Plumbago zeylanica</i> (Chitrak); <i>Argyrea nervosa</i> (Vidara); <i>Foeniculum vulgare</i> (Saunf); <i>Cinnamomum tamala</i> (Sonai Patra); <i>Acacia catechu</i> (Khadira) (Bark); <i>Cinnamomum verum</i> (Dalchini); <i>Elettaria cardamomum</i> (Chhoti elaichi).	CARIRD, Patiala Total 44 single drugs.
5	<i>Aquillaria agalocha</i> (Agharu) Heartwood; <i>Plectranthus vettiveroides</i> (Ambu); <i>PAVONIA ODORATA</i> (Hrivera) Root; <i>Emblica officinalis</i> (Amalaki) Pericarp; <i>Achyranthus aspera</i> (Apamarga) Root; <i>Cassia fistula</i> (Aragvad) St. bark; <i>Aconitum heterophyllum</i> (Athivisa) Root; <i>Pterocarpus marsupium</i> (Avaltholi) Bark; <i>Trachyspermum ammi</i> (Ajmoda) Seed; <i>Psoralea coryfolia</i> (Bakuci) Fruit; <i>Sida rhombifolia</i> (Bala) Root; <i>Aegle marmelose</i> (Bilwa) Bark; <i>Plumbago zeylanica</i> (Citraka)Root; <i>Cedrus deodara</i> (Devadaru) Heartwood; <i>Coriandrum sativam</i> (Dhanyaka) Seed; <i>Fumaria parviflora</i> (Parpataka) Whole plant; <i>Cinnamomum tamala</i> (Patta) Stem bark; <i>Piper longum</i> (Pippali) Fruit; <i>Boerhavia diffusa</i> (Punarnava) Root; <i>pterocarpus santalinus</i> (Rakthachandanam) Hardwood; <i>Alpinia galanga</i> (Rasna) Root; <i>Anethem sowa</i> (Satahva) Seed; <i>Zingiber officianale</i> (Sunthi) Rhizome; <i>Taxus buccata</i> , (Thaleesapathra) Leaf; <i>Cinnamomum zeylanicum</i> (Tvak) Stem bark; <i>Vetiveria zizanioides</i> (Usira) Root; <i>Terminalia bellerica</i> (Vibhitaki) Fruit; <i>Embelia ribes</i> (Vizhalari) Fruit; <i>Hordeum vulgare</i> (Yava) Seed; <i>Hordeum vulgare</i> (Yavaksharam) Whole plant; <i>Azadirachta indica</i> (Nimba) Root bark; <i>Cyperus rotundus</i> (Musta) Rhizome; <i>Trigonella foenum – graecum</i> (Methi) Seed; <i>Ricinus communis</i> (Eranda) Root; <i>Tribulus terrestris</i> (Goksura) Dried Fruit; <i>Tinospora cordifolia</i> (Guduchi) Stem; <i>Commiphora mukul</i> (Guggulu) Exudate; <i>Curcuma longa</i> (Haridra) Rhizome; <i>Terminalia chebula</i> (Haritaki) Fruit rind; <i>Cuminum cyminum</i> (Jeeraka) Seed; <i>Murraya koenigii</i> (Kaidarya) Leaf; <i>Nigella sativa</i> (Karijeeraka) Seed; <i>Picrorhiza kurroa</i> (Katuki) Root; <i>Andrographis paniculata</i> (Kiriyath) Whole plant; <i>Paspalum scrobiculatum</i> (Kodravah) Grain; <i>MACROT-YLOMA UNIFLORUM</i> (Kulatha) Seed; <i>Holarrhena antidysentrica</i> (Kudajam) Stem bark; <i>Saussurea lappa</i> (Kushtham) Stem; <i>Mimosa pudica</i> (Lajjalu) Whole plant; <i>Rubia cordifolia</i> (Manjistha) Stem; <i>Piper nigrum</i> (Maricha) Fruit.	NARIP, Cheruthuruthy, 50 single drugs.



3.3.2. Compound formulations

Summary: Studies on 29 (batches/samples) of classical Ayurvedic formulations & claimed/coded formulations have been analyzed/continued at CSMRADDI, Chennai, CARIDD, Kolkata, CARIRD, Patiala, RARIDD, Gwalior and NARIP, Cheruthuruthy for Quality assessment/ some specific parameters.

Table- 12: Details of Standardization of Compound formulations

S. No.	Ayurvedic Classical / Coded / Claimed Formulations	Institute
a.	Ayurvedic Classical Formulations	
1	Sameerpannaga rasa	RARIDD, Gwalior
2	Ashwagandhadi Churna,	
3	Sitopaladi Churna,	
4	Anu Taila	
5	Tribhuvan Kirti Rasa Vati	CARIRD, Patiala
6	Ayush Herbal –Tea	CSMRADDI, Chennai
7	Muktashukti Bhasma	
8	Loh Bhasma	
9	Shankh Bhasma	
10	Varunadi Kvatha Churna	CARIDD, Kolkata
11	Apamarga Kshara,	
12	Puga Khanda (Formulation)	
13	Eladi Churna(Formulation)	
14	Trayodasanga Guggulu(Formulation),	
15	Pathyadi Kvatha Churna	
16	Jatyadi taila	NARIP, Cheruthuruthy
17	Avipattikara churna	
18	Nisamlaki churna	
19	Talisapatradi churna	
20	Trikatu churna	
21	Triphala churna	
22	Lajjalukeram	
b.	Coded/ Claimed Formulations	
23	Ayush -D Tablet	CSMRADDI, Chennai
24	C-1 Oil-claim	
25	Ayush PE Eye Drops	
26	SVK -claim	CSMRADDI, Chennai
27	SSV-claim	CARIDD, Kolkata
28	Ayush GG	CARIDD, Kolkata
29	Ayush 82	



3.3.3. Shelf life of formulations / finished products

Batches/Samples of the following five drugs (sample/batch) have been studied for shelf life studies.

Table- 13: Details of Shelf life formulations/finished products

S. No.	Formulations / Finished products	Status	Institute
1	Ayush Rasayan-B (Batch-III)	Going on	CSMRADDI, Chennai
2	Ayush-D		
3	Ayush PE Eye drops		
4	Carctol S Capsule		
5	Ayush SL Tablet		
6	Ksharsutra		

3.4. Other Laboratory Activities

3.4.1. NABL Related Work

- **Internal Audit:** Internal audit of Chemical and Biological laboratories were conducted from 2 – 5 July 2018 as per the procedure laid down in an ISO/IEC 17025:2005 to meet the NABL requirements.
- **Quality Control Check:** Quality control check of Sodium and Potassium was done every month from April 2018 to March 2019.
- **Internal Calibration:** Calibration of instruments, critical consumables, reference standards, SOP's and intermediate checks were done regularly to meet the ISO/IEC 17025: 2005 requirements. Measurement uncertainty (MU) of Ash value for the sample coded APT-108-AVC & AYI-208-AT and of Alcohol soluble extractive for the sample coded TAY-21-GG was completed.
- **Inter/Intra- Laboratory comparison:** Inter/Intra laboratory comparison of various parameters for the sample coded AYII-197-PRB, AYI-208-AT, TAY-21-GG, APT-108-AVC, AYII-186-NKL, was completed. Calculation of Z score for various parameters of five Samples matrices such as Oil, Guggulu, Churna, Bhasma and Lavana etc. was completed.
- **Method Validation:** Standard operating procedures (SOPs) and method development for Calcium estimation were completed. Standard operating procedures (SOPs) for Intermediate check of AAS reference standards were prepared.

3.4.2. DTL (Drug Testing Laboratory): 51 numbers of samples were analyzed for various parameters under NABL scope.



4. PRE-CLINICAL STUDIES

Pharmacological and Toxicological studies constitute a very vital part in Drug Research Programme. The Ayurvedic medicines are studied on experimental models in different animal species to establish safety and efficacy profile. The studies are being carried out at Council's various institutions viz. CSMRADDI, Chennai; NARIP, Cheruthuruthy; RARIDD, Gwalior; CARIDD, Kolkata and RAIFR, Pune. During the reporting period, 1 Intra Mural Research projects have been completed and 18 projects are in progress.

Biological activity and safety studies

4.1 In-vitro assessment of anti-diabetic Ayurvedic formulations using cell based assays

1. Objectives

- To access the in vitro anti diabetic activity of selected Ayurvedic formulations
- To explore partial/full mechanism of action of these drugs on selected cell lines

2. **Duration of project:** 3 years

3. **Participating centre:** RAIFR, Pune

4. **Name of the PI:** Dr. S. D. Pawar

5. **Date of initiation/enrolment:** 18/08/2014

6. **IAEC approval no:** NA

7. **Current Status:** Project completed.

8. **Project Outcome:** The MTT assay of all cell lines (Chang Liver, C2C12, 3T3LI And RIN5F) with aqueous extract, hydro alcoholic extract, Metformin, Glibenclamide and Insulin is completed. Effect of extract on differentiation and maturation of pre-adipocyte-3T3L1 cells using Oil Red O Staining was carried out and data was analyzed. Effect of Ayurvedic formulation extract on glucose uptake in matured adipocytes (3T3L1 cells) was carried out. Identification and Characterization of differentially expressed protein: Q-TOF MS and Database Search was done. Hydroalcoholic extract was found to be more effect as compared to aqueous extract. Ayurvedic formulation extract showed Alpha Glucosidase inhibitory activity using In-vitro biochemical assays and found to be effective in reducing fat droplets on differentiation of pre-adipocyte indicative of antihyperlipidemic response. Treatment with extract showed increase in glucose uptake in matured adipocytes which was supported by proteomic studies. Preparation of final report of the project is under progress.

4.2 Evaluation of *Kanchanar Guggulu* against chemically induced hypothyroidism in rats

1. Objectives

- To evaluate acute and 90 days repeated dose oral toxicity of *Kanchanar Guggulu*.
- To assess the efficacy of *Kanchanar Guggulu* in chemically induced hypothyroidism in rats.



2. **Duration of project:** 2 years
3. **Participating centre:** CARIDD, Kolkata
4. **Name of the PI:** Dr. Amit Kumar Dixit
5. **Date of initiation/enrolment:** 01/12/2018
6. **IAEC approval no:**
 - Proposal No. 20/P/S/IAEC/2018 dated 18.12.2018 for “Acute oral toxicity study of *Kanchanar Guggulu* in Wistar rats as per OECD guidelines 423”.
 - Proposal No. 21/P/S/IAEC/2018 dated 18.12.2018 for “Repeated dose 90 day oral study of *Kanchanar Guggulu* in Wistar rats as per OECD guideline 408”.
7. **Current Status:** Study is in progress.
8. **Project Outcome:** Physicochemical analysis of the drug has been completed. The acute toxicity study of *Kanchanar guggulu* on Wistar rats has been completed. All the animals of three groups (Group I, II & III) were apparently normal. No mortality, no abnormal clinical signs and no pathophysiological symptoms were observed in any animal throughout the study period. 90 days oral toxicity is in progress.

4.3 Evaluation of *Vatari guggulu* for anti-arthritic activity through different arthritis models in experimental animals

1. **Objectives**
 - **Primary:** To evaluate anti-arthritic activity of *Vatari guggulu* through different arthritis models in experimental animals.
 - **Secondary:** To evaluate the toxicity of *Vatari guggulu* in experimental rats through acute & chronic toxicity studies (OECD Guidelines).
2. **Duration of project:** 2 years
3. **Participating centre:** NARIP, Cheruthuruthy
4. **Name of the PI:** Dr. Sanjaya Kumar. Y. R.
5. **Date of initiation/enrolment:** 21/09/2018
6. **IAEC approval no:**
 - For Toxicity studies -IAEC/NARIP/2017-18/03 dated 08-06-2017
7. **Current Status:** Project is in progress.
8. **Project Outcome:** The acute toxicity study has been completed. During acute toxicity study, test drug was administered to 3 female SD rats once and observed for the signs of clinical toxicity for a period of 14 days. The test drug was found to be safe up to dose of 2000 mg/kg body weight in female Sprague Dawley rats upon single exposure. 90 days repeated dose oral toxicity study is under progress.



4.4 Evaluation of Anti-arthritic activity of *Trayodashang guggulu* in Complete Freund's Adjuvant induced Arthritic Rat Model

1. Objectives

- **Primary:** Evaluation of Anti-arthritic activity of *Trayodashang guggulu* in Wistar rats.
- **Secondary:** Evaluation of acute and 90 days safety toxicity of *Trayodashang guggulu* in Wistar rats.

2. **Duration of project:** 2 years

3. **Participating centre:** CARIDD, Kolkata

4. **Name of the PI:** Dr. Manajit Bora

5. **Date of initiation/enrolment:** 23/06/2018

6. IAEC approval no:

- **IAEC Approval no. 14/P/S/IAEC/2018:** Acute (Oral) toxicity study of *Trayodashang guggulu* in Wistar rats as per OECD Guideline 423.
- **IAEC Approval no. 15/P/S/IAEC/2018:** Dose Range Finding study and 90 days repeated dose toxicity (Oral) study of *Trayodashang guggulu* in Wistar rats as per OECD guideline 408.

7. **Current status:** Project is in progress.

8. **Project Outcome:** In Acute toxicity study, the dose level 2000mg/kg of *Trayodashang guggulu* was found to be safe in Wistar rats when given at single dose. In Dose Range Finding (DRF) study, Wistar rats when treated with *Trayodashang guggulu* at the doses 1500mg/kg, 1000mg/kg, 500mg/kg body weight by oral route for 28 days, no significant effect was observed on body weight, feed consumption, water consumption, behavioral patterns and other clinical signs. There was no significant effect on haematological and blood bio-chemical parameters in the DRF study. Hence, the dose level of 1500mg/kg of *Trayodashang guggulu* powder was found as Maximum Tolerated Dose (MTD) in rats. Ninety days repeated dose toxicity study of *Trayodashang guggulu* is in progress.

4.5 Evaluation of *in-vitro* safety study of some Ayurvedic drugs/plant extracts with special reference to Genotoxicity

1. Objectives

- To evaluate mutagenicity/ genotoxicity of the Ayurvedic drugs components/ materials/ plant extracts in-vitro.

2. **Duration of project:** 2 years

3. **Participating centre:** RAIFR, Pune



4. **Name of the PI:** Dr. Pallavi Jamadagni
5. **Date of initiation/enrolment:** 10/10/2018
6. **IAEC approval no:** NA
7. **Current Status:** Project is in progress.
8. **Project Outcome:** Maximum solubility of each aqueous and hydroalcoholic plant extracts (*Datura metal* Linn., *Semecarpus anacardium* Linn., *Strychnox nuxvomica* Linn., *Cannabis sativa*, *Aconitum ferox*, *Croton tiglium*) has been evaluated. TA 98 and TA 100 strains of *Salmonella typhi* were tested for genetic analysis. Ames test procedure for *Croton tiglium* aqueous extract with TA 98 has been initiated. Ames test with metabolic activation for all test drugs with TA100 & revival of CHO (Chinese Hamster Ovary) cell line and procedure for standardization of MTT assay of all the available extracts is in progress.

4.6 Effect of Haritkadi yoga on middle cerebral artery occlusion ischemic-reperfusion injury and its safety in rats

1. Objectives

- I. Standardization of procured drug with raw drugs and markers
- II. Toxicological evaluation of *Haritkadi yoga* in animal models
 - a) Acute toxicity study (OECD 425)
 - b) 90 days repeated oral toxicity study (OECD 408)
- III. Pharmacological evaluation of *Haritkadi yoga* in animal models
 - a) In-vitro antioxidant and anti-inflammatory evaluation of test drug
 - b) To study the neuroprotective effect of *Haritkadi yoga* in neuroblastoma Neuronal cells
 - c) Plasma concentration of any of the ingredients of Prabhakar vati
 - d) Effect of *Haritkadi yoga* on middle cerebral artery occlusion ischemic-reperfusion injury in rats
- IV. Documentation

2. **Duration of project:** 3 years

3. **Participating centre:** CSMRADDI, Chennai

4. **Name of the PI:** Dr. R. Arunadevi

5. **Date of initiation/enrolment:** 25/06/2018

6. **IAEC approval no:**

- For acute oral toxicity: IAEC/CSMRADDI/10/2017 dated 31-12-2018
- For 90 days oral toxicity: IAEC/CSMRADDI/11/2017 dated 31-12-2018
- For efficacy study: IAEC/CSMRADDI/12/2017 dated 31-12-2018



7. **Current status:** Project is in progress.

8. **Project Outcome:** Standardization has been completed for procured drug with raw drugs and markers. Raw drugs were procured, authenticated by Botany Department, subjected for microbial, heavy metals analysis, HPTLC fingerprinting and anti-oxidant activity were carried out. In-vitro antioxidant activity is in progress.

4.7 **Anti-atherosclerotic activity of *Hridayarnava Rasa* against atherosclerosis in animal model**

1. Objectives

- Acute oral toxicity study in rats as per OECD guideline 423.
- Efficacy study of *Hridayarnava Rasa* for its anti-atherosclerotic activity in rats.

2. **Duration of project** 1 years

3. **Participating centre:** CSMRADDI, Chennai

4. **Name of the PI:** Dr. Chitra Subramani

5. **Date of initiation/enrolment:** 11/07/2018

6. **IAEC approval no:** IAEC/CSMRADDI/17/2017

7. **Current Status:** Project is in progress.

8. **Project Outcome:** Quality control analysis includes microbial load, heavy metal analysis like copper, mercury and sulphur has been completed. Acute toxicity study as per OECD guideline 423 has been completed and found non-toxic. Analysis of in-vitro antioxidants such as DPPH, nitric oxide scavenging assay, iron chelating activity and reducing power assay has been completed. Efficacy study is in progress.

4.8 ***In-vivo* and *in-vitro* nephroprotective evaluation of AYUSH K1 extract**

1. Objectives

- I. To study efficacy profile of AYUSH K1 extract in animal models (CSMRADDI)
 - a) Cisplatin induced kidney damage
 - b) Diclofinac induced kidney damage
- II. Exploratory evaluation of the efficacy of AYUSH K1 extract in the models of chronic nephropathy- Collaborate with the Department of Veterinary Biochemistry, Madras Veterinary College, Chennai 600007.
 - a) Experimental study of the nephro-protective effect of Ayurvedic formulation AYUSH K1 extract in chronic renal failure in rats induced with antiglomerular basement membrane.



b) To study the efficacy of Ayurvedic formulation K1 extract using proteomic and genomic approaches.

2. **Duration of project :** 1 year

3. **Participating centre:** CSMRADDI, Chennai

4. **Name of the PI:** Dr. R. Ilavarasan

5. **Date of initiation/enrolment:** 29/06/2018

6. **IAEC approval no:**

- IAEC approval No.: IAEC/CSMRADDI/07/2017 dated 31/12/2018 for neuroprotective evaluation of AYUSH K1 extract on diclofenac induced renal injury in experimental mice.
- IAEC approval No.: IAEC/CSMRADDI/08/2017 dated 14/12/2017 for neuroprotective evaluation of AYUSH K1 extract on cisplatin induced renal injury in experimental rats.

7. **Current Status:** Project is in progress.

8. **Project Outcome:** *In-vitro* anti-oxidant studies such as DPPH Radical Scavenging Assay, Nitric Oxide Radical Scavenging Assay and Hydrogen Peroxide radical Scavenging assay has been completed. Nephroprotective evaluation of AYUSH K1 extract on cisplatin induced renal injury in experimental rats has been completed and BUN, SOD, MDA and Proteinurea levels were analyzed. Kidney tissue samples for Histopathology and TUNEL studies is in progress.

4.9 Effect of Gokshuradi Guggulu on Experimental Diabetic Nephropathy: *In-vitro* and *In-vivo* Studies

1. **Objectives**

- To study effect of *Gokshuradi guggulu* on *in-vitro* antioxidant parameters and aldose reductase inhibition.
- To study effect of *Gokshuradi guggulu* on oxidative stress and functional parameters of kidney in diabetic animals and mechanism involved there in.

2. **Duration of project:** 2 Year

3. **Participating centre:** RARIDD, Gwalior

4. **Name of the PI:** Dr. Manish M. Wanjari

5. **Date of initiation/enrolment:** 01/09/2018

6. **IAEC approval no:**

- Proposal Number (sought on 12/10/2017): RARIDD-GWL/IAEC/2017/04
- Proposal Number (sought on 10/05/2018): RARIDD-GWL/IAEC/2017/04/R



7. **Current Status:** Project is in progress.

8. **Project Outcome:** *Gokshuradi guggulu* was studied to find out various physiochemical parameters like pH, loss on drying, ash values, extractive values and thin layer chromatography as per standard methods and also tested for heavy metals, microbial load and test for specific pathogens, aflotoxins (B1, B2, G1, G2) and pesticide residue. In addition, quantitative estimation of phytoconstituents viz. total flavonoid, total phenolic and total saponin contents was also carried out. All the standardization parameters of *gokshuradi guggulu* were found within pharmacopoeial limits. Based on the results, it can be concluded that the test item (*gokshuradi guggulu*) is quality complaint product. *In-vitro* Antioxidant activity assessment is in progress.

4.10 **Biochemical and Pharmacological Evaluation of Kaishore Guggulu in Experimental Models of Gout (Vatarakta)**

1. Objectives

- To evaluate of acute and repeated dose oral toxicity of *Kaishor guggulu*.
- To study effect of *Kaishore guggulu* on xanthin oxidase activity and enzyme kinetics.
- To study effect of *Kaishore guggulu* on experimental hyperuricemia and gouty arthritis.

2. **Duration of project :** 2 Year

3. **Participating centre:** RARIDD, Gwalior

4. **Name of the PI:** Dr. Manish M. Wanjari

5. **Date of initiation/enrolment:** 17/03/2016

6. **IAEC approval no:** Proposal Number: RARIDD-GWL/IAEC/2017/06/R (sought on 10/05/2018)

7. **Current Status:** Project is in progress.

8. **Project Outcome:** *Kaishore guggulu* was studied to find out various physiochemical parameters like pH, loss on drying, ash values, extractive values and thin layer chromatography as per standard methods and also tested for heavy metals, microbial load and test for specific pathogens, aflotoxins (B1, B2, G1, G2) and pesticide residue. In addition, quantitative estimation of phytoconstituents of *Kaishore guggulu* viz. total flavonoid, total phenolic and total saponin contents was also carried out. All the standardization parameters of *kaishore guggulu* were found within pharmacopoeial limits. Based on the results, it can be concluded that the test item (*kaishore guggulu*) is quality complaint product. *In-vitro* xanthine oxidase activity is in progress.

4.11 ***In-vitro* evaluation of anti-diabetic activity of AYUSH-82 using proteomic and metabolomic tools**

1. Objectives

- Characterization of individual ingredients of AYUSH 82.
- To evaluate the *in-vitro* antidiabetic activity of AYUSH 82.



- To explore the partial/full mechanism of action of AYUSH 82 on Proteome of selected cell lines.
 - To explore the partial/full mechanism of action of AYUSH 82 on Metabolome of selected cell lines.
2. **Duration of project:** 2 years
 3. **Participating centre:** RAIFR, Pune
 4. **Name of the PI:** Dr. S. D. Pawar
 5. **Date of initiation/enrolment:** 05/10/2018
 6. **IAEC approval no:** NA
 7. **Current Status:** Project is in progress.
 8. **Project Outcome:** Standardization of alpha-Amylase Inhibition assay and alpha-Glucosidase Inhibition assay using acarbose has been completed. Aqueous and hydro-alcoholic extracts of all five individual components and complete formulation of AYUSH-82 were prepared and were applied to LCMS (Agilent Q-TOF) data acquisition using Infinity Lab Poroshell 120 Hilic column (3.0 x 100 mm 2.7-Micron) with Acetonitrile: Water as mobile phase in gradient mode. Standardization of MTT (3-(4, 5-dimethylthiazol-2-yl)-2, 5-diphenyltetrazolium bromide) assay using increasing cell number for INS cell lines has been completed. Standardization of protocol for AGE (advance glycation end products) analysis using D-ribose is in process.

4.12 *In-vivo* anti-diabetic activity of AYUSH-82

1. **Objectives**
 - Evaluation of anti-diabetic activity of AYUSH-82 in Wistar rats.
2. **Duration of project:** 1 years
3. **Participating centre:** CARIDD, Kolkata
4. **Name of the PI:** Dr. S. Upadhyay
5. **Date of initiation/enrolment:** 12/09/2018
6. **IAEC approval no:** Proposal No. 16/P/S/IAEC/2018, dated 23.06.2018 for Acute oral toxicity study of AYUSH 82 as per OECD guideline 423.
7. **Current Status:** Project is in progress.
8. **Project Outcome:** Acute toxicity study of AYUSH-82 has been completed. No mortality, no clinical and no gross pathological changes were seen after 14 days. The dose level 2000mg/kg of AYUSH-82 churna was found to be safe when given at single dose in rats. Hence, the lethal/ toxic dose of AYUSH-82 churna is more than 2000mg/kg. efficacy study is in process.



4.13 Evaluation of *Gomutra Haritki* in fatty liver degeneration

1. Objectives

- To evaluate Safety/Toxicity of *Gomutra Haritki*
- Evaluation of pharmacological activity of *Gomutra Haritki*

2. **Duration of project :** 1 year

3. **Participating centre:** CSMRADDI, Chennai

4. **Name of the PI:** Dr. R. Ilavarsan

5. **Date of initiation/enrolment:** 22/02/2018

6. **IAEC approval no:**

Acute toxicity (Oral) study- IAEC/CSMRADDI/15/2017

28days Sub-acute toxicity (Oral) study- IAEC/CSMRADDI/16/2017

7. **Current Status:** Study is in progress.

8. **Project Outcome:** The test drugs were screened for acute toxicity study in rats and found safe upto 2000 mg/kg body weight. AYUSH-GH at the dose of 250 mg/kg, 500 mg/kg and 1000 mg/kg were considered to be safe as they did not cause any adverse changes in the general behaviors in 28 days repeated dose oral toxicity studies in experimental rats. No alterations were observed in hematological, biochemical parameters in repeated dose 28-days oral toxicity studies of AYUSH-GH treated experimental rats. This shows the nontoxic nature of the AYUSH-GH at the dose level of 250 mg/kg, 500 mg/kg and 1000 mg/kg and thus the drug can be used for long-term administration. Efficacy study is in process.

4.14 Preclinical safety/toxicity and hepatoprotective activity of Coded drug PKT.

1. Objectives

- To evaluate Safety/Toxicity of Coded drugs PKT
- Evaluation of safety profiles of the test drug to assure the safety in oral consumption

2. **Duration of project :** 1 year

3. **Participating centre:** CARIDD, Kolkata

4. **Name of the PI:** Dr. S. Upadhyay

5. **Date of initiation/enrolment:** 02/05/2017

6. **IAEC approval no:**

i) Proposal No. 03/P/S/IAEC/2017, dated 27th April, 2017 IAEC/2016/02 for “Acute toxicity (Oral) study of Coded drug PKT in Wistar rats”.



ii) Proposal No. No. 04/P/S/IAEC/2017, dated 27th April, 2017 for “28 days Sub-acute toxicity (Oral) study of Coded drug PKT in Wistar rats”.

7. **Current Status:** Study is in progress.

8. **Project Outcome:** In case of acute toxicity study, there was no mortality and no abnormal clinical sign of the experimental animals was observed. In case of sub acute toxicity study, all rats were apparently normal and no abnormal clinical sign was observed in any animal throughout the study period after treated with PKT (250, 500 & 1000mg/kg bw). The dose level 1000mg/kg of Coded drug PKT was found as NOAEL (No Observed Adverse Effect Level) in rats. Further, efficacy study is in progress.

4.15 Development of Coded drug AYUSH M-3 for the management of Migraine patients

1. Objectives

- Acute oral toxicity study and Repeated Dose 28-day and 90-Day Oral Toxicity Study (OECD 407) of AYUSH M-3 in mice & rats.
- Effect of AYUSH M-3 on morphine withdrawal hyperalgesia in the hot-plate test.
- Effect of AYUSH M-3 on acetic acid-induced abdominal constrictions.

2. **Duration of project:** 1 year

3. **Participating centre:** CSMRADDI, Chennai

4. **Name of the PI:** Dr. R. Ilavarsan

5. **Date of initiation/enrolment:** July 2016

6. IAEC approval no:

- Proposal No. IAEC/CSMRADDI/01/2016 dated 18/07/16 for acute oral toxicity study in mice.
- Proposal No. IAEC/CSMRADDI/01/2016 dated 18/07/16 for acute oral toxicity study in rats.
- Proposal No. IAEC/CSMRADDI/03/2016 for 28-Days repeated dose oral toxicity study in mice.
- Proposal No. IAEC/CSMRADDI/02/2016 for 28-days repeated dose oral toxicity study in rats.
- Proposal No. IAEC/CSMRADDI/05/2016 dated 18/07/2016 for 90 days oral toxicity in mice.
- Proposal No. IAEC/CSMRADDI/02/2016 for 90 days oral toxicity in rats.
- Proposal No. IAEC/CSMRADDI/01/2017 dated 05/07/2017 for evaluation of anti-migraine activity of AYUSH M3 in acetic acid induced abdominal writhing model in mice.

7. **Current Status:** Study is in progress.

8. **Project Outcome:** Acute oral toxicity studies in rats and mice have been completed and found



safe at the limit dose level of 2000 mg/kg body weight. The repeated toxicity (28 days and 90 days) studies also found safe at the dose of 250 mg/kg, 500 mg/kg and 1000 mg/kg in mice and rats. Acetic acid induced writhing model is used to screen anti-migraine drugs using sumatriptan as a standard drug used for migraine clinically. In the present study AYUSH M3 at 400 mg/kg bw significantly reduced the writhing count. In prophylactic dosing though not significant AYUSH M3 at 400 mg/kg bw produced 22% inhibition. Further, efficacy study is in process.

4.16 Anti-inflammatory activity of Shunthi Guggulu

1. Objectives

- Analgesic, anti-inflammatory and anti arthritic activities of Shunthi Guggulu (Triphalashodhit and Gomutrashodhit).

2. Duration of project: 1 year

3. Participating centre: NARIP, Cheruthuruthy

4. Name of the PI: Dr. Sanjaya Kumar .Y.R.

5. Date of initiation/enrolment: October 2016

6. IAEC approval no: IAEC/NARIP/2017-18/02

7. Current Status: Study is in progress.

8. Project Outcome: As a preliminary study, the test drugs were screened for safety and anti inflammatory activities. The test drugs were safe up to 2000 mg / Kg in female rats. During preliminary studies, the test drugs were found to possess significant anti inflammatory activity at doses 250 and 500 mg per kg body weight in rats. Analgesic activity and anti-arthritic activity is in process.

4.17 Analgesic activity of SG 1, SG 2 and SG 3

1. Objectives

- To evaluate analgesic activity of SG 1 and SG 2
- To evaluate safety of coded drug AYUSH SG 3 in SD rats through acute toxicity study.
- To evaluate efficacy of coded drug AYUSH SG 3 for analgesic and anti-inflammatory activities.

2. Duration of project : 1 year

3. Participating centre: NARIP, Cheruthuruthy

4. Name of the PI: Dr. Sanjaya Kumar .Y.R

5. Date of initiation/enrolment: November 2016



6. IAEC approval no:

- Proposal No. IAEC/NARIP/2017-18/01 for SG1 & SG2
- Proposal No. IAEC/NARIP/2018-19 / 01 dated 21/03/2019 for SG3

7. Current Status: Study is in progress.

8. Project Outcome: The test drugs were screened for analgesic activity by radiant heat method in SD rats. Analgesic activity in Swiss mice was screened through Eddy's hot plate method and Acetic acid induced writhing method. No signs of toxicity and mortality were observed in the animals which received the SG1, SG2 and SG3 at dose of 2000 mg/kg body weight. The test drugs Sunthi Guggulu (Triphala shoditha and Gomutra shodhita) showed significant analgesic and anti-inflammatory activities at doses 250 and 500 mg/kg body weight. Sunthi guggulu (Gomutra shodhita) was found to be more effective. An efficacy study for SG3 is in progress.

4.18 Ocular toxicity of coded Ayurvedic PE eye drops for conjunctivitis.

1. Objectives

- To evaluate Ocular Safety/Toxicity of coded Ayurvedic eye drop PE drops for conjunctivitis

2. Duration of project : 1 year

3. Participating centre: CSMRADDI, Chennai

4. Name of the PI: Dr. R. Ilavarsan

5. Date of initiation/enrolment: 16/02/2018

6. IAEC approval no: IAEC/CSMRADDI/03/2018 dated 31/12/2018

7. Current Status: Study is in progress.

8. Project Outcome: Isolated Chicken Eye test for PE eye drop was found to be not irritating and not causing any visible damage to isolated chicken eye cornea. Eye test for PE eye drop on rabbit for toxicity study is in process.

4.19 Development of Medicinal Plant garden for Veterinary Ayurveda Research at GADVASU, Ludhiana, Punjab

1. Objectives

Primary

- To develop the Agro technique protocols for 10 selected medicinal plants used in veterinary medical practices by organic farming technique.
- Development of Medicinal Plants Garden for demonstration purpose.
- Plantation of Medicinal Plant trees along the boundary of the garden.



- iv. To educate students, farmers and common man about use, benefits and importance of medicinal plants in their day to day veterinary practices
- v. To create awareness about our ancient indigenous system of vet. Medicine
- vi. Utilization of the cultivated plants in preparation of the medicine

Secondary

- i. To develop cultivation methods & conservation strategies for rare, endangered and threatened species
- ii. To document an inventories of the medicinal plants
- iii. Sensitization of farmers/Pashu Palak by awareness programme
- iv. To establish seed bank for all the accession collected & transplanted from various agro-climatic zones.
- v. Organic & eco-friendly approached towards cultivation & propagation

2. **Duration of project :** 3 year

3. **Participating centre:** CRCVA (CCRAS), Ludhiana

4. **Name of the PI:** Dr. Santosh S. Mane

5. **Date of initiation/enrolment:** May 2018

6. **IAEC approval no:** NA

7. **Current Status:** Study is in progress.

8. **Project Outcome:** Land and irrigation plan has been completed for plantation of medicinal plants used in Veterinary Ayurveda. 80 medicinal plants have been cultivated in medicinal plant garden of GADVASU with their name on signboard. Fencing has been completed at 3 boundaries with plants like *Madhyamika*, *Karipatta* and most of the trees have been planted on North and West side of garden to avoid shade to other plants.



5. CLINICAL RESEARCH

5.1 Intra Mural Clinical Research Projects

Under IMR, 13 IMR Clinical Research projects on 12 diseases/conditions viz. Cognitive Deficit, Gout, Haemorrhoids, Iron Deficiency Anaemia, Menopausal syndrome, Obesity, Osteoarthritis knee, Osteopenia/ Osteoporosis, Psoriasis, Rheumatoid Arthritis, Urolithiasis & Uterine Fibroid have been completed and 20 IMR Projects on 16 diseases/conditions viz., Gout, Allergic Conjunctivitis, Cervical Spondylosis, Urolithiasis, Sciatica, Primary Dysmenorrhoea, Osteoarthritis knee, Bacterial Vaginosis, Chronic Bronchitis, Iron Deficiency Anaemia, Rheumatoid Arthritis, Bronchial Asthma, Fissure, Influenza like illness, Allergic Rhinitis, Ano-rectal Fistula have been going on.

The list of projects is as follows: -

Table –14: List of IMR Projects

Completed IMR Projects
1. Clinical evaluation of efficacy of Panchtiktaguggulu Ghrita and Brihanmarichadya Taila in the management of Psoriasis w. s. r. to Pathya-apathya
2. Clinical evaluation of Goksura churna and Sveta parpati in the Management of Mutrasmari (Urolithiasis)
3. Clinical evaluation of efficacy of Khadirarishta and Kanchanara guggulu in the management of Uterine Fibroid – An exploratory study
4. Clinical evaluation of Punarnava Guggulu and Rasna Saptaka Kashaya in the management of Rheumatoid Arthritis (Amavata)
5. A Clinical evaluation of Triphala Guggulu and Kasisadi Taila in the management of Arsha (Haemorrhoids)
6. Therapeutic evaluation of Rasnadi Gutika and Chandrakala lepa in Janusandhigata vata (Osteoarthritis)
7. Clinical evaluation of Kaishore Guggulu and Madhusnuhi Rasayana in the management of Gout (Vatarakta)
8. Clinical evaluation of Abhadya Churna and Muktaashukti Bhasma in the management of Osteopenia / Osteoporosis (Asthi-kshaya)
9. Clinical evaluation of Laksha Guggulu and Muktaashukti Bhasma in the management of Osteopenia/ Osteoporosis
10. Clinical Evaluation of Certain Ayurvedic Formulations In The Management of Sthoulya (Obesity)
11. Clinical evaluation of Mandura vataka in the management of Pandu (Iron deficiency Anaemia)
12. Clinical evaluation of Sukumara Ghritam and Brahmi churnam in the management of Menopausal syndrome
13. Clinical evaluation of Kalyanak Ghrita in the management of Cognitive Deficit (Smriti Daurbalya)



Ongoing IMR Projects

14. Clinical evaluation of Haridrakhand and Triphala Kwath in the management of chronic Allergic Conjunctivitis (Kaphaja Abhishyanda)
15. Clinical evaluation of Svadamshtadi Kashaya and Hajarulayahuda Bhasma in the Management of Mutrashmari (Urolithiasis)
16. Clinical evaluation of Panchamrit Lauha Guggulu and Panchgunataila in the management of Cervical Spondylosis (Greevagraha)
17. Clinical Evaluation of Rasnadi Kwatha churna (Maha), Trayodashanga Guggulu and Brihatsaindhavadya Taila in the Management of Osteoarthritis of Knee (Janugata Sandhivata)
18. Clinical evaluation of Sapthasaram Kashayam & Saraswatharishtam in the management of Primary Dysmenorrhoea- An Exploratory study
19. Clinical efficacy of Kaishore Guggulu and Balaguduchyadi taila in the management of Gout (Vatarakta)
20. Clinical evaluation of the efficacy of Trayodashanga Guggulu, Maharasnadi Kwatha and Prasarani Taila in the management of Gridhrasi (Sciatica)
21. Assessment of therapeutic efficacy and safety of Sitopaladi Churna with Madhu in the management of Kasa (Stable Chronic Bronchitis)
22. Clinical efficacy of Talisadi Churna in the management of Kasa (Stable Chronic Bronchitis)
23. Clinical Evaluation of Ayurvedic formulations in the management of Parikartika (Fissure in Ano)
24. Clinical evaluation of Drakshasava in the management of Pandu (Iron Deficiency Anaemia)
25. Clinical evaluation of Drakshavaleha in the management of Pandu (Iron Deficiency Anaemia)
26. Clinical Evaluation of Eladi Churna and Draksharishta in the management of KASA (Bronchitis)
27. Clinical Evaluation of Efficacy of Indukanta Ghrita and Trayodashang Guggulu in the Management of Rheumatoid Arthritis vis –a–vis Amavata
28. Clinical evaluation of the efficacy of Pushyanug Churna in the management of Sweta Pradara w.r.t. Bacterial Vaginosis (Leucorrhoea)
29. Clinical Evaluation of Kantakaryavaleha and Eladi Gutika in the Management of Mild Stable Bronchial Asthma (Tamaka Shwasa)
30. Observation on Fistula cutting Time with Ksharsutra used in routine patients of Anorectal Fistula (Bhagandara)
31. Clinical evaluation of an Ayurvedic formulation in the management of Allergic Rhinitis-a pilot study
32. A Pilot Evaluation of Safety and Efficacy of an Ayurvedic Formulation (AYUSH-64) for accelerating the recovery in cases of Influenza like Illness.
33. Clinical evaluation of AYUSH-PE eye drops in the management of Acute Allergic Conjunctivitis.



BRIEF REPORT OF COMPLETED PROJECTS

5.1.1. Clinical evaluation of efficacy of Panchtiktaguggulu Ghrita and Brihanmarichadya Taila in the management of Psoriasis w. s. r. to Pathya-apathya

1. Objectives:

- **Primary Objective**

- To evaluate the clinical efficacy of Panchtiktaguggulu Ghrita and Brihanmarichadya Taila in Psoriasis.
- To evaluate the effect of Pathya-Apathya in Psoriasis.

- **Secondary Objective**

- To evaluate the safety of Panchtiktaguggulu Ghrita and Brihanmarichadya Taila in the patients of Psoriasis

2. Study Design: Interventional, open label

3. Sample Size: 120 (60 in each group)

4. Duration of Study: 2 years and extended

5. Interventions:

- **Group – I:** Panchatikta guggulu Ghrita and Brihanmarichadya Taila
- **Group - II:** Panchatikta guggulu Ghrita, Brihanmarichadya Taila and Pathya – Apathya

6. Participating centre along with PI:

S. No.	Name of the participating centre	Name of PI
1	RARIDD, Gwalior	Dr. P. L. Bharti

7. Date of IEC Approval

S. No.	Name of the participating centre	Date of IEC Approval
1	RARIDD, Gwalior	25/02/2014

8. CTRI Registration/Reference (for clinical trials) : CTRI/2015/01/005426

9. Date of initiation:

S. No.	Name of the participating centre	Date of initiation
1	RARIDD, Gwalior	16.10.2015

10. Current status:

Table - 15: Status of projects along with participating centres

S. No.	Participating Centre	Group	No. of cases enrolled	No. of cases completed	No. of cases continued	Drop outs/ withdrawn
1	RARIDD, Gwalior	I	60	50	00	10
		II	60	52	00	08
Total			120	102	00	18

11. Summary: Study is completed.



5.1.2. Clinical evaluation of Goksura churna and Sveta parpati in the Management of Mutrasmari (Urolithiasis)

1. Objectives :

- **Primary Objectives:** To assess the clinical efficacy of *Goksura churna* and *Sveta parpati* in the Management of *Mutrasmari* (Urolithiasis).
- **Secondary Objectives:** To assess the clinical safety of *Goksura churna* and *Sveta parpati* in the Management of *Mutrasmari* (Urolithiasis).

2. **Study Design:** Interventional (single arm), open label

3. **Sample Size:** 100 patients

4. **Duration of Study:** 3 yrs.

5. **Interventions:** *Goksura Churna & Sveta Parpati*

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	RARIED, Lucknow	Dr. Alok Kumar Srivastava

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARIED, Lucknow	26 th March 2014

8. **CTRI Registration (for clinical trials):** CTRI/2015/02/005488

9. Date of initiation:

S.No.	Name of the Participating Centre	Date of initiation
1.	RARIED, Lucknow	25 th February, 2016

10. Current status:

Table - 16: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIED, Lucknow	100	91	09	00

11. **Summary of Project:** Study Completed and the data is under verification.



5.1.3. Clinical evaluation of efficacy of *Khadirarishta* and *Kanchanara guggulu* in the management of Uterine Fibroid – An exploratory study

1. Objectives:

- **Primary Objective:** To assess the effects of *Khadirarishta* and *Kanchanara guggulu* on the changes on clinical features i.e. heavy bleeding during menstrual period, passing of clots, fluctuation in the duration, fluctuation in the length of the monthly cycle, pelvic pressure symptoms, pain in pelvic and rectal region and in the size of uterine fibroids.
- **Secondary Objectives:** To see the improvement in the quality of life of the study participants by using uterine fibroid symptoms and quality of life questionnaire (UFS-QOL)

2. **Study Design:** Prospective interventional single arm trial

3. **Sample Size:** 40

4. **Duration of Study :** 3 Year

5. **Interventions :** *Kanchanara guggulu*, *Khadirarishta*

6. Participating centre along with PI :

S.No.	Name of the participating centre	Name of PI
1	RARILSD, Trivandrum	Dr. Indira Kumari, Dr. Susmita P. Otta

7. Date of IEC approval:

S.No.	Name of the participating centre	Date of IEC approval
1	RARILSD, Trivandrum	3 rd October, 2014

8. **CTRI Registration (for clinical trials) :** CTRI/2014/09/005018

9. Date of initiation :

S.No.	Name of the participating centre	Date of initiation
1	RARILSD, Trivandrum	07-10-2015

10. Current status:

Table - 17: Status of project along with participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARILSD, Trivandrum	40	36	04	00

11. **Summary of Project:** The project has been completed. The research article & monograph is under draft.



5.1.4. Clinical evaluation of Punarnava Guggulu and Rasna Saptaka Kashaya in the management of Rheumatoid Arthritis (Amavata)

1. Objectives :

- **Primary Objective:** To assess the efficacy of the Punarnava Guggulu and Rasna Saptaka Kashaya in the Management of Rheumatoid Arthritis(Amavata)
- **Secondary Objective:** To assess the clinical safety of the Punarnava Guggulu and Rasna Saptaka Kashaya in the patients of Rheumatoid Arthritis(Amavata)

2. **Study Design** : Interventional

3. **Sample size** : 90 subjects

4. **Duration of Study** : 2 ½ years

5. **Intervention** : Punarnava Guggulu & Rasna saptaka Kashaya

6. **Participated centre along with PI** :

S.No.	Name of the participating centre	Name of PI
1	RARIED, Lucknow	Dr. Pallavi
2	RARI, Gangtok	Dr. T.K. Mondal

7. **Date of IEC approval:**

S.No.	Name of the participating centre	Date of IEC approval:
1	RARIED, Lucknow	26.03.2014
2	RARI, Gangtok	05.09.2014

8. **CTRI Registration/Reference (for clinical trials):** CTRI/2015/04/005691

9. **Date of initiation :**

S.No.	Name of the participating centre	Date of initiation
1	RARIED, Lucknow	15.01.2016
2	RARI, Gangtok	08.03.2016

10. **Current Status :**

Table-18: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIED, Lucknow	90	80	10	00
2.	RARI, Gangtok	90	59	31	00
	Total	180	139	41	00

11. **Summary of Project:** Completed.



5.1.5. A Clinical evaluation of Triphala Guggulu and Kasisadi Taila in the management of Arsha (Haemorrhoids)

1. Objectives:

- **Primary Objective** - To assess the clinical efficacy of Triphala Guggulu and Kasisadi Taila in the management of Arsha (haemorrhoids).
- **Secondary Objectives** - To assess the clinical safety of Triphala Guggulu and Kasisadi Taila in the management of Arsha (haemorrhoids).

2. **Study Design:** A Prospective Open label Interventional clinical study.

3. **Sample Size : 150** (50 subjects in each centre i.e. 50 x 3 Centres)

4. **Duration of Study :** 24 months

5. **Interventions:** Triphala Guggulu & Kasisadi Taila

6. Participated centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1	RARIDD, Gwalior	Dr. P. L. Bharati
2	CARIDD, Kolkata	Dr. L. D. Barik
3	RARIED, Lucknow	Dr. Sanjay Kumar Singh

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1	RARIDD, Gwalior	25 th February, 2014
2	CARIDD, Kolkata	3 rd May, 2014
3	RARIED, Lucknow	26 th March, 2014

8. **CTRI Registration (for clinical trials):** CTRI/2014/10/005081

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1	RARIDD, Gwalior	16 th December, 2016
2	CARIDD, Kolkata	17 th February, 2017
3	RARIED, Lucknow	30 th January, 2017

10. Status of the project :

Table - 19: Status of project along participating Centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs
1	RARIDD, Gwalior	50	48	02
2	CARIDD, Kolkata	52	50	02
3	RARIED, Lucknow	50	42	08
	Total	152	140	12

11. **Summary of Project:** Completed.



5.1.6. Therapeutic evaluation of Rasnadi Gutika and Chandrakala lepa in Janusandhigata vata (Osteoarthritis)

1. Objective:

- To assess the clinical efficacy of *Rasnadi Gutika* and *Chandrakala lepa* in the management of *Janusandhigata Vata* (Osteoarthritis).

2. **Study Design:** Prospective interventional single arm multi centre trial.

3. **Sample Size:** 120 (60 in each centre)

4. **Duration of Study :** 2 Year

5. **Interventions :** *Rasnadi Gutika* and *Chandrakala lepa*

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	CARIHD, Bhubaneswar	Dr. Banamali Das
2.	RARIED, Lucknow	Dr. Sanjay Kumar Singh

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	CARIHD, Bhubaneswar	14/03/2014
2.	RARIED, Lucknow	26/03/2014

8. **CTRI Registration (for clinical trials) :** CTRI/2015/01/005414

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1.	CARIHD, Bhubaneswar	04/03/2017
2.	RARIED, Lucknow	28/02/2017

10. Status of the project during reporting period:

Table – 20: Status of project along participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARIHD, Bhubaneswar	60	58	02	00
2	RARIED, Lucknow	60	56	04	00
	Total	120	114	06	00

11. **Summary of Project:** The project work has been completed at both the participating centres. Data has been verified and analysis is under process.



5.1.7. Clinical evaluation of Kaishore Guggulu and Madhusnuhi Rasayana in the management of Gout (Vatarakta)

1. Objective:

- To Evaluate therapeutic efficacy of kaishore Guggulu and Madhusnuhi Rasayana in Vatarakta (Gout)

2. Study Design: Interventional

3. Sample Size : 55 patients

4. Duration of Study : 2 Years

5. Interventions : Kaishore Guggulu and Madhusnuhi Rasayana

6. Participated centre along with PI :

S. No.	Name of the Participating Centre	Name of PI
1	CARIHD, Bhubaneswar	Dr. Purnendu Panda

7. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1	CARIHD, Bhubaneswar	14/03/2014

8. CTRI Registration (for clinical trials) : CTRI/2014/08/004917

9. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	CARIHD, Bhubaneswar	06/02/2017

10. Current status :Project completed on 13/02/2019

Table - 21: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIHD, Bhubaneswar	55	51	04	00

11. Summary of Project: Study completed.

5.1.8. Clinical evaluation of Abhadya Churna and Muktaashukti Bhasma in the management of Osteopenia / Osteoporosis (Asthiakshaya)

1. Objectives :

- Primary Objective:** To assess the clinical efficacy of Abhadya Churna and Muktaashukti Bhasma in the Patients of Osteopenia / Osteoporosis

2. Study Design : Interventional



3. Sample size : 65

4. Duration of Study : 2 years

5. Intervention : Abhadya Churna & Muktashukti Bhasma

6. Participated centre along with PI:

S.No.	Name of the participating centre	Name of PI
1	CARIHD, Bhubaneswar	Dr. A.K. Panda

7. Date of IEC approval:

S.No.	Name of the participating centre	Date of IEC approval
1	CARIHD, Bhubaneswar	14.3.2014

8. CTRI Registration/Reference (for clinical trials): CTRI/2015/01/005474

9. Date of initiation :

S.No.	Name of the participating centre	Date of initiation
1	CARIHD, Bhubaneswar	5.3.2017

10. Current Status :

Table - 22: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIHD, Bhubaneswar	65	59	06	00

11. Summary of Project: Completed.

5.1.9. Clinical evaluation of Laksha Guggulu and Muktashukti Bhasma in the management of Osteopenia/Osteoporosis

1. Objective :

- To assess the clinical efficacy of Laksha guggulu and Muktashukti Bhasma in the Management of Asthi Saushirya (Osteopenia/ Osteoporosis)

2. Study Design : Interventional

3. Sample size : 65 at each centre

4. Duration of Study : 2 years

5. Intervention : Laksha Guggulu & Muktashukti Bhasma

6. Participated centre along with PI :

S. No.	Name of the participating centre	Name of PI
1	RARISD, Vijayawada	Dr. G.P Prasad
2	CARIDD, Kolkata	Dr. Achintya Mitra



7. Date of IEC approval:

S.No.	Name of the participating centre	Date of IEC approval
1	RARISD, Vijayawada	25.09.2014
2	CARIDD, Kolkata	5.07.2014

8. CTRI Registration/Reference (for clinical trials): CTRI/2017/05/008662

9. Date of initiation :

S.No.	Name of the participating centre	Date of initiation
1	RARISD, Vijayawada	22.03.2017
2	CARIDD, Kolkata	01.02.2017

10. Current Status :

Table-23: Status of projects along with participating centres

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARISD, Vijayawada	65	62	03	0
2.	CARIDD, Kolkata	65	64	01	0
	Total	130	126	04	0

11. Summary of Project: Completed

5.1.10. Clinical Evaluation of certain Ayurvedic formulations in the management of Sthoulya (Obesity)

1. Objectives:

- **Primary Objective** - To assess the clinical efficacy of Navaka Guggulu, Brihatmanjishtadi Kwatha, Tryushanadi Guggulu, Brihat Manjishtadi Kwatha in the management of sthoulya (Obesity)
- **Secondary Objectives** - To assess the clinical safety of Navaka Guggulu, Brihatmanjishtadi Kwatha, Tryushanadi Guggulu, Brihat Manjishtadi Kwatha in the patients of sthoulya (Obesity)

2. Study Design: Interventional

3. Sample Size:120 each centre (60 in each group)

4. Duration of Study: 2 years

5. Interventions:

Group-I Navaka Guggulu & Brihat Manjishtadi Kwatha

Group-II Tryushanadi Guggulu & Brihat Manjishtadi Kwatha



6. Participated centre along with PI:

S.No.	Name of the Participating Centre	Name of PI
1.	RARISD, Vijayawada	Dr. C. Murali Krishna
2.	CARIDD, Kolkata	Dr. S.K. Debanath

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARISD, Vijayawada	25 th September, 2014
2.	CARIDD, Kolkata	5 th July, 2014

8. CTRI Registration (for clinical trials): CTRI/2015/09/006150

9. Date of initiation:

S.No.	Name of the Participating Centre	Date of initiation*
1.	RARISD, Vijayawada	23 rd December.2016
2.	CARIDD, Kolkata	7 th February.2017

10. Current status:

Table - 24: Status of project along participating Centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARISD, Vijayawada	120	114	6	-
2	CARIDD, Kolkata	120	114	6	-
	Total	240	228	12	-

11. Summary of Project: Study completed.

5.1.11. Clinical evaluation of Mandura vataka in the management of Pandu (Iron deficiency Anaemia)

1. Objectives:

- **Primary objectives** – Clinical efficacy of Mandura Vataka in the management of Iron Deficiency Anaemia.
- **Secondary objectives** - Clinical safety of Mandura Vataka in the patients of Iron Deficiency Anaemia.

2. Study Design : Interventional

3. Sample Size : 100 (50 patients at each centre)

4. Duration of Study : 1 Year

5. Interventions : Mandura Vataka



6. Participated centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1	RARISD, Vijayawada	Dr. A. J. V. Sai Prasad
2	RARIGID, Guwahati	Dr. Bharali

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1	RARISD, Vijayawada	11/01/2017
2	RARIGID, Guwahati	12/05/2017

8. CTRI Registration (for clinical trials) : CTRI/2017/05/008463

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1	RARISD, Vijayawada	10/04/2017
2	RARIGID, Guwahati	June,2017

10. Current status : Project completed on June 2018 (Vijayawada)

Table- 25: Status of project along participating Centres

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARISD, Vijayawada	50	48	02	00
2.	RARIGID, Guwahati	18	17	00	00
	Total	68	65	02	00

11. Summary of Project: The study has been completed in one centre (RARISD, Vijayawada) but and due to non-availability of suitable cases at RARIGID, Guwahati it has been discontinued. The data verification and analysis is under process.

5.1.12. Clinical evaluation of Sukumara Ghritam and Brahmi churnam in the management of Menopausal syndrome

1. Objectives:

- Clinical evaluation of *Sukumara Ghritam* and *Brahmi churnam* in the management of Menopausal syndrome

2. Study Design: Prospective interventional single arm trial

3. Sample Size: 50

4. Duration of Study : 1 Year

5. Interventions : *Sukumara Ghritam and Brahmi churnam*

6. Participating centre along with PI :

S.No.	Name of the participating centre	Name of PI
	ALCRA, Chennai	Dr. K. Prameeladevi



7. **Date of IEC approval:**

S.No.	Name of the participating centre	Date of IEC approval
1	ALCRA, Chennai	02/07/2016

8. **CTRI Registration (for clinical trials) :** CTRI/2017/11/010312

9. **Date of initiation :**

S.No.	Name of the participating centre	Date of initiation
1	ALCRA, Chennai	31/07/2017

10. **Current status:**

Table - 26: Status of project along with participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	ALCRA, Chennai	50	44	06	00

11. **Summary of Project:** Study Completed. The research article & monograph is under draft.

5.1.13. Clinical evaluation of Kalyanak Ghrita in the management of Cognitive Deficit (Smriti Daurbalya)

1. **Objectives:**

- **Primary objectives** To assess the clinical efficacy of Kalyanaka Ghrita in the management of Smriti Daurbalya.
- **Secondary objectives** - To assess the clinical safety of Kalyanaka Ghrita in the children suffering from Smriti Daurbalya

2. **Study Design:** Interventional

3. **Sample Size :** 40 patients

4. **Duration of Study :** 18 Months

5. **Interventions :** Kalyanak Ghrita

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	ACAMH&NS, Bengaluru	Dr. G.V. Ramana

7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	ACAMH&NS, Bengaluru	21/03/2014

8. **CTRI Registration (for clinical trials) :** CTRI/2017/10/010300



9. Date of initiation:

S.No.	Name of the Participating Centre	Date of initiation
1	ACAMH&NS, Bengaluru	27 th March, 2017

10. Current status : Study completed on 31stJuly 2018

Table - 27: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	NIMHANS, Bengaluru	40	35	05	00

11. Summary of Project: Study completed. Article has been published in JRAS.

ONGOING PROJECTS

5.1.14. Clinical evaluation of Haridrakhand and Triphala Kwath in the management of chronic Allergic Conjunctivitis (Kaphaja Abhishyanda)

1. Objective:

- To assess the clinical efficacy and safety of *Haridrakhand* and *Triphala Kwath* in the management of chronic Allergic Conjunctivitis (*Kaphaja Abhishayanda*).

2. Study Design: Prospective interventional single arm trial.

3. Sample Size: 55

4. Duration of Study : 2 Year

5. Interventions : *Haridrakhand* and *Triphala Kwath*

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	RARIED, Lucknow	Dr. Alok Srivastava

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARIED, Lucknow	23/05/2017

8. CTRI Registration (for clinical trials) : CTRI/2018/02/011782

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1.	RARIED, Lucknow	20/09/2017



10. Status of the project during reporting period:

Table - 28: Status of project along with participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARIED, Lucknow	45	36	01	08

11. Summary of Project: The study is ongoing.

5.1.15. Clinical evaluation of Svadamshtadi Kashaya and Hajarulayahuda Bhasma in the Management of Mutrashmari (Urolithiasis)

1. Objectives :

- **Primary Objectives:** To assess the clinical efficacy of *Svadamshtadi Kashaya* and *Hajarulayahuda Bhasma* in the management of *Mutrashmari* (Urolithiasis)

2. Study Design: Open label Interventional

3. Sample Size: 75 patients

4. Duration of Study: 2yrs.

5. Interventions: *Svadamshtadi Kashaya* and *Hajarulayahuda Bhasma*

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	RARISD, Vijayawada	Dr. B. Venkateshwarlu

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARISD, Vijayawada	09-12-2016

8. CTRI Registration (for clinical trials): CTRI/2017/03/008096

9. Date of initiation:

S.No.	Name of the Participating Centre	Date of initiation
1.	RARISD, Vijayawada	29-11-2017

10. Current status:

Table - 29: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARISD, Vijayawada	56	46	05	05

11. Summary of Project: Study is continuing.



5.1.16. Clinical evaluation of Panchamrit Lauha Guggulu and Panchgunataila in the management of Cervical Spondylosis (Greevagraha)

1. Objectives :

- **Primary Objectives:** To evaluate the clinical efficacy of Panchamrit Lauha Guggulu and Panchguna Taila in the management of Greeva graha (Cervical Spondylosis)
- **Secondary Objectives:** To assess the clinical safety of Panchamrit Lauha Guggulu and Panchguna Taila in the management of Greeva graha (Cervical Spondylosis)

2. **Study Design :** Interventional, open label, Not controlled, OPD Level

3. **Sample Size :** 70 patients

4. **Duration of Study:** 2 Years

5. **Interventions:** Panchamrit Lauha Guggulu and Panchguna Taila

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	RARIND, Mandi	Dr. S.K. Sharma

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARIND, Mandi	16/02/2017

8. **CTRI Registration (for clinical trials) :** CTRI/2017/11/010410

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1.	RARIND, Mandi	20 th March. 2017

10. Current status :

Table -30: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIMD, Mandi	60	43	04	13

11. **Summary of Project:** Study is in progress.

5.1.17. Clinical Evaluation of Rasnadi Kvatha churna (Maha), Trayodashanga Guggulu and Brihatsaindhavadya Taila in the Management of Osteoarthritis of Knee (Janugata Sandhivata)

1. Objectives :

- To assess the clinical efficacy of Ayurvedic formulations *Rasnadi Kvatha churna (Maha)*, *Trayodashanga Guggulu* and *Brihatsaindhavadya Taila* in the management of osteoarthritis of knee (*Janugata Sandhivata*).



- To assess the clinical safety of the of Ayurvedic formulations *Rasnadi Kvatha churna (Maha)*, *Trayodashanga Guggulu* and *Brihatsaindhavadya Taila* in the management of osteoarthritis of knee (*Janugata Sandhivata*).

2. **Study Design** : Interventional

3. **Sample size** : 60 patients

4. **Duration of Study** : 2 years

5. **Intervention:** Rasnadi kvath churna (Maha), Trayodashanga Guggulu & Brihatsaindhavadya Taila

6. **Participated centre along with PI:**

S.No.	Name of the participating centre	Name of PI
1	RARIED, Jaipur	Dr. Bhuvnesh Kumar Sharma

7. **Date of IEC approval:**

S.No.	Name of the participating centre	Date of IEC approval:
1	RARIED Jaipur	20.7.2017

8. **CTRI Registration/Reference (for clinical trials):** CTRI/2018/03/012292

9. **Date of initiation :**

S.No.	Name of the participating centre	Date of initiation
1	RARIED Jaipur	15.12.2017

10. **Current Status :**

Table - 31: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIED Jaipur	60	51	02	07

11. **Summary of Project:** Study is in progress.

5.1.18. Clinical evaluation of Saptasaram Kashayam & Saraswatharishtam in the management of Primary Dysmenorrhea- An Exploratory study

1. **Objective:**

- Primary Objective**

- To assess the effect of *Saptasaram Kashayam & Saraswath arishtam* in the management of primary dysmenorrhea.

- Secondary Objective**

- To observe the changes in the quality of life of patients of Kasthartava (Primary Dysmenorrhea) by using Health Survey SF-36 Questionnaire (RAND).



- To observe the changes in the psychosomatic status by using Mestural Distress Questionnaire and Hamilton's Anxiety rating scale

2. Study Design: Prospective interventional single arm multi centre study.

3. Sample Size: 100 (50 in each centre)

4. Duration of Study : 2 Year

5. Interventions : *Sapthasaram Kashayam & Saraswath arishtam*

6. Participating centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1.	RARILSD, Thiruvananthapuram	Dr. D. Sudhakar
2.	CARICD, New Delhi	Dr. Sakshi Sharma

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	RARILSD, Thiruvananthapuram	14/02/2018
2.	CARICD, New Delhi	21/09/2017

8. CTRI Registration (for clinical trials) : CTRI/2016/02/009857

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1.	RARILSD, Thiruvananthapuram	03.04.2018
2.	CARICD, New Delhi	08.05.2018

10. Status of the project during reporting period:

Table – 32: Status of project along participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARILSD, Thiruvananthapuram	31	08	01	22
2	CARICD, New Delhi	30	09	00	21
	Total	61	17	01	43

11. Summary of Project: The study is ongoing.

5.1.19. Clinical efficacy of Kaishore Guggulu and Balaguduchyadi taila in the management of Gout (Vatarakta)

1. Objectives :

- **Primary objective-** To assess the clinical efficacy especially the hypouricemic effect of Kaishore Guggulu and Balaguduchyadi Taila in the patients of Gout (Vatarakta)



- **Secondary objective**-The study the safety of Kaishore Guggulu, Balaguduchyadi Taila in the patient of Gout(Vatarakta)

2. **Study Design** : Interventional

3. **Sample Size**: 220 (110 at each centre)

4. **Duration of Study** : 3 Years

5. **Interventions** : Kaishore Guggulu and Balaguduchyadi Taila

6. **Participated centre along with PI** :

S.No.	Name of the Participating Centre	Name of PI
1	CARICD, New Delhi	Dr. Deepa Makhija
2	RARIID, Patna	Dr. Deepika Tewari

7. **Date of IEC approval**:

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARICD, New Delhi	21/09/2017
2	RARIID, Patna	10/06/2017

8. **CTRI Registration (for clinical trials)** : CTRI/2018/04/013326

9. **Date of initiation** :

S.No.	Name of the Participating Centre	Date of initiation
1	CARICD, New Delhi	07/07/2018
2	RARIID, Patna	16/05/18

10. **Current status** :

Table-33: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARICD, New Delhi	15	09	00	06
2.	RARIID, Patna	20	13	00	07
	Total	35	22	00	13

11. **Summary of the Project**: Study is in progress.

5.1.20. Clinical evaluation of the efficacy of Trayodashanga Guggulu ,Maharasnadi Kwatha and Prasarani Taila in the management of Gridhrasi (Sciatica)

1. **Objectives**:

- **Primary objectives** -To assess the clinical efficacy of Trayodashanga Guggulu, Maharasanadi Kwatha and Prasarani Taila in the management of Gridhrasi.
- **Secondary objectives** - To assess the clinical safety of Trayodashanga Guggulu, Maharasanadi Kwatha and Prasarani Taila in the management of Gridhrasi.



2. **Study Design:** open label
3. **Sample Size:** 180 patients (60 at each centre)
4. **Duration of Study:** 2 years
5. **Interventions:** Trayodashanga Guggulu, Maharasanadi Kwatha and Prasarani Taila
6. **Participating centre along with PI:**
7. **Date of IEC approval:**

S. No.	Name of the Participating Centre	Date of IEC approval
1	RARIMD, Bengaluru	15-09-2017
2	ACAMHNS, Bengaluru	18-03-2017
3	RARISD, Vijayawada	11-01-2017

8. **CTRI Registration (for clinical trials) :** CTRI/2017/11/015925

9. **Date of initiation:**

S. No.	Name of the Participating Centre	Date of initiation
1	RARIMD, Bengaluru	11 April 2018
2	ACAMHNS, Bengaluru	27 April 2018
3	RARISD, Vijayawada	14 May 2018

10. **Current status :**

Table – 34: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARIMD, Bengaluru	53	30	02	21
2	ACAMHNS, Bengaluru	46	20	02	24
3	RARISD, Vijayawada	60	45	03	12
	Total	159	95	07	57

11. **Summary of Project:** Study is in Progress.

5.1.21. **Assessment of therapeutic efficacy and safety of Sitopaladi Churna with Madhu in the management of Kasa (Stable Chronic Bronchitis)**

1. **Objective:**

- **Primary objectives** –To evaluate the clinical efficacy of Sitopladi Churna in the case of Kasa (Stable Chronic Bronchitis).
- **Secondary objectives** –
 - To validate the clinical efficacy of Ayurvedic drug *Sitopladi Churna* on the specific parameters in the patients of Kasa (Stable Chronic Bronchitis).
 - To evaluate the safety of *Sitopladi Churna* in the patients of Kasa (Stable Chronic Bronchitis).



2. **Study Design:** Interventional

3. **Sample Size :** 75 patients

4. **Duration of Study :** 1 Year

5. **Interventions :** Sitopladi Churna

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	CARICD, New Delhi	Dr. Seema Jain

7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARICD, New Delhi	21/09/2017

8. **CTRI Registration (for clinical trials) :** CTRI/2017/10/010253

9. **Date of Initiation:**

S.No.	Name of the Participating Centre	Date of initiation
1	CARICD, New Delhi	07/02/2018

10. **Current status :**

Table - 35: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARICD, New Delhi	66	29	03	34

11. **Summary of Project:** Study is in progress. The tenure of the study has been extended upto June 2019.

5.1.22. Clinical efficacy of Talisadi Churna in the management of Kasa (Stable Chronic Bronchitis)

1. **Objectives :**

- **Primary objective-** To evaluate the clinical efficacy of Talisadi Churna in the cases of Kasa (Stable Chronic Bronchitis)
- **Secondary objective-** To validate the clinical efficacy of Ayurvedic drug Talisadi Churna on the specific parameters in the patients of Kasa (Stable Chronic Bronchitis)

2. **Study Design :** Interventional

3. **Sample Size:** 75

4. **Duration of Study :** 1 Year



5. **Interventions :** Talisadi Churna

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	CARIRD, Patiala	Dr. Rinku Tomar

7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARIRD, Patiala	5/01//2018

8. **CTRI Registration (for clinical trials) :** CTRI/2018/01/011549

9. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1	CARIRD, Patiala	18/06/2018

10. **Current status :**

Table- 36: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIRD, Patiala	70	32	06	32

11. **Summary of the Project:** Study is in progress.

5.1.23. Clinical Evaluation of Ayurvedic formulations in the management of Parikartika (Fissure in Ano)

1. **Objectives :**

- **Primary objective-** To evaluate the clinical efficacy of Jatyadi ghrita and Jatyadi Taila in the management of Parikartika (Fissure in Ano)
- **Secondary objective-** To evaluate the clinical safety of Jatyadi ghrita and Jatyadi Taila in the management of Parikartika (Fissure in Ano)

2. **Study Design :** Interventional

3. **Sample Size:** 60 (30 at each centre)

4. **Duration of Study :** 2 Years

5. **Interventions :** Jatyadi Ghrita, Jatyadi Taila & Haritaki Churna

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	CARIDD, Kolkata	Dr. L.D. Barik



7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARIDD, Kolkata	13/10/2015

8. **CTRI Registration (for clinical trials) :** CTRI/2017/06/008773

9. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1	CARIDD, Kolkata	19/12/2017

10. **Current status :**

Table- 37: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIDD, Kolkata	45	29	01	15

11. **Summary of the Project:** Study is in progress.

5.1.24. Clinical evaluation of Drakshasava in the management of Pandu (Iron Deficiency Anaemia)

1. **Objectives :**

- **Primary objective-**To assess the clinical efficacy of Drakshasava in the management of Pandu (Iron Deficiency Anaemia)
- **Secondary objective-**To assess the clinical safety of Drakshasava in the management of Pandu (Iron Deficiency Anaemia)

2. **Study Design :** Interventional

3. **Sample Size:** 60

4. **Duration of Study :** 2 Years

5. **Interventions :** Drakshasava

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	RARIED, Jaipur	Dr. Indu P.P

7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	RARIED, Jaipur	07/08/2018

8. **CTRI Registration (for clinical trials) :** CTRI/2018/08/015485



9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1	RARIED, Jaipur	17/09/2018

10. Current status :

Table- 38: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIED, Jaipur	17	05	00	12

11. Summary of the Project: Study is in progress.

5.1.25. Clinical evaluation of Drakshavaleha in the management of Pandu (Iron Deficiency Anaemia)

1. Objectives :

- **Primary objective-** To assess the clinical efficacy of Draksha awaleha in the management of Pandu (Iron Deficiency Anaemia)
- **Secondary objective-** To assess the clinical safety of Draksha awaleha in the management of Pandu (Iron Deficiency Anaemia)

2. Study Design : Interventional

3. Sample Size: 60

4. Duration of Study : 2 Years

5. Interventions : Draksha awaleha

6. Participated centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1	RARIND, Mandi	Dr SK Sharma

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1	RARIND, Mandi	21/07/2018

8. CTRI Registration (for clinical trials) : CTRI/2018/08/015146

9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1	RARIND, Mandi	5/10/2018



10. **Current status :**

Table- 39: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	RARIND, Mandi	04	02	00	02

11. **Summary of the Project:** Study is in progress.

5.1.26. Clinical Evaluation of Eladi Churna and Draksharishta in the management of KASA (Stable Chronic Bronchitis)

1. **Objectives :**

- **Primary objective-**To evaluate and validate the clinical efficacy of *Eladi Churna* and *Draksharishta* in the management of *Kasa* (Stable Chronic Bronchitis)
- **Secondary objective-**To evaluate the safety of *Eladi Churna* and *Draksharishta* in the management of *Kasa* (Stable Chronic Bronchitis)

2. **Study Design :** Interventional

3. **Sample Size:** 130 (65 at each centre)

4. **Duration of Study :** 1 Year

5. **Interventions :** Eladi Churna and Draksharishta

6. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	CARIRD, Patiala	Dr. Harbans Singh
2	CARIDD, Kolkata	Dr. Rohit Kumar Ravte

7. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARIRD, Patiala	9/05/2018
2	CARIDD, Kolkata	17/04/2018

8. **CTRI Registration (for clinical trials) :** CTRI/2018/07/014714

9. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1	CARIRD, Patiala	03/12/2018
2	CARIDD, Kolkata	27/12/2018



10. Current status :

Table- 40: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIRD, Patiala	40	02	02	36
2.	CARIDD, Kolkata	12	00	01	11
	Total	52	02	03	47

11. Summary of the Project: Study is in progress.

5.1.27. Clinical Evaluation of Efficacy of Indukanta Ghrita and Trayodashang Guggulu in the Management of Rheumatoid Arthritis vis –a–vis Amavata

1. Objective

- **Primary objective:** To assess the clinical efficacy of Indukanta Ghrita and Trayodashang guggulu in the Management of Rheumatoid Arthritis vis –a–visAmavata.
- **Secondary Objective:** To assess the clinical safety of Indukanta Ghrita and Trayodashang guggulu in the Management of Rheumatoid Arthritis vis –a–visAmavata.

2. Study Design : Interventional

3. Sample size : 50 in each centre

4. Duration of Study : 2 years

5. Intervention : Indukanta Ghrita & Trayodashang Guggulu

6. Participated centre along with PI :

S. No.	Name of the participating centre	Name of PI
1	NRIP, Cheruthuruthy	Dr. Akashlal M.
2.	CARIDD, Kolkata	Dr. Rohit Ravte

7. Date of IEC approval:

S. No.	Name of the participating centre	Date of IEC approval
1	NRIP, Cheruthuruthy	8.6.2018
2.	CARIDD, Kolkata	16.4.2018

8. CTRI Registration/Reference (for clinical trials): CTRI/2018/07/015025

9. Date of initiation :

S.No.	Name of the participating centre	Date of initiation
1.	NARIP, Cheruthuruthy	03.12.2018
2.	CARIDD, Kolkata	16.10.2018



10. Current Status :

Table - 41: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	NARIP, Cheruthuruthy	10	0	1	9
2.	CARIDD, Kolkata	16	7	4	5
	Total	26	07	5	14

11. Summary of Project: Study is in progress.

5.1.28. Clinical evaluation of the efficacy of Pushyanug Churna in the management of Sweta Pradara w.r.t. Bacterial Vaginosis (Leucorrhoea)

1. Objective:

- **Primary Objective:** To evaluate the therapeutic efficacy of *Pushyanug Churna* on the clinical signs and symptoms of *Swetapradara* (Leuorrhoea) w.s.t. Bacterial Vaginosis. .
- **Secondary Objective:**
 - To assess the clinical safety of *Pushyanug Churna* in the management of *Swetapradara* (Leuorrhoea) w.s.t. Bacterial Vaginosis.
 - To assess the clinical safety of *Pushyanug Churna* on quality of life of the women with *Swetapradara* (Leuorrhoea) w.s.t. Bacterial Vaginosis.

2. Study Design: Prospective interventional single arm multi centre clinical trial.

3. Sample Size: 80 (40 in each centre)

4. Duration of Study : 2 Year

5. Interventions : *Pushyanug Churna*

6. Participating centre along with PI :

S. No.	Name of the Participating Centre	Name of PI
1.	CARICD, New Delhi	Dr. Seema Jain
2.	RARIMCH, Nagpur	Dr. Savita Sharma

7. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1.	CARICD, New Delhi	27.08.2018
2.	RARIMCH, Nagpur	28.09.2018

8. CTRI Registration (for clinical trials): CTRI/2018/07/014717



9. Date of initiation :

S. No.	Name of the Participating Centre	Date of initiation
1.	CARICD, New Delhi	03.04.2018
2.	RARIMCH, Nagpur	08.05.2018

10. Status of the project during reporting period:

Table – 42: Status of project along participating Centre

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARICD, New Delhi	26	14	03	09
2	RARIMCH, Nagpur	13	03	03	07
	Total	39	17	06	16

11. Summary of Project: The study is ongoing.

5.1.29. Clinical Evaluation of Kantakaryavaleha and Eladi Gutika in the Management of Mild Stable Bronchial Asthma (Tamaka Shwasa)

1. Objectives:

- **Primary Objective** - To evaluate the efficacy of Kantakaryavaleha and Eladi Gutika in the Mild Stable bronchial asthma.
- **Secondary Objectives** - To evaluate the safety of Kantakaryavaleha and Eladi Gutika in the patients of Mild Stable bronchial asthma.

2. Study Design: Interventional

3. Sample Size: 45 Each Centre

4. Duration of Study: 2 years

5. Interventions: Kantakaryavaleha and Eladi Gutika

6. Participated centre along with PI:

S.No.	Name of the Participating Centre	Name of PI
1.	CARIRD, Patiala	Dr. Harbans
2.	RARISD, Vijaywada	Dr. G.Babu

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1.	CARIRD, Patiala	23 rd March, 2018
2.	RARISD, Vijaywada	8 th May, 2018

8. CTRI Registration (for clinical trials): CTRI/2018/06/14425



9. Date of initiation:

S.No.	Name of the Participating Centre	Date of initiation*
1.	CARIRD, Patiala	11 th August,2018
2.	RARISD, Vijayawada	25 th October,2018

10. Current status:

Table - 43: Status of project along participating Centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARIRD, Patiala	45	44	01	-
2	RARISD, Vijayawada	23	09	04	10
	Total	68	53	05	10

11. Summary of Project: Study is ongoing.

5.1.30. Observation on Fistula cutting Time with Ksharsutra used in routine patients of Anorectal Fistula (Bhagandara)

1. Objectives:

- **Primary objectives** – To evaluate fistula cutting time with Ksharsutra used in routine patients of Anorectal fistula (Bhagandara)

2. Study Design : Pilot study

3. Sample Size : 30 patients at each centre

4. Duration of Study : 1 Year

5. Interventions : Ksharsutra, Thripala Guggulu and Haritaki churna

6. Participated centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1	CARICD, New Delhi	Dr. Shashi Ghosh
2	*CARIDD, Kolkata	Dr. L.D. Barik

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARICD, New Delhi	27/03/2015
2	*CARIDD, Kolkata	27/11/2015

8. CTRI Registration (for clinical trials) : CTRI/2017/11/010562



9. Date of initiation :

S.No.	Name of the Participating Centre	Date of initiation
1	CARICD, New Delhi	28/03/2018
2	*CARIDD, Kolkata	20/02/2019

10. Current status :

Table- 44: Status of project along participating Centres

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARICD, New Delhi	30	26	04	00
2.	CARIDD, Kolkata*	09	00	01	08
	Total	39	26	05	00

11. Summary of Project: Study is in progress.

*This study was initially allotted to the RRAP CARIC, Mumbai but due to some technical points it has been shifted to CARIDD, Kolkata

5.1.31. Clinical evaluation of an Ayurvedic formulation in the management of Allergic Rhinitis-a pilot study

1. Objectives :

- **Primary objective-** To assess the clinical efficacy of Ayurvedic formulation in the management of Vataja Pratishyaya (Allergic Rhinitis)
- **Secondary objective-** To assess the clinical safety of Ayurvedic formulation in the management of Vataja Pratishyaya (Allergic Rhinitis)

2. Study Design : Interventional

3. Sample Size: 60 (30 at each centre)

4. Duration of Study : 1 Year

5. Interventions : Anutaila, Ashawagandhadi compound (Ayush VPR), Shirishadi Kashaya

6. Participated centre along with PI :

S.No.	Name of the Participating Centre	Name of PI
1	CARICD, New Delhi	Dr. Shweta Mata
2	CARIC, Mumbai	Dr. Parth Dave

7. Date of IEC approval:

S.No.	Name of the Participating Centre	Date of IEC approval
1	CARICD, New Delhi	07/01/2017
2	CARIC, Mumbai	9/02/2019



8. **CTRI Registration (for clinical trials):** CTRI/2017/12/010937

9. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1	CARICD, New Delhi	29/11/2018
2	CARIC, Mumbai	To be initiated

10. **Current status :**

Table- 45: Status of project along participating Centers

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARICD, New Delhi	17	10	02	05

11. **Summary of the Project:** Study is in progress.

5.1.32. A Pilot Evaluation of Safety and Efficacy of an Ayurvedic Formulation (AYUSH-64) for accelerating the recovery in cases of Influenza like Illness.

1. **Objectives**

- A Pilot Evaluation of Safety and Efficacy of an Ayurvedic Formulation (AYUSH 64) for accelerating the recovery in cases of Influenza like Illness.

2. **Study Design :** Interventional

3. **Sample size :** 38

4. **Duration of Study :** 12 months

5. **Intervention :** AYUSH-64

6. **Participated centre along with PI :**

S.No.	Name of the participating centre	Name of PI
1	CARIC, Mumbai	Dr. Manohar Gundeti

7. **Date of IEC approval**

S.No.	Name of the participating centre	Date of IEC approval
1	CARIC, Mumbai	9.01.2017

8. **CTRI Registration/Reference (for clinical trials):** CTRI/2017/10/010145

9. **Date of initiation :**

S.No.	Name of the participating centre	Date of initiation
1	CARIC, Mumbai	26.06.2018



10. Current Status :

Table - 46: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	CARIC, Mumbai	36	28	06	02

11. Summary of Project: Study is in progress.

5.1.33. Clinical evaluation of AYUSH-PE eye drops in the management of Acute Allergic Conjunctivitis.

1. Objectives:

- **Primary objectives** -To assess the clinical efficacy of AYUSH PE Eye Drops in the management of Acute Allergic Conjunctivitis.
- **Secondary objectives** - To assess the clinical safety of AYUSH PE Eye Drops in the management of Acute Allergic Conjunctivitis.

2. Study Design: Interventional

3. Sample Size: 220 patients (55 at each centre)

4. Duration of Study: 1 year

5. Interventions: AYUSH PE Eye Drops

6. Participating centre along with PI:

S. No.	Name of the Participating Centre	Name of PI
1	CARICD, New Delhi	Dr. Nandini Jadhav
2	RARIMD, Bengaluru	Dr. Bhavya
3	RARIED, Lucknow	Dr. Alok Srivastav
4	RARILSD, Trivendrum	Dr. P. Balkrishnan

7. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1	CARICD, New Delhi	23-04-2018
2	RARIMD, Bengaluru	03-07-2018
3	RARIED, Lucknow	09-04-2018
4	RARILSD, Trivendrum	24-01-2019

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



9. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	CARICD, New Delhi	17 August 2018
2	RARIMD, Bengaluru	13 August 2018
3	RARIED, Lucknow	19 July 2018
4	RARILSD, Trivendrum	to be initiated

10. Current status:

Table – 47: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	CARICD, New Delhi	56	55	01	00
2	RARIMD, Bengaluru	39	39	00	00
3	RARIED, Lucknow	55	53	01	01
4	RARILSD, Trivandrum	00	00	00	00
	Total	150	147	02	01

11. Summary of Project: Study is in Progress.

5.2 Knowledge, Attitude and Practice (KAP) Studies

One project on Knowledge, Attitude and Practice study has been completed and 3 projects have been going on. Details are as under:-

Completed project

5.2.1. A Cross sectional study of Cancer KAP among Ayurveda and Allopathic fraternity

1. Objectives:

- To assess the Knowledge, attitude and practice (KAP) with respect to cancer diagnosis, treatment and prevention in Ayurvedic and Allopathy fraternity

2. Study Design: Cross sectional study

3. Sample Size: 600

4. Duration of Study: 6 months

5. Participating centre along with PI:

S. No.	Name of the participating centre	Name of PI
1	CARIC Mumbai	Dr. Manohar Saheb Gundeti

6. Date of IEC Approval

S. No.	Name of the participating centre	Date of IEC Approval
1	CARIC Mumbai	17/11/2016



7. **CTRI Registration/Reference (for clinical trials):** CTRI/2017/10/010294

8. **Date of initiation:**

S. No.	Name of the participating centre	Date of initiation
1	CARIC Mumbai	01.03.2017

9. **Current status:**

Participants enrolled in survey

- Ayurveda: Total 489 (partial 258, complete 231)
- Alloapthy: Total 345 (Partial 95, complete 250)

10. **Summary:** Survey is completed and data analysis is ongoing.

Ongoing Projects

5.2.2. Knowledge, Attitude and Practice towards Ayurvedic medicine use among the Diabetics- a cross sectional study in India (KAP)

1. **Objectives :**

- **Primary objective-** To evaluate the knowledge, attitude and practice (KAP) among the diabetics on Ayurvedic care in all CCRAS centres and Ayurvedic Medical Colleges Hospital of India
- **Secondary objective-**To determine factors influencing the use of Ayurvedic treatment.

2. **Study Design :**A Cross Sectional

3. **Sample Size:** 1500 (750 at each centre)

4. **Duration of Study :** 1 Year

5. **Participated centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1	MSRARIED, Jaipur	Dr. Indu P.P.
2	RARIMD, Bengaluru	Dr. Shashidhar. H. Doddamani

6. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1	MSRARIED, Jaipur	1/09/2018
2	RARIMD, Bengaluru	15/09/2018



7. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1	MSRARIED, Jaipur	28/11/2018
2	RARIMD, Bengaluru	28/11/2018

8. **Current status :**

Table- 48: Status of project along participating Centers

S. No.	Participating Centre	Total Submission
1.	MSRARIED, Jaipur	126
2.	RARIMD, Bengaluru	98
	Total	224

9. **Summary of the Project:** Study is in progress.

5.2.3. Awareness about Neuro Psychiatric disorders among Ayurvedic Doctors –KAP Study

1. **Objectives :**

- **Primary Objectives:** To assess the knowledge, attitude and practice (KAP) with respect to Neuropsychiatric disorders diagnosis, treatment and prevention by Ayurvedic doctors

2. **Study Design :** Online survey questionnaire

3. **Sample Size :** 400 participants

4. **Duration of Study:** 1year

5. **Participating centre along with PI :**

S.No.	Name of the Participating Centre	Name of PI
1.	ACAMH&NS, Bengaluru	Dr. G. V. Raman

6. **Date of IEC approval:**

S.No.	Name of the Participating Centre	Date of IEC approval
1.	ACAMH&NS, Bengaluru	22/11/2017

7. **Date of initiation :**

S.No.	Name of the Participating Centre	Date of initiation
1.	ACAMH&NS, Bengaluru	31/12/2018

8. **Current status :**

Table - 49 : Status of project along participating Centre

S. No.	Participating Centre	Total Submission
1.	ACAMH&NS, Bengaluru	56

9. **Summary of Project:** Study is in progress.



5.2.4. A Cross Sectional Study on Knowledge Aptitude and Practice on Gastro-intestinal disorders among Ayurveda and Allopathic fraternity”

1. **Objectives:** To assess the Knowledge, attitude and practice (KAP) with respect to Gastro-intestinal disorders diagnosis, treatment and prevention in Ayurvedic and Allopathy Fraternity.
2. **Study Design:** Cross-sectional Survey
3. **Sample Size:** 300
4. **Duration of the study:** 1 year
5. **Participating Centre along with PI:**

S.No.	Name of Participating Centre	Investigator	Co-Investigator
1	RARIGID, Guwahati	Dr. Neha Dubey	Dr. T. Saketh Ram, NIIMH, Hyderabad Dr. Manohar Gundeti, CARIC, Mumbai

6. **Date of IEC approval:** 10.08.2018
7. **Date of Initiation:** 23-10-18
8. **Current status:**

Table - 50: Status of project

S.No.	Name of participating Institute	No of submissions by Ayurveda Fraternity	No of submissions by Allopathic Fraternity
1	RARIGID, Guwahati	19	06

9. **Summary of the project:** Study is ongoing.



5.3 Systematic Review Projects on Ayurveda Interventions in Major Disease areas (SRP-AI) - An Initiative under CCRAS-IMR

A systematic review summarizes the results of available carefully designed healthcare studies (controlled trials) and provides a high level of evidence on the effectiveness of healthcare interventions. Judgments may be made about the evidence and inform recommendations for healthcare.

These reviews are complicated and depend largely on what clinical trials are available, how they were carried out (the quality of the trials) and the health outcomes that were measured. Review authors pool numerical data about the effects of the treatment through a process called meta-analyses. Then authors assess the evidence for any benefits or harms from those treatments. In this way, systematic reviews are designed to provide a complete, exhaustive summary of current evidence relevant to a research question. For example, systematic reviews of randomized controlled trials are key to the practice of evidence-based medicine, and a review of existing studies is often quicker and cheaper than embarking on a new study.

The Cochrane Database of Systematic Review (CDSR) has the largest collection of Systematic reviews as a part of the Cochrane library. Before starting a Systematic Review, a protocol is mandatory, as it helps to reduce the bias during the review. PROSPERO (International Prospective Register of Systematic Reviews) is an agency under the National Institute of Health Research that registers the protocol for a systematic review on different topics. Wherein a register number is provided for each protocol once it accepted for registration. This enhances the credibility of the review and prevents the duplication of work.

A Systematic Review of the efficacy of Ayurveda intervention will help in an in-depth analysis of the use of Ayurveda to treat a condition for which the treatment modality appeared to demonstrate some efficacy. The unique advantage of Quantitative analysis (Meta-analysis) is increased power and precision in estimating effects and risks particularly relevant to the need of drug manufacturers.

In the view of the above, Council has taken initiative as a short term grant of nine months under CCRAS-IMR scheme for initiation of projects for Systematic Review and Meta-analysis on Efficacy and Safety of Ayurveda interventions in major diseases/conditions where Ayurveda has strength. The Council has sanctioned 25 Systematic Review projects so far under the guidance of the Program Officer Dr.B.C.S.Rao, A.D.(Ay). Dr.Azeem Ahmad, R.O.(Ay) and Dr.Sumeet Goel, R.O.(Ay) are coordinating as Nodal Officers for these projects. The title and status of the projects are given below:

Table - 51: Status of projects

S. No.	Title of the Project	Institute Involve	Status of the Project	PROSPERO Registration
1	Ayurvedic treatment in Hemiplegia: A systematic review	NARIP, Cheruthuruthy	On-going	Resubmitted to PROSPERO
2	Ayurveda interventions for Sciatica: A systematic review	NARIP, Cheruthuruthy	On-going	Submitted to PROSPERO
3	Ayurvedic interventions in Gout: A systematic review	NARIP, Cheruthuruthy	On-going	Resubmitted to PROSPERO



4	Ayurveda intervention for Parkinson Disease: A systematic review	NARIP, Cheruthuruthy	On-going	Resubmitted to PROSPERO
5	Ayurveda intervention in Iron Deficiency Anemia: A systematic review	NARIP, Cheruthuruthy	On-going	Resubmitted to PROSPERO
6	Ayurveda management of Fistula in Ano: A systematic review	NARIP, Cheruthuruthy	On-going	Submitted to PROSPERO
7	Systematic review and Meta-analysis of Ayurvedic interventions for Conjunctivitis.	RARIED, Lucknow	On-going	Registered CRD42019129436
8	Ayurveda Interventions for Diabetic Retinopathy - A Systematic Review	RARIED, Lucknow	On-going	Submitted to PROSPERO
9	Systematic review and Meta-analysis of Ayurvedic interventions for Rheumatoid Arthritis.	CCRAS Headquarters, New Delhi	On-going	Registered CRD42019133722
10	Systematic review and Meta-analysis of Ayurvedic interventions for Dysmenorrhoea.	CCRAS Headquarters, New Delhi	On-going	Submitted to PROSPERO
11	Systematic Review of Efficacy and Safety of Ayurveda interventions for Female Infertility	CCRAS Headquarters, New Delhi	On-going	Submitted to PROSPERO
12	Efficacy and safety of Ayurveda interventions for Sinusitis- A Systematic Review	CCRAS Headquarters, New Delhi	On-going	Registered CRD42018103995
13	Systematic review and Meta-analysis of Ayurvedic interventions for Urolithiasis.	RARIMD, Bengaluru	On-going	Submitted to PROSPERO
14	Ayurveda Interventions for Glaucoma- A Systematic Review	RARIMD, Bengaluru	On-going	Resubmitted to PROSPERO
15	Systematic Review on the efficacy of Ayurveda interventions in Bronchial Asthma	RAIFR, Pune.	On-going	Resubmitted to PROSPERO
16	Effectiveness and safety of Ayurveda intervention in children and adolescent with ADHD	RRAP CARIC Mumbai.	On-going	Registered CRD42019129676
17	Efficacy and safety of Ayurveda intervention in Essential Hypertension: A systematic review	RRAP CARIC Mumbai.	On-going	Submitted to PROSPERO
18	Efficacy and safety of Ayurveda interventions for Allergic Rhinitis: a systematic review.	RRAP CARIC Mumbai.	On-going	Registered CRD42018107035
19	Efficacy and safety of Ayurveda interventions for Psoriasis: a systematic review	RRAP CARIC Mumbai.	On-going	Registered CRD42018097298
20	Ayurveda Interventions for Dry Eye Syndrome - A Systematic Review	CARICD, Punjabi Bagh, New Delhi	On-going	Submitted to PROSPERO
21	Ayurveda Interventions for Depression- A Systematic Review	CARICD, Punjabi Bagh, New Delhi	On-going	Submitted to PROSPERO
22	Ayurveda Interventions for Anxiety Disorders- A Systematic Review	NIMHANS, Bengaluru	On-going	Submitted to PROSPERO
23	Efficacy and safety of Ayurveda interventions for Polycystic Ovary Syndrome: A Systematic Review	CARIRD, Patiala	On-going	Submitted to PROSPERO
24	A systematic review of the safety and efficacy of Ayurveda interventions for Hepatitis.	RARC, Agartala	On-going	Registered CRD42019103115
25	“Efficacy and Safety of Ayurveda interventions for Obesity: A Systematic Review”	RARI, Ranikhet	On-going	Registered CRD42019130104



5.4 Collaborative Clinical Research Projects

Under collaborative Clinical Research, 3 projects viz. Clinical study of ‘AYUSH Rasayana A & B’ in Elderly subjects with AIIMS, New Delhi & BHU, Varanasi; Development of Bio-medical instrumentation for Ksharasutra chamber for preparation of standardized Ksharasutra with IIT, New Delhi and Validation of Prakriti Assessment Questionnaire/Scale with reputed organizations have been completed and 5 projects viz. C1-Oil for wound healing with AIIMS, New Delhi & Development; Clinical study of coded drug in the management of Dengue fever & prevention its complications in collaboration with ICMR; Ayush D for pre-diabetic subjects; Ayush D for Type-II Diabetes Mellitus and Validation and Reliability Testing of Ayurveda Diagnostic Methods with reputed organizations have been going on.

Completed Projects

5.4.1. Collaborative Multicentric Clinical Trial to Study the Effect of Ayush Rasayana (A&B) on Ageing in Apparently Healthy Elderly Subjects

1. Background in Brief :

The Rasayana drugs are said to have Anti-inflammatory, Anti-oxidant, Immuno-modulatory properties and have beneficial effects on cognitive functioning, physical fitness and endurance.

This study is a Open Label, clinical trial to see the effect of Ayurvedic Coded drugs (Ayush Rasayana A & B) on ageing in apparently healthy elderly subjects.

10 grams of Ayush Rasayana ‘A’ contains 3 gm each of 3 herbs and 1 gm rock salt. 750 mg of Ayush Rasayana ‘B’ contains 250 mg extract of 3 herbs each. Acute, sub acute and chronic toxicity studies have been conducted with either of the trial drugs on mice and rats. The drugs were found safe experimentally

The age group of the subjects selected for this study will be 60-75 years and they will be put on a trial for a period of 186 days (approx. 6 months)

2. Objectives

- **Primary Objectives:** To see the efficacy of Rasayana drugs in improving the general body health and quality of life in elderly people.
- **Secondary Objectives:**
 - To observe the changes in bio-chemical profile and other health parameters.
 - To see the safety of the Rasayana drugs as anti-ageing formulation

3. Study Design : Interventional

4. Sample size : 80 subjects per centre

5. Duration of Study :3 years



6. Intervention : Ayush Rasayana ‘A’ & Ayush Rasayana ‘B’

7. Participated centre along with PI :

S. No.	Name of the Participating Centre	Name of PI
1.	Department of Geriatric Medicine, AIIMS, New Delhi	Prof. A.B.Dey,
2.	Department of Medicine, IMS, BHU, Varanasi, U.P	Prof. Inderjeet Singh
3.	NRIADD Kolkata, (CCRAS Institute).	Dr.Jayaram Hazra,

8. Date of IEC approval :

S. No.	Name of the Participating Centre	Date of IEC approval
1.	Department of Geriatric Medicine, AIIMS, New Delhi	01.08.2014
2.	Department of Medicine, IMS, BHU, Varanasi, U.P	13.2.2013
3.	NRIADD Kolkata, (CCRAS Institute).	4.07.2014

9. CTRI Registration (For Clinical Trials) : CTRI/2015/04/005679

10. Date of initiation:

S. No.	Name of the Participating Centre	Date of Initiation
1.	Department of Geriatric Medicine, AIIMS, New Delhi	22.04.2015
2.	Department of Medicine, IMS, BHU, Varanasi, U.P	20.7.2015
3.	NRIADD Kolkata, (CCRAS Institute).	22.05.2015

11. Current Status :

Table- 52: Status of projects along with participating centres

S.No.	Participating Centre	No. of cases Enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	Department of Geriatric Medicine, AIIMS, New Delhi	106	82	24	0
2.	Department of Medicine, IMS, BHU, Varanasi, U.P	109	70	39	0
3.	NRIADD Kolkata, (CCRAS Institute).	87	76	11	0
	Total	302	228	74	0

12. Summary of Project: Completed.

5.4.2. Comparative clinical evaluation of Ksharasutra prepared manually and by automated machine in fistula-in-ano (Bhagandara)

The above study will be conducted in two parts. In phase-I, Automation of Ksharasutra is being done by IIT, New Delhi and after its completion clinical study will be conducted at CARICD, New Delhi and CARIC, Mumbai in phase-II



1. Objectives for phase-I

• IIT Delhi

- To develop the prototype for automatic Ksharasutra preparation.
- To support the technical trial production Ksharasutra on prototype made by IIT and working at ACRI.
- To prepare TOT documents on the engineering prototype for automated Ksharasutra productions

• ACRI, Delhi

- To advise on the corresponding manual process being used, suggest method to maintain solution consistency wherever needed.
- To advise on the standardized Ksharasutra Preparation with its stability and shelf life.
- To advise on chemicals and chemical processes for Ksharasutra, and supply special raw materials not readily available in open market, wherever applicable.
- To compare the Ksharasutra made from IIT prototype with the one prepared by manually.
- To conduct clinical trials of Ksharasutra prepared by prototype developed by IIT and manually prepared ksharasutra.
- To identify agencies for TOT

2. Duration of Study : 3 Years

3. Participated centre along with PI :

Name of the Participating centers	Name of PI	Phase/work
1. IIT, Hauj Khas, New Delhi	Pof. D.T. Shahni	First (in progress)
2. Central Ayurveda Research Institute for Cardiovascular Diseases, New Delhi	Dr. H. Panigrahi	Second phase (Clinical) will be initiated after completion of first phase
3. Raja Ramdeo Anandilal Podar (RRAP) Central Ayurveda Research Institute for Cancer, Mumbai	Dr. Govind Reddy	

4. Date of initiation :12/10/2012*

5. Summary of Project: Automated Ksharasutra machine has been developed in collaboration with IIT, New Delhi and handed over to CARICD, New Delhi. The first phase of this project has been completed and the second phase regarding clinical study will be initiated shortly.

*Project has been extended due to modification in the prototype developed as per the technical comments offered by the expert group



5.4.3. Development and validation of Prakriti Assessment Questionnaire/ Scale

BACKGROUND: Ayurveda gives emphasis on the personalized approach of treatment for patients as it believes that every individual is unique having specific constitution vis-à-vis *Prakriti*. The determination of *Prakriti* has significant importance in both healthy and unhealthy states which can be applied clinically in diagnosis, treatment (for deciding appropriate drug, dose, duration, diet and life style) and prognosis of the disease as well as for promotion of health by following daily and seasonal regimens according to *Prakriti*.

Looking at the emerging global popularity of Ayurveda, the Council has developed a standardized *Prakriti* assessment questionnaire which can encompass the minute details of features/ characteristics of a person as described in Ayurvedic Classics with rationality, reliability and validity in consultation with eminent experts of Ayurveda, biostatistician, clinical psychologists etc through multicenter study. The Standard Operative Procedures (SoPs) for capturing each and every predictor for assessment of *Prakriti* has been developed and documented in the form of **Manual of Standard Operative Procedures (SoPs)**. For the easy application of the scale, user friendly **Ayur *Prakriti* Web Portal (Standardized *Prakriti* Assessment Scale)** has also been designed.

The work done during the reporting period:

The project has been completed. Following activities have been carried out during the reporting period.

1. The '*Manual of Standard Operative procedures for Prakriti Assessment*' and '*Ayur Prakriti Assessment Web Portal*' have been formally launched by Shri Shripad Yesso Naik , Hon'ble MoS(IC), Ministry of AYUSH on 28th April 2018 on the occasion of '*National Consultative Meet on Intra AYUSH Collaboration* held on 28th - 29th April, 2018' at A.P.Shinde Symposium Hall, ICAR, NASC Complex, Pusa, New Delhi.
2. The questionnaire was subjected to Confirmatory Factor Analysis using PCA (Principle Component Analysis) as a further step of validation on the basis of which reduction of items from the questionnaire was carried out. An expert group meeting was convened on 28th -29th May, 2018 to appraise the same in which the Predictors which were very –very important clinically and have reliable responses and definite outcomes were included in the questionnaire.

Considering the importance of Gunas in deciding the preventive and therapeutic measures, the Gunas responsible for each predictor were also discussed in detail and documented.

3. The *Prakriti* Assessment Questionnaire /Scale vis-a-vis Ayur *Prakriti* Assessment Web Portal was subjected to clinical validation with Physician's Perspective at 10 selected institutes on 10 cases at each institute. An inter-rater agreement was assessed in comparison to the *Prakriti* examined by a renowned physician with 8-10 years' clinical experience. The data was analyzed for agreement. The *Prakriti* of 20 Ayurveda Doctors was also assessed. The Doctors were instructed to assess their *Prakriti* as per their methodology before the assessment of their *Prakriti* by Ayur *Prakriti* Assessment Web Portal. The data obtained from the two assessments was analyzed. Based on the analysis it was observed that a few predictors need to be retained and few to be removed.



4. The final version of *Prakriti* Assessment Scale and Ayur *Prakriti* Assessment Web Portal was appraised to the expert group in a meeting organized on 28th December 2018 at CCRAS Hqrs. New Delhi.
5. A copyright has been obtained on ‘Manual of Standard Operative procedures for *Prakriti* Assessment’ from Copyright Office, Government of India.
6. The detail activities carried out in the project for developing and validating the *Prakriti* Assessment Scale has been drafted in a form of a book and the same is under editing for publication.
7. To disseminate and propagate the usage of developed Manual of Standard Operative Procedures (SoPs) for *Prakriti* Assessment and AYUR *Prakriti* Assessment software, Training Programme for total 87 Master Trainers from various Council’s institute across India on ‘Standardized *Prakriti* Assessment Scale and AYUR *Prakriti* Assessment Web Portal’ has been organized in two batches on 19th -20th January 2019 and 2nd- 3rd February, 2019 at CCRAS Hqrs., New Delhi.
8. All the Master trainers have practiced the assessment of the *Prakriti* of apparently healthy individuals following the Manual of Standard Operative Procedures for *Prakriti* Assessment through the link (apwp.pasvalidation.com) on at least 10 individuals.
9. The Master Trainers have further imparted training on standardized *Prakriti* Assessment scale and Ayur *Prakriti* Assessment Web Portal to all the Ayurveda Scientists of the Council. The queries of the trainees regarding *Prakriti* Assessment or any other technical help for the same while practicing has been addressed through the project email id: prakriti.ccras@gmail.com.

Ongoing projects

5.4.4. Controlled Clinical Trial to assess the effectiveness of topical application of C1 herbal oil on superficial external wound and split thickness skin graft donor’s site for surgical wound healing

1. Objectives:

- To compare the healing times of superficial external wounds and STSG donor sites receiving C1 oil with conventional paraffin gauze dressings.
- To compare patients’ pain levels of superficial external wounds and STSG donor sites receiving C1 oil with conventional paraffin gauze dressings.
- To compare the incidence of infections of superficial external wounds and STSG donor sites receiving C1 oil with conventional paraffin gauze dressings.
- To determine the wound complications from the use of C1 oil, if any

2. Study Design: Randomized controlled trial.

3. Sample Size: 50 patients



4. Duration of Study: 2 years

1st year (phase 1) in STSG donor sites

2nd phase in superficial external wounds

5. Interventions: Local application of C1 Oil

6. Participating centre along with PI:

S. No.	Name of the Participating Centre	Name of PI
1	Jai Prakash Narayan Apex Trauma Center, (JPNATC), AIIMS, New Delhi	Dr. Maneesh Singhal

7. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1	Jai Prakash Narayan Apex Trauma Center, (JPNATC), AIIMS, New Delhi	18/08/2015

8. CTRI Registration (for clinical trials) : CTRI/2017/10/010150

9. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	Jai Prakash Narayan Apex Trauma Center, (JPNATC), AIIMS, New Delhi	1/06/2016*

10. Current status:

Table – 53: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	Jai Prakash Narayan Apex Trauma Center, (JPNATC), AIIMS, New Delhi	35	28	02	05

11. Summary of Project: *The First Phase is completed and second phase was initiated in August 2018 and Project is going on. The project extended till 30 August 2019.

5.4.5. Evaluation of Add on Efficacy & Safety of an Ayurvedic coded Formulation in the management of Dengue Fever & Prevention of its complications – A Double Blind Clinical Study (Collaborative)

1. Objectives:

- **Primary objectives** - To describe the safety profile in terms of systemic events, unsolicited adverse events and serious adverse events during the trial period.
- **Secondary objectives** - To describe the Hematological, Immunological and any Capillary leak response from the baseline to the end of the drug trial period.



2. **Study Design:** Randomized placebo Controlled trial
3. **Sample Size:** 250 patients (75 in each group at Belagavi and 50 in each group at Kolar)
4. **No. of Groups:** 2
5. **Duration of Study:** 2 years
6. **Interventions:** Oral intervention of polyherbal formulation PJ-7: 700mg (2 tablets of 350 mg each) twice daily for 10 days.

7. Participating centre along with PI:

S. No.	Name of the Participating Centre	Name of PI
1	Belagavi Shri BMK Ayurveda Mahavidyalaya Belagavi National Institute Traditional Medicine (NITM) Belagavi, KLE University's J.N. Medical College	Dr. B.S. Prasad Dr. S.L. Hoti Dr. V.A. Kothiwale
2	Kolar Department of Integrative Medicine, Sri Devaraj Urs Academy and Higher Education and Research, SDUAHER, Kolar	Dr. Neetina kumar Patil

8. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1	Shri BMK Ayurveda Mahavidyalaya, NITM, JNMC, Belagavi	25-03-2017
2	Department of Integrative Medicine, SDUHER, Kolar	22-01-2018

9. CTRI Registration (for clinical trials) : CTRI/2017/11/010586

10. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	Shri BMK Ayurveda Mahavidyalaya, NITM, JNMC, Belagavi	September 2017
2	Department of Integrative Medicine, SDUHER, Kolar	August 2018

11. Current status :

Table – 54: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1.	Shri BMK Ayurveda Mahavidyalaya, NITM, JNMC, Belagavi	66	63	03	00
2.	Department of Integrative Medicine, SDUHER, Kolar	15	14	01	00
3.	Total	81	77	04	00

12. Summary of Project: Study is in Progress.



5.4.6. A Randomized Placebo Controlled Prospective Phase II Clinical Study of an Ayurvedic Coded Drug 'AYUSH-D' on Glycemic control in Pre-Diabetic Subjects (Collaborative)

1. Objectives:

- **Primary objectives** - To evaluate the clinical efficacy of AYUSH-D as therapy for Glycemic control in the management of Pre-Diabetes.
- **Secondary objectives** - To evaluate the clinical safety of AYUSH-D as therapy for Glycemic control in the management of Pre-Diabetes.

2. **Study Design:** Randomized Double blind placebo controlled Clinical trial

3. **Sample Size:** 264 patients (66 {33 in each group} in each center)

4. **No. of Groups:** 2

5. **Duration of Study:** 2½ years

6. Interventions:

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

7. Participating centre along with PI:

S. No.	Name of the Participating Centre	Name of PI
1	RARIMD, Bengaluru	Dr. Kishore Kumar
2	AIIMS, New Delhi	Dr. Rajesh Khadgawat
3	RAPA, Medical College, Mumbai	Prof. K.R. Kohli
4	KLEU's Shri BMK Ayurveda Mahavidyalaya, Belgavi	Dr. Basavaraj R. Tubaki

8. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
1	RARIMD, Bengaluru	15-09-2017
2	AIIMS, New Delhi	04.05.2018
3	RAPA, Medical College, Mumbai	29-11-2017
4	KLEU's Shri BMK Ayurveda Mahavidyalaya, Belgavi	21-07-2017

9. **CTRI Registration (for clinical trials) :** CTRI/2017/11/010716

10. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	RARIMD, Bengaluru	09 October, 2018
2	AIIMS, New Delhi	15 October, 2018
3	RAPA, Medical College, Mumbai	20 October, 2018
4	KLEU's Shri BMK Ayurveda Mahavidyalaya, Belgavi	11 October, 2018



11. Current status :

Table – 55: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARIMD, Bengaluru	13	00	01	12
2	AIIMS, New Delhi	04	00	01	03
3	RAPA, Medical College, Mumbai	02	00	00	02
4	KLEU's Shri BMK Ayurveda Mahavidyalaya, Belgavi	21	00	01	20
	Total	40	00	03	37

12. Summary of Project: Study is in Progress.

5.4.7. A Randomized Placebo Controlled Prospective Phase II Clinical Study of an Ayurvedic Coded Drug 'AYUSH-D' in the management of Type 2 Diabetes Mellitus as add on Therapy to Metformin (Collaborative)

1. Objectives:

- **Primary objective** - To evaluate the clinical efficacy of AYUSH-D as add on therapy to Metformin for Glycemic control in the management of Type 2 Diabetes Mellitus.
- **Secondary objective** - To evaluate the clinical safety of AYUSH-D as add on therapy to Metformin in Type 2 Diabetes Mellitus.

2. Study Design: Randomized Double blind placebo controlled Clinical trial

3. Sample Size: 264 patients (66 {33 in each group} in each center)

4. No. of Groups : 2

5. Duration of Study: 2½ years

6. Interventions:

- Group 1:** Metformin + AYUSH D (2 tablets of 1 gram each thrice daily) before meals.
- Group 2:** Metformin + Placebo (2 tablets of 1 gram each thrice daily) before meals.

7. Participating centre along with PI :

S. No.	Name of the Participating Centre	Name of PI
	RARIMD, Bengaluru	Dr. Kishore Kumar
	AIIMS, New Delhi	Dr. Rajesh Khadgawat
	RAPA, Medical College, Mumbai	Prof. K.R. Kohli
	RGGPGAC, Paprola	Dr. Vijay Chaudhary

8. Date of IEC approval:

S. No.	Name of the Participating Centre	Date of IEC approval
	RARIMD, Bengaluru	15-09-2017
	AIIMS, New Delhi	04-05-2018
	RAPA, Medical College, Mumbai	29-11-2017
	RGGPGAC, Paprola	16-01-2018



9. CTRI Registration (for clinical trials) : CTRI/2017/11/010716

10. Date of initiation:

S. No.	Name of the Participating Centre	Date of initiation
1	RARIMD, Bengaluru	10 October, 2018
2	AIIMS, New Delhi	09 October, 2018
3	RAPA, Medical College, Mumbai	17 October, 2018
4	RGGPGAC, Paprola	10 October, 2018

11. Current status:

Table – 56: Status of project along participating Centre

S. No.	Participating Centre	No. of cases enrolled	No. of cases completed	No. of cases Drop outs	No. of cases continued
1	RARIMD, Bengaluru	28	00	02	26
2	AIIMS, New Delhi	34	00	01	33
3	RAPA, Medical College, Mumbai	15	00	01	14
4	RGGPGAC, Paprola	17	00	02	15
	Total	94	00	06	88

12. Summary of Project: Study is in Progress.

5.4.8. Validation and Reliability Testing of Ayurveda Diagnostic Methods

The First phase of this project will be done in IMR mode and for second phase validation the project will be executed in collaborative mode.

1. Objectives :

- i) To develop standardized Ayurvedic Case Taking Protocol (SACTP) in consideration with elements of diagnosis/case recording from Ayurveda and standard health records format(s).
- ii) To develop standard diagnosis protocols for selected diseases frequently managed through Ayurveda.
- iii) To develop interface for integration/ customization and development of diagnosis gadgets which are aptly integrated with latest Information Technology tools such as *Internet of Things (IoT)* for Ayurveda specific diagnostic requirements.

2. Deliverables:

- i) Standardized Ayurvedic Case Taking Protocol (SACTP) integrated with Electronic Health Record System for point of care case recoding.
- ii) Norms for reporting about methodologies on Standardization of Ayurvedic Diagnostics
- iii) Standardized Diagnostic Protocols for selected diseases frequently managed through Ayurveda.



- iv) Ayurvedic clinical case report(s) /case series portal.
- v) Interface for integration/customization and development of diagnostic gadgets based on Internet of Things.
- vi) Publication of Article(s) in Scientific Journals based on interim developments and finalized work(s)

3. **Study Design** : Tool Development: Validation and Reliability Testing

4. **Duration of Study** : 3 Years

This Project will be carried out in two Phases. The first phase reliability testing, validation will be done at CCRAS institute, and phase two validation will be done in collaborative mode at six identified centers as follows: The first phase validation it is being executed at CCRAS Hqrs and NIIMH Hyderabad. The Hyderabad institution is responsible for development of software for smooth execution of this project.

5. **Participated centres along with PI Co-Investigator:**

S. No.	Name of the Participating Institutes	Principal Investigator	CCRAS Institutes	Co-Investigator at CCRAS
1	All India Institute of Ayurveda, New Delhi	Dr. V.G. Huddar, Associate Professor	Central Ayurveda Research Institute for Cardiovascular Diseases, New Delhi	Dr. Deepa Makhija, R.O (Ay.)
2	Chaudhary Brahm Prakash Ayurved Charak Sansthan (CBPACS), Khera Dabar	Dr. Yogesh kr. Pandey, Associate Professor	Central Ayurveda Research Institute for Cardiovascular Diseases, New Delhi	Dr. Deepa Makhija, R.O (Ay.)
3	National Institute of Ayurveda, Jaipur	Dr. H.M.L. Meena, Associate Professor	M.S. Regional Ayurveda Research Institute for Endocrine Disorders, Jaipur	Dr. S.K. VEDI, R.O. (Ay)
4	Sri Dharmasthala Manjunatheshwara, College of Ayurveda, Karnataka	Dr. Prakash Mangalasseri, Professor	Regional Ayurveda Research Institute for Metabolic Disorders, Bengaluru	Dr. Subhashree M.N. , R.O. (Ay)
5	Vaidyaratnam P.S. Varier, Ayurveda College Kottakal, Kerala	Dr. Girish K.J, Professor	National Ayurveda Research Institute for Panchakarma, Cheruthuruthy, Kerala	Dr. Shreedipti, R.O. (Ay)
6	Institute for post-graduation teaching and Research in Ayurveda, Gujarat	Dr. Mandip Goyal, Associate Professor	Regional Ayurveda Research Institute for Skin Disorders (RARISD), Ahmedabad	Dr. Prateek Aggarwal, R.O. (Ay)

6. **Date of initiation** :7/06/2018 (CCRAS Hqrs) and for Collaborative centers budget was sanctioned to the nearby CCRAS institutes on 29/03/19



7. Current status :

Table-57: Status of project along participating Centers

S. No.	Identified Disease/ Condition	Participating Centre	Status
1.	Twaka Vikara (Skin Diseases)	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • Proforma Developed • 1st Phase of Validation and Reliability testing of developed profoma at 8 Clinical Research Institute under CCRAS- completed • Data Analysis – Going-On • 1st Draft “Ayurveda based Clinical Methods for Diagnosis of Skin Diseases (Twaka Vikara) - Published • Development of e-module – Going-on
2.	Pranvahasroto vikara (Shwasa and Kasa)	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • Proforma Developed • 1st Phase of Validation and Reliability testing of developed profoma at 10 Clinical Research Institute under CCRAS- completed • Data Analysis – Going-On • 1st Draft “Ayurveda based Clinical Methods for Diagnosis of Respiratory Diseases (Pranvahasroto vikara- Shwasa and Kasa) – Near to Completion. • Development of e-module – 1st Test Module developed
3.	Jwara	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • Proforma Developed • 1st Phase of Validation and Reliability testing of developed profoma at 10 Clinical Research Institute under CCRAS- completed • Data Analysis – Going-On • 1st Draft “Ayurveda based Clinical Methods for Diagnosis of Jwara- start • Development of e-module – Not Strated
4.	Unmada	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • 1st phase of compilation –Done • Development of e-module – Not Started
5.	Annavaashroto vikara (Atisara, Pravahika, Grahani, Arsha, Shula)	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • 1st phase of compilation –Done • Development of e-module – Not Started
6.	Vatavyadhi	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • 1st phase of compilation –Going On • Development of e-module – Not Started
7.	Mutravaashro to vikara	CCRAS Hq. New Delhi NIIMH, Hyderabad	<ul style="list-style-type: none"> • 1st phase of compilation –Going On • Development of e-module – Not Started

8. Summary of the Project: Study is in progress.



6. LITERARY RESEARCH AND DOCUMENTATION PROGRAMME

The Council's Literary Research and Documentation programme broadly relates to medico-historical studies, transcription, translation and publication of classical treatises, important/ rare works, unpublished texts and their commentaries to Hindi, English or other languages. These works have been carried out by the Headquarter of Council along with selected peripheral Institutes. National Institute of Indian Medical Heritage (NIIMH), Hyderabad with the objective of literary research additionally focuses on medico-historical studies, preparation of biography of eminent scholars, preparation of e-books on classics of AYUSH Systems of Medicine etc. Apart from NIIMH, National Research Institute for Sowa-Rigpa, Leh and National Ayurveda Research Institute for Panchakarma, Cheruthuruthy has also been involved in the literary research. During the period under report the following achievements have been made:

6.1. Publication and Documentation:

The Council publishes books, monographs, technical reports and the outcomes of Intra Mural Research projects, sponsored research projects, compilation of research related data, medico-historical data, which are useful and informative for researchers, academicians and students as well as public. The following publications have been published during the reporting period.

Books:

Intra-AYUSH Documents:

1. AYUSH SYSTEMS: A Focus on Core Achievements and Potential Areas for Intra AYUSH Collaboration.

General guidelines:

2. General guidelines for drug development of Ayurvedic formulations - Vol. 1
3. General guidelines for safety/toxicity evaluation of Ayurvedic formulations - Vol. 2
4. General guidelines for clinical evaluation of Ayurvedic interventions - Vol. 3

Glimpses Series:

5. Glimpses of CCRAS Contributions (50 Glorious Years): Clinical Research and Drug Development (Vol.-I)
6. Glimpses of CCRAS Contributions (50 Glorious Years): Research Publications (Vol.-II)
7. Glimpses of CCRAS Contributions (50 Glorious Years): Medicinal Plants Research (Vol.-III)
8. Glimpses of CCRAS Contributions (50 Glorious Years): Phyto-chemistry, Drug Standardization and Quality Assurance (Vol.-IV)
9. Glimpses of CCRAS Contributions (50 Glorious Years) – Vol. – V – Research Oriented Healthcare Services



Others:

10. Manual of Standard Operative Procedures for Prakriti Assessment
11. Ayurveda and Siddha formulations.
12. Comprehensive Technical Dossier (CTD) of Medicinal Plants Used in Ayurveda: *Bacopa monnieri* (L.) Wettst. Series – I, Number – 6 (CTD Monograph)
13. CTD Monograph of Medicinal Plants used in Ayurveda – *Lasuna* (*Allium sativum* L.) Series 1 No.7
14. Health related demography of the tribes of Rajasthan – Technical Report.
15. Ayurveda in Public Health: Compendium of Select Research Papers and related information.
16. Ayurveda based Dietary and Lifestyle Advocacy for Mental Health & Psychiatric Disorders.
17. Health related demography in Thiruvananthapuram District-Kerala – Technical Report.
18. Health related demography the Schedule Caste Population in Kamrup District-Assam – Technical Report
19. Ayurveda – A Focus on Research and Development (Coffee Table Book).
20. Ayurveda Clinical Methods Series- I - Ayurveda Based Clinical Methods for Examination of Skin Diseases (Twak Vikara)

Booklets:

1. Ayurveda Based Diet and Lifestyle Guidelines for Prevention of Cardiac Disorders.
2. CCRAS Sandesh Patrika (Hindi).
3. Ayurvedic Gharelu Upachar (Hindi).
4. Ayurvedic Home Remedies (English).
5. Swasthavritta – An Ayurvedic approach to healthy living (English).
6. Swasthavritta – Swasthya Raksha ki Ayurvediy Vidhi (Hindi).

Besides these, following Volumes of Journals and News Bulletin of CCRAS have also been released during the reporting period.

Journals:

1. Journal of Research in Ayurvedic Sciences (JRAS), Vol- 1, Issue – 4, October to December 2017.
2. Journal of Research in Ayurvedic Sciences (JRAS), Vol- 2, Issue –1, January to March 2018.
3. Journal of Research in Ayurvedic Sciences (JRAS), Vol- 2, Issue –2, April to June 2018.
4. Journal of Research in Ayurvedic Sciences Vol.2 Issue-3, July to September 2018.



5. Journal of Drug Research in Ayurvedic Sciences (JDRAS), Vol- 2, Issue – 4, October to December 2017.
6. Journal of Drug Research in Ayurvedic Sciences (JDRAS), Vol- 3, Issue –1, January to March 2018
7. Journal of Drug Research in Ayurvedic Sciences - Vol.3 Issue-2, April to June 2018

6.2. Intra Mural Literary Research Projects

Under the Intra Mural Research Programme, 04 literary research projects have been carried forward from the previous year while 08 new research projects were initiated. Out of total 12 literary research Projects, 01 project was completed during the reporting period. The brief report of these projects is as follows:

Table –58: List of IMR Projects

Projects carried forward from the previous year: 04
<ol style="list-style-type: none"> 1. Translation of Netra Prakashika (English and Hindi) 2. English translation of Abhinava Chintamani and Editing of Hindi version of the text published by the Council 3. A Chronicle of Dravyaguna: Tangible History based on Paleo-botanical, Archeological Sources 4. Documentation of Effective Marma Practices
New projects initiated during the reporting period: 08
<ol style="list-style-type: none"> 1. Implementation & Maintenance of “National AYUSH Morbidity and Standardized Terminologies Portal (NAMSTP) 2. AYUSH Research Portal 3. Preparation of Āyurveda Grantha Samuccaya (Ayurveda E-Book portal). 4. Marmadarpanam - Hindi and English Translation with comparative notes with Marma described in Ayurveda. 5. E-book preparation of Al-Qanun Fi al-Tibb (Canon of Medicine) written by Avicenna (Arabic Text). 6. Documetation and validation of Local Health Tradition & Folk Claims. 7. History of Inception and Development of Homoeopathy in India. 8. Preparation of Printed copies of Digitized Medical Manuscripts from South India, Madhya Pradesh and Maharashtra.
Completed Projects: 01
<ol style="list-style-type: none"> 1. Documentation of Effective Marma Practices



Completed project

6.2.1. Documentation of Effective Marma Practices

Objectives:

- Identification and preparation of directory of Marma practitioners.
- Documentation of marma management techniques.
- Identifying the special formulations used in Marma chikitsa.

Duration of Study: 10 months and further extended for three months.

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. V.C. Deep, Research Officer (Ayurveda), NARIP, Cheruthuruthy.

Date of initiation: 08.03.2018

Current Status: The project has been completed and the final document is under preparation.

Summary of work done: The documentation of Marma practices from 20 experts as per target has been completed and the draft document of the project has been submitted to Headquarter office.

Ongoing projects

6.2.2. Translation of Netra Prakashika (English and Hindi)

Objectives:

To translate the classical work on Ophthalmology in Ayurveda named Netra Prakashika into English and Hindi and publish it.

Duration of study: One year

Nature of document/ publication (Book, manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. V.K. Lavaniya, Research Officer (Ay.), CCRAS Hqrs., New Delhi.

Date of initiation: March, 2017.

Current Status: The work is in progress.

Summary of work done: The English translation work of 12 out of 14 chapters has been completed. The translation of last two chapters has been assigned to expert.

6.2.3. English translation of Abhinava Chintamani and Editing of Hindi version of the text published by the Council

Objectives: -

- Editing of Sanskrit version of the text followed by editing of Hindi translation of the text.
- English translation of text and finalization of the text.



Duration of Study: Two years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. V. Sridevi, Research Officer (Ay.), NIIMH, Hyderabad

Date of initiation: 26-09-2017.

Current Status: The work is in progress.

Summary of work done: Out of 66, editing of 62 chapters [from Chapter No. 1, 2, 7 to 66 i.e. Manaparibhashakashayadi nirupano nama kirana, rasadishuddhi nirupano nama kirana and Grahaniroga nirupano nama to Vamanadhikaradi...nirupano nama kirana completed.

6.2.4. A Chronicle of Dravyaguna: Tangible History based on paleo-botanical, Archeological Sources

Objectives:

- Systematic reconstruction of medicinal substances usage from Pre-Vedic (2500 BC) till Samhita period (500 BC) period based on Paleo-botanical and archeological evidences.

Duration of Study: One year and further extended for 6 more months.

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. T. Saketh Ram, Research Officer (Ay.), NIIMH, Hyderabad

Date of initiation: 02.02.2018

Current Status: The work is in progress.

Summary of work done: The relevant information from 20 different sources has been collected.

Relevant information, if any: Project tenure extended for 6 more months (w.e.f. 02-02-2019)

6.2.5. Implementation & Maintenance of “National AYUSH Morbidity and Standardized Terminologies Portal (NAMSTP)”

Objectives:

- To collect and systematically present National AYUSH Morbidity Statistics and Health Care Service Delivery indices.
- To promote usage of Electronic Health Records [E.H.R] across AYUSH Domain.
- To work as “NAMSTP Secretariat” on behalf of Ministry of AYUSH in terms of coordinating further revisions of ASU-Morbidity Codes, Standardized terminologies, and cross linkages with W.H.O. ICD-10/11, SNOMED etc., in liaison with World Health Organization, Central Bureau of Health Intelligence, Directorate General of Health Services (CBHI-DGHS), Ministry of Health and Family Welfare, Government of India, National Informatics Centre/Digital India, Quality Council of India (QCI), National Resource Centre for E.H.R Standards (NRCeS) etc.



Duration of Study: Three years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Online Dynamic Web Portal; Publication of National Ayurveda, Siddha, Unani Morbidity codes and standardized terminologies.

Participating centre along with PI: Dr. T. Saketh Ram, R.O (Ayurveda), NIIMH Hyderabad.

Date of initiation in project mode: 14th May 2018

Current Status: The portal is being maintained successfully.

Summary of work done:

Table –59: Data Upload Status

Medical System	By Institute			Total Number of Cases (from beginning)		
	OPD	IPD	Others	OPD	Others	IPD
Ayurveda	37	14	25	1060525	394207	17138
Yoga & Naturopathy	00	00	00	0	0	0
Unani	23	04	15	733788	168192	20553
Siddha	02	00	01	38793	26981	0
Homoeopathy	18	03	01	527131	60117	45303
Total	80	21	42	2360237	649497	82994
				3009734		

6.2.6. AYUSH Research Portal (www.ayushportal.nic.in)

Objectives:

- To carry out the entrusted the work of software design and development.
- Ayurveda research related data upload and
- Maintenance of AYUSH Research Portal.

Duration of Study: 3 years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Online Research Portal

Participating centre along with PI: Dr. P.V.V.Prasad, AD (Ay.), National Institute of Indian Medical Heritage, Hyderabad.

Date of initiation of the Project: 18-06-2018.

Summary of work done:

- Research article abstracts sent to the committees of AYUSH Research Portal: 1225
- Research article abstracts uploaded: 1207



Table –60: Research abstracts uploaded in AYUSH Research Portal

S. No.	Category	AYUSH MEDICAL SYSTEM					
		Ayurveda	Yoga & Naturopathy	Unani	Siddha	Homoeopathy	Sowa Rigpa
	Clinical Research	2668	1003	427	91	671	0
	Preclinical Research	10223	199	204	244	141	0
	Drug Research	5043	0	1196	294	433	0
	Fundamental Research & Others	1643	219	626	268	1069	0
Total		19577	1421	2453	897	2314	0
Grand Total		26662					

The task of AYUSH Research Portal has been entrusted to NIIMH, Hyderabad by CCRAS/ AYUSH in October 2010.

6.2.7. Preparation of Āyurveda Grantha Samuccaya (Ayurveda E-Book portal).

Objectives:

To prepare an “Ayurveda E-Book Portal” with effective search option(s) viz., key word in the context (KWIC) along with advanced epistemological, ontological and heuristic capabilities. The work will primarily cover primary texts of Ayurveda viz., Brihatrayi (Carakasamhita, Sushrutasamhita, Vagbhata), Laghutrayi (Madhavanidana, Sharangadharasamhita, Bhavaprakasha), important nighantu (lexicons), Ayurveda texts mentioned under Schedule 1 of D& C act 1940 and any other Ayurvedic text based literary work(s) already published by CCRAS/RAV/Ministry of AYUSH so far.

Duration of Study: One and half years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Platform independent, multi device compatible dynamic web portal and mobile application(s).

Participating centre along with PI: Dr. M.M. Sharma, R.O. (Ayu.), CCRAS Headquarter.

Date of initiation: 22.06.2018.

Current Status: The work is in progress.

Summary of work done:

- Typing of Sharngadharasamhita, Bhavaprakasha, Bhelasamhita, Rasavaisheshikasutra, Chikitsarnava, Vaidyamanorama, Rasachandamshu Yogaratnakara, Haritasamhita, Chakradatta, Kashyapasamhita, Vrikshayurveda, Anjananidana, Chikitsakalika, Rajamarthanda, Ayurvedasutra, Arkaprakasha, Siddhabheshajamanimala, Gadanigraha, Bhaishajyaratnavali (820 pages) and Vangasenasamhita (786 pages) have been completed.
- Proofreading of Sharngadharasamhita, Rasavaisheshikasutra, Anjananidana, Ayurvedasutra, Vaidyamanorama and Arkaprakasha have been completed and that of Bhavaprakasha, Chakradatta, Kashyapasamhita and Rajamarthanda are ongoing.
- Development of software module is in progress.



6.2.8. Marmadarpanam - Hindi and English Translation with comparative notes with Marma described in Ayurveda.

Objectives:

Hindi and English translation with comparative notes with Marma described in Ayurveda Classics

Duration of Study: One year

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. M.M.Sharma, R.O. (Ayu.) CCRAS Headquarters

Date of initiation: 05.06.2018.

Current Status: The work is in progress.

Summary of work done: English translation of the book has been completed and the Hindi translation is in progress.

6.2.9. E-book preparation of Al-Qanun Fi al-Tibb (Canon of Medicine) written by Avicenna (Arabic Text).

Objectives:

To prepare E-Book of Al-Qanun Fi al-Tibb (written by Avicenna) by

- Typing and typesetting of Arabic text of Al-Qanun
- Correction and proofreading of Arabic text of Al-Qanun
- Preparing of E-Book by uploading the data to the software in five parts in CD form

Duration of Study: Two years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): E-book

Participating centre along with PI: Dr. Ashfaque Ahmad, Research Officer (Unani), NIIMH Hyderabad.

Date of initiation: 13-08-2018

Current Status: The work is in progress.

Summary of work done:

- Typing, typesetting of Arabic texts of Al-Qanun Volume One (650 pages) and Al-Qanun Volume Two (Page No. 01-170) Total 170 pages have been completed till now
- Correction and proofreading of above texts has been completed
- Addition of the data to the software module has been initiated



6.2.10. Documentation and Validation of Local Health Traditions & Folk Claims

Objectives:

- To screen Local Health Traditions (LHTs) and folk claims collected through CCRAS-Tribal Health Care Research Program (THCRP) and Medico-Ethno-Botanical Survey (MEBS) Program during 2007-08 to 2017-2018 for novelty and uniqueness.
- Systematic documentation of coded drugs with new indication and usage.
- Systematic documentation of non-coded drugs/ claims as per Extra-pharmacopoeial format.
- Assessment of non-coded drugs/claims for Rasapanchaka and Pharmacological profile with scientific rationale along with safety and efficacy studies through pilot clinical studies as feasible.
- To publish the LHTs and folk claims found in Ayurvedic, Ethno-medical literature and related published literature, which are in vogue in tribal areas and communities

Duration of Study: One year

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book.

Participating centre along with PI: Dr. V. Sridevi, Research Officer (Ay.), CCRAS Hq., New Delhi.

Date of initiation: 18-10-2018.

Current Status: The work is in progress.

Summary of work done:

- Systematic documentation of all Local Health Traditions collected under THCRP during 2007-2008 to 2017-2018 (11 years) completed.
- Screening/ Validation of all LHTs collected under THCRP during 2015-2016 to 2017-2018 (3 years) for uniqueness/ novelty is completed.
- Finalization of systematic documentation and screening of Medico-Ethno-Botanical Practices (EMPs) collected under Medico-Ethno-Botanical Program during 2007-2008 to 2017-2018 is under progress.

6.2.11. History of Inception and development of Homoeopathy In India- NIIMH, Hyderabad

Objectives: To prepare comprehensive history of Homoeopathy in India since its inception and consequent developments till date and publish in the form of Monograph.

Duration of Study: 18 months

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. Biswo Ranjan Das, R.O (Homoeopathy), NIIMH Hyderabad.

Date of initiation: 1st March 2019



Current Status: The work is in progress.

Summary of work done:

- Biography of Homoeopathic Physicians, Dr. R.M. Banerjee, Dr. Sripad Banerjee, Dr. Anil Bhatia and Dr. B.K. Bose has been collected.
- Information on “Origin of Homoeopathy in India”, “Homoeopathic Education at Calcutta”, and “Resolution in Central Legislative Assembly-1937” has been collected.

6.2.12. Preparation of Printed copies of Digitized Medical Manuscripts from South India, Madhya Pradesh and Maharashtra

Objectives:

- To save and preserve the data of digitized Medical Manuscripts collated from South India, Madhya Pradesh and Maharashtra in print format for posterity.
- Identification, short-listing and prioritizing of rare and unpublished manuscripts for further appraisal of experts from the digitized collections.

Duration of Study: Two years

Nature of Document/ Publication (Book, Manuscript, Bibliography etc.): Printed Copies of manuscripts digitized from South India, Madhya Pradesh and Maharashtra.

Participating centre along with PI: Dr. P.V.V. Prasad, Assistant Director (Ay), NIIMH Hyderabad.

Date of initiation: 18-03-2019

Current Status: The work is in progress.

Summary of work done:

Photoshop work on two Manuscripts i. Abhidhanaratnamala (CDMM 1580) and ii. Vaidyachintamani (CDMM 1581) digitized from AP-ASPGMRIK (Andhra Sahitya Parishat Govt. Museum and Research Institute, Kakinada, Andhra Pradesh) has been initiated.

6.3. Collaborative Literary Research Projects

Under the Collaborative Literary Research Programme, 01 research projects has been carried forward from the previous year while 01 new research projects was initiated. Out of total 02 research Projects, 01 project was completed during the reporting period. The brief report of these projects is as follows:

Completed Projects: 01

1. Translation of most popular Marathi Compendium “Chikitsa Prabhakar” (English)

New projects initiated during the reporting period: 01

2. Hindi translation of Marathi Compendium ‘Chikitsa Prabhakar’



Completed project

6.3.1 Translation of most popular Marathi Compendium “Chikitsa Prabhakar”

Objectives:

Primary: To make available an authentic English translation of most popular Marathi Compendium Chikitsa Prabhakar.

Secondary:

- To include critical notes wherever required
- Preparation of appendix of botanical name wherever applicable

Duration of study: 1 year

Nature of document/ publication (Book, manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. Abhijit H. Joshi, Acting Registrar, Tilak Maharashtra Vidyapeeth, Pune.

Date of initiation: 02.05.2017.

Current Status: The project has been completed.

Summary of work done: The project has been completed and the document is under publication.

Ongoing project

6.3.2 Hindi translation of Marathi Compendium Chikitsa Prabhakar

Objectives:

Primary: To make available an authentic Hindi translation of most popular Marathi Compendium Chikitsa Prabhakar.

Secondary:

- To include critical notes wherever required.
- Preparation of appendix of botanical name wherever applicable

Duration of study: 1 year

Nature of document/ publication (Book, manuscript, Bibliography etc.): Book

Participating centre along with PI: Dr. Abhijit H. Joshi, Acting Registrar, Tilak Maharashtra Vidyapeeth, Pune.

Date of initiation: 21.02.2019

Current Status: The work is in progress.



Summary of work done:

- Translation of first introductory part “Guna Dosha of Padartha” from Page No. 1 to 23 has been done.
- Hindi Synonyms of medicinal plants described in introductory part has been searched and listed separately.
- Explanations of regional food items described in this part have been searched from internet, their translation is done and notes were prepared.

6.4. CCRAS-Research Management Information System (RMIS)

CCRAS, New Delhi has initiated RMIS programme for offering suggestions/inputs related to planning/ designing /protocol related, sampling and statistical issues etc. as required by M.D./M.S, Ph.D scholars and guides across Ayurvedic Institutes/Colleges.

Services offered under CCRAS-RMIS programme are as follows:

1. Formulating research question /hypothesis
2. Trial Design
3. Setting of objectives
4. Sampling/sample size.
5. Selection criteria
6. Investigations required (for diagnosis and assessment)
7. Assessment criteria/methods
8. Suggestions on Feasibility of interventions identified for study
9. Ethical Issues
10. Suggested useful literatures relevant to proposed study
11. General comments on the Synopsis /research plan
12. Data analysis and interpretation (of completed projects).

6.5. Documentation of Folklore Claims /LHTs

Through Medico-Ethno-Botanical Survey and Tribal Health Care Research Programmes, information on 658 folklore claims from traditional healers and general public from different tribal and forest areas across the country have been collected and documented during this reporting period (Table 51 & 52).



Table -61: LHTs/folklore claims documented through medico-ethno-botanical surveys

S.No.	Institute Name	LHTs/Folk claim collected
1	RARIMD, Bangalore	46
2	RARI, Jhansi	29
3	RARI, Tarikhet	63
4	RARIGID, Guwahati	13
5	RARI, Itanagar	124
6	RAIFR, Pune	175
Total		450

Table -62: LHTs/folk claims documented through THCRP

S.No.	Institute Name	LHTs/ Folk claim collected through THCRP	LHTs/ Folk claim collected through SCSP
1	CARIHD, Bhubaneswar	15	5
2	CARIDD, Kolkata	15	0
3	RARIECD, Jaipur	15	4
4	RARIDD, Gwalior	15	5
5	RARISD, Vijayawada	15	5
6	RARIMCH, Nagpur	15	6
7	RARIMD, Bangalore	15	Project not allotted
8	RARIID, Patna	13	5
9	RARIGID, Guwahati	15	5
10	RARI, Gangtok	16	5
11	RARIND, Jammu	15	4
12	NIIMH, Hyderabad	15	Project not allotted
13	ALRCA, Chennai	08	5
14	RARC, Port Blair	15	Project not allotted
15	NRISR, Leh	06	Project not allotted
16	CARICD, New Delhi	Project not allotted	1
17	NARIP, Cheruthuruthy	-do-	6
18	CARIRD, Patiala	-do-	6
19	RARIED, Lucknow	-do-	5
20	CARIC, Mumbai	-do-	2
21	RARILSD, Trivandrum	-do-	5
22	RARIND, Mandi	-do-	5
23	RARISD, Ahmedabad	-do-	5
24	ACAMH&NS, Bangalore	-do-	5
Total		208	89



6.6 Research Papers

During the reporting year, 214 research papers published in Journal's Bulletin, 41 papers published in conference proceedings souvenirs etc. and 10 Books were published.

Table – 63 (a): Details of research publication in Journals

S. No.	Name of the Author	Title of paper	Name of Journals/ Bulletin	Date of Publication
A. Clinical Research				
1	Bhavya. B. M.	A Case Study on Retinitis Pigmentosa which Responded to Ayurvedic Management	Intl Jour. of Applied Res. (IJAR) Vol.9, (2):20-21.	Feb., 2019
2	Kumawat V.B.	A clinical trial of Arogyavardhinivati and Lekhaniyamahakashaya in the management of obesity	Ayush Dhara, Vol 5, Issue 4, Page-1781-1785	July-Aug., 2018
3	Biradar L.M. & Doddamani S.H.	A comparative clinical study on the effect of virechana karma and shamana snehapana in kitibha kushta with special reference to psoriasis.	International journal of medical and applied sciences. Vol. 7 (2), 2018. pg no 24-33	Jan., 2019
4	Sudhakar D.	A comparative study to assess the modulation of stress by shirodhara in healthy individuals by psychometric and heart rate variability measures	Applied medical research, Volume 6, Issue 2	March, 2019
5	Bhende M.P., Bamnikar M.D., Sheetal B. & Baheti S.R.	A Study on Ashwagandha Granules in the management of Balshosh (Kuposhan)	World Journal of Pharmaceutical Research, 2019, Vol-8, Issue-3, 747-760	March, 2019
6	Chaudhari S.Y., Galib R., Patgiri B.J. & Prajapati P.K.	Anti-hyperlipidemic effect of Hridayarna rasa– a randomized double blind clinical study	Indian J Ayurveda Res 2018; 1:4-10	July–Dec., 2018
7	Surendran E.S.	Ayurvedic management of abnormal fluid collection in uterus –a case report	IJRAP (International Journal of Research in Ayurveda and Pharmacy), Vol 9, issue 4	Aug., 2018
8	Ratha K.K. & Meher S.K.	Ayurvedic management of acute viral hepatitis: A case report	Indian J Case Reports. 2018; 4(6):511-514	Nov.-Dec., 2018
9	Lal A., Mithuna K. & Pratap Shankar K.M.	Ayurvedic management of Bell's Palsy – A Single Case Report	International Journal of AYUSH Case reports (IJA CARE) Jan-Mar 2019; 3(1); ISSN: 2457-0443	Jan.-Mar., 2019
10	Doddamani S.H., Shubhashree M.N., Naik R., Giri S.K., & Bharali B.K.	Ayurvedic Management of Extra Hepatic Manifestation (Cutaneous vasculitis) in Hepatitis-B: A Case Report	International Journal of Complementary & Alternative Medicine Volume 11 Issue 6 - 2018.	Feb., 2019
11	Sinimol. T.P. & Surendran E.S. & Sumedhan V.	Ayurvedic management of Lumbar spondylolisthesis (kati shoola) with special reference to Chinchalavana sweda- A case report	International Journal of Ayurveda and Pharma Research, Volume 7, Issue 1	March, 2019
12	Srivastava A., Makhija D., Singh S.K., Khanduri S., Dua P., Yadav B. & Rana R.	Clinical efficacy and safety of Mahatriphaladya Ghrita in the management of Allergic Conjunctivitis: A prospective open label study	Journal of Research in Ayurvedic Sciences, Vol.-1(4); 247-253	April, 2018



13	Rao B.C.S., Sahu S., Gupta H.K., Yadav B., Chaudhary S., Bhuyan G.C., Khanduri S., Sharma B.S., Rana R. & Singhal R.	Clinical Efficacy and Safety of Sarasvata Ghrita in the Management of Cognitive Deficit–A Prospective Open Label Study.	Journal of Research in Ayurvedic Sciences,(Pg.63-69) Volume: 2, Issue – 2, Pages- 63-69	Oct., 2018
14	Thugutla M., Jain A.K., Swamy G.K., Ghosh S., Sai Prasad A.J.V., Sunita, Rao M.M, Subhose V., Kumavat V.B., Srinivas P., Makhija R., Khanduri S., Rana R.K., Singhal R., Bharti & Srikanth N.	Clinical Efficacy of Classical Ayurvedic Formulations Vatari Guggulu, Rasnasaptaka Kashaya, and Brihat Saindhavadya Taila in the Management of Rheumatoid Arthritis (Amavata): An Open-label Prospective Randomized Multicenter Study	Journal of Research in Ayurvedic Sciences, Volume 2, Issue 1 Pages No:1-11	July, 2018
15	Sharma S., Sekhar Namburi U.R., Sunita, Sharma R., Bharti, Rana R., Singhal R., Shikanth N. & Dhiman K.S.	Clinical Efficacy/Safety of Therapeutic Combination; Kshirbala Taila, Matra Basti, Vatari Guggulu, Maharasnadi Kwatha and Narayan Taila in the Management of Osteoarthritis Knee (Sandhivata): A Prospective Open Label Study	Journal of Research in Ayurvedic Sciences, Vol.- 2(2); 90-98	Oct., 2018
16	Suryavanshi M., Meena H.M.L. & Babu G. et. al	Clinical evaluation and safety of “Vasavaleha” in the Management of Stable Chronic Bronchitis: A Prospective open Label Multicentric Study	Journal of Research in Ayurvedic Sciences 2017;1(4):231-237	April, 2018
17	Ramana G.V., Gupta H.K., Sudhakar D., Singh R., Rana R. & Singhal R.	Clinical Evaluation of Aswagandha and Mandookaparni in the management of Manodwega (Generalized Anxiety Disorder)	Journal of Research in Ayurvedic Sciences, Volume: 2, Issue – 2, Pages- 70-79	Oct., 2018
18	Sahoo S.,Sudhakar D., Bhuyan G.C., Rana R., Singhal R, Dua P.K., Khanduri S. & Yadav B.	Clinical Evaluation of Brahmi Ghrita and Jyotishmati Taila in the Management of Cognitive Deficit in Children	Journal of Research in Ayurvedic Sciences Volume: 2, Issue - 2 Pages- 80-89	Oct., 2018
19	Makhija D., Bharti, Dua M., Ota S., Jadhav N. & Vedi S.K.	Clinical evaluation of Mahatriphaladi Ghrita and Anu Taila Nasya in Computer Vision Syndrome	Journal of Research in Ayurvedic Sciences (JRAS): 2(3) Pg. No. 156-163	March, 2019
20	Srinivas P., Subhose V., Deep V.C., Sharma S.K., Ota S., Sai Prasad A.J.V., Babu G., Radhakrishnan P., Sharma O.R., Dua P., Rana R., Singhal R. & Narayanam S.	Clinical evaluation of Nisha Katakadi Kashaya and Yashada bhasma in the Management of Type-2 Diabetes mellitus (Madhumeha): A multi centre, Open Label Prospective Study	Journal of Research in Ayurvedic Sciences, 2 (2): 108-121	Oct., 2018
21	Kolhe R.H. & Acharya R.	Clinical evaluation of three source drugs of Trivrut on Purishaja Anaha (Constipation): Randomized comparative double blind clinical study	Journal of Research in Ayurvedic Science 2018; 2(1):20-26	July, 2018
22	Sharma O.R., Goel S., Arya D. & Lavaniya V.K.	Clinical Observation of Panchamrit Lauha Guggulu and Panchguna Taila in the Management of Greevastambha (Cervical Spondylosis): Retrospective Analysis	Journal of Research in Ayurvedic Science 2018; 2(3):176-179.	March, 2019



23	Sharma B.S., Srinivas P., Venkateswarlu G., Gundeti M.S., Marlewar S., Kumar K., Das B., Ravte R., Wakode V.B., Khanduri S., Rana R. & Singhal R.	Clinical Safety of Selected Ayurvedic Formulations as Rasayana in Apparently Healthy Elderly Persons: A Pharmacoepidemiological Perspective	Journal of Research in Ayurvedic Sciences 2(2):122-131	Oct., 2018
24	Ota S., Dua P., Sahu D.S., Sharma S.K., Bharali B.K., Gangrude V.V., Namburi U.R.S., Jain S., Srinivas P., Subhose V., Deep V.C., Sharma L., Sheetal A., Khanduri S., Yadav B., Sharma B.S. & Srikanth N.	Clinical Safety of Selected Ayurvedic Formulations in Diabetes Mellitus— A Pharmaco-epidemiological Perspective	Journal of Research in Ayurvedic Sciences, 2018;2(3): 180-187	March, 2019
25	Rohit K.S	Clinical study on immobilization using vamsha kusha bandha with raktachandana triputah triphala and haridra in comparison to plaster of paris cast in the management of Colles fracture	International Ayurvedic Medical Journal, ISSN: 2320 5091 Vol.6, Issue 9	Sept., 2018
26	Goel S. & Ojha N.	Clinical study on the efficacy of an Ayurvedic compound and Panchakarma procedure in the management of spasticity among children suffering from spastic Cerebral palsy.	Journal of Ayurveda. XII(2): 2018	Dec., 2018
27	Bora G.K., Yadav S. & Goswami R.K.	Correlative study between lipid profile and disease activity in patients with Rheumatoid Arthritis-A hospital based study	International Journal of Advanced Research (IJAR), 6 (4), 625-632	April, 2018
28	Soumya M.C., Pradeep Raj R. S. & Ratheesh P.	Curing Acute Prostatitis by means of Ayurveda – A Case a report	Journal of Ayurveda and Integrated Medical Sciences, Nov. - Dec., 2018; Vol -3, Issue 6; 189 - 192	Jan., 2019
29	Nair P.P.	Effect of an Ayurvedic combination in abnormal serum cholesterol and Liver enzymes – a pilot study	International Journal of Research in Ayurveda and Pharmacy, ISSN: 2277-4343 (P), ISSN: 2229-3566 (O) Vol 9/ Issue 2, Pg: 80-85	April, 2018
30	Krishana kumar V.	Effect of Ayurvedic treatment on Allergic Conjunctivitis	International Journal of Scientific Research, Volume-7; Issue-7; July-2018; 39-40; ISSN No 2277 – 8179	Feb., 2019
31	Surendran E.S.	Effect of combination of certain indigenous drugs in hirsutism	International Journal of Health sciences and research, Vol.- 8 issue 7; 92-96	July, 2018
32	Chandla A.	Effect of Gokshuradi Guggul and Varunadi Kwath in the management of Renal Calculi and Simple Ovarian Cyst-A Case Report	International Journal of AYUSH Case Reports. Oct-Dec.2018; 2(4); 1-4	Jan., 2019



33	Hetalben A.	Effect of Moth (Cyperus Rotundus Linn.) And Nagarmoth (Cyperus Scariosus Linn.) The Management of Sthaulya(- Obesity)	European Journal Biomedical And Pharmaceutical Sciences, ISSN No. 2349-8870, Volume 6, Issue I, 2019; 287 to 292	Jan., 2019
34	Ravte R.K., Ray C., Mitra A. & Hazra J.	Effective treatment response of Ayurvedic formulation in Chronic diabetic foot ulcer: a case study	Aryavaidyam, Vol.- XXXII, No. 1	Aug.– Oct., 2018
35	Ratheesh P., Abhayadev A., Sumedhan V., Meghna P.P., Srinivasan M., Sudhakar D., Sunilkumar & Kannadas C.S.	Effectiveness of Ayurvedic intervention in Primary Open Angle Glaucoma (Kaphaja Adhimantha) - A Case Study	Journal of Ayurveda and Integrated Medical Sciences, Vol-3, Issue-4, Page 210-219	July – Aug., 2018
36	Shubhashree M.N., Das B., Nanda G.C., Swamy G.K., Ota S., Doddamani S., Rao M.M., Tewari V., Sharma B.S., Khanduri S., Rana R., Singhal R., Kumar A. & Srikanth N.	Efficacy and safety of Mamajjaka Ghanavati in the treatment of type 2 diabetes mellitus: a prospective open label multi-center clinical study	Clinical Trails in Degenerative Diseases, Volume-4, Issue-1, Page-7-13	March, 2019
37	Mangal A.	Efficacy of an Ayurvedic intervention in the management of hypertension: A case study	International Journal of Research in Ayurveda and Pharmacy IJRAP; 10 (1):2019, pp 64-66.	Feb., 2019
38	Rao M.M., Radhakrishnan P., Subose V., Ota S., Bhuyan G.C., Dua P., Khanduri S., Yadav B., Rana R., Singhal R. & Srikanth N.	Evaluation of Vyoshadi Guggulu and Haritaki Churna in the Management of Dyslipidemia: A Multicenter Prospective Clinical Study.	Journal of Research in Ayurvedic Sciences, January-March 2018; 2(1):12-19	July, 2018
39	Deep V.C.	Exploration of efficacy of panchakarma treatment in endosulfan affected population	International Journal of Medical and Health Research ISSN: 2454 -9142, Vol.4: Issue-7, P-118 -123	July, 2018
40	Panda A.K. & Ratha K.K.	Fibro scan evidence of Reversal of Liver fibrosis by Ayurveda Medication: Case series	Journal of clinical and experimental hepatology, Vol.- 8, Supplement 1, Page S79	July, 2018
41	Nair D.R., Ravte R.K., Mitra A. & Hazra J.	Hemodynamic Evaluation of Abhyanga (Oil Massage) With Sarvanga Sweda (Ayurvedic Heat Therapy).	Aryavaidyam, Vol XXXI, No, 3	Feb., - April, 2018
42	Shah A.B. & Mohod P.	Indralupta (Alopecia areata) A case successfully treated with Jalukavacharan (a leech therapy)	International Journal of Ayurveda and Pharma Research, Vol 7 Issue – 1; Page 10-12, ISSN 2322-0902 (P); ISSN 2322-0910 (O)	Jan., 2019
43	Chandla A. & Tomer R.	Kshara, Prakshalana and Picchu Karma” as Ayurvedic Treatment modalities in Cervical Erosion: A Case Study	World Journal of Pharmacy and Pharmaceutical, Vol-8, Issue-1, 2019	Jan., 2019



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137	Debnath S.K., Barik L., Sahu D., Dixit A.K. & Rao M.M.	Probable Standardization for quality control of Guggulu	International Ayurvedic Medical Journal, Volume 7, Issue 2, P.No.192-196	Feb., 2019
138	Debnath S.K., Sahu D., Das D., Barik L. Rao M.M.	Probable Standardization of Alambushadi Churna Tablet for quality control	Journal of Ayurvedic and Herbal Medicine, 8:6 (2018) 3386-3391	Nov., - Dec., 2018
139	Senthamil K.M., Radha R., Vadivu R. & Nartunai G.	Raw Material Standardization of a Polyherbal Ayurvedic Formulation: Patoladi Kvatha Churnafor Skin Diseases	World Journal of Pharmacy and Pharmaceutical Sciences; 7(4), 1021-1030	March 2018
140	Singh S., Kumar V., Chauhan A., Datta S., Wani A.B., Singh N. & Singh J.	Toxicity, degradation and analysis of the herbicide atrazine.	Environmental Chemistry Letters. 2018, 16, 211-237	April, 2018
141	Sainthiya V., Asokan A., Dey Y.N. & Wanjari M.M.	Vesicular Arbuscular Mycorrhiza association augments antioxidant activity of Vitex negundo leaves.	International Journal for Research in Applied Sciences and Biotechnology. 2018 (5)3: 15-22.	May, 2018
F. Literary & Miscellaneous				
142	Pradeep Kumar P.P., Radhakrishnan P., Krishna Rao S., Indu S. & Deep V.C.	A Brief review on Avapeedaka snehapana principles and practice	International Journal of Research in Ayurveda and Pharmacy Vol. 9. Issue 5, Page 24-26	Nov., 2018
143	Jadhav N.	A brief compilation on Triphala- a wonder compound in ayurvedic ophthalmology-	International journal of ayurvedic allied sciences vol.7(8) page 123-128	Dec., 2018
144	Shubhashree M.N. & Bhavya B.M.	A comprehensive drug review on the role of ayur. Med. plants in Mukharogas with special ref. to oral diseases	International Journal of Complementary & Alt. Med. Vol 11. (6)- 2018. 404-407.	Nov., 2018
145	Kumari M.	A Comprehensive Review of Physiological Aspects of Apana	IJAPC, Vol. 10, Issue 1, Pages 137-150	Jan., 2019
146	Sinimol.T.P.	A critical review on Medohara (Antidyslipidemic) Action of stem bark of Cirabilwa (Holoptelea Integrifolia Planch.)' with special reference to ayurvedic and modern aspect.	International Journal of Ayurveda and Pharma Research Volume 6, Issue 3, Page No. 32-36	April, 2018



147	Sinimol T.P., Meghna P.P. & Soumya M.C.	A critical review on the application of Yukti pramana for logical inclusion or rejection of a drug mentioned in aushadha yoga (medicinal formulations) according to clinical condition	International Journal of Ayurveda and Pharma Research, Vol 6, Issue 9; 67-70	Oct., 2018
148	Pratap K.M. Shankar, Rohit K.S., Pratap Kumar P.P. & Babu G.	A Critical Review on various Indications of Paniya Kshara	The Antiseptic Vol. no.115, No.9, Pp.27-33, 9(4):103-106	Sept., 2018,
149	Sahoo S.	A Glimpse of Upaluta Yoni Vyapath in Relation to Vulvo Vaginal Candidiasis	Asian Journal of Medical and Health Research; Volume - 3, Issue - 7; 19-29	July, 2018
150	Vyas K., Sharma V., Goel S., Shinde P. & Sharma O.R.	A review on concept of Gulma in Ayurveda with special reference to Inflammation and Pain	International Journal of Research in Ayurveda and Pharmacy, Vol. 9 (2), Page 1-5	April, 2018
151	Thakur R., Meena A.K., Dixit A.K. & Joshi S.	A Review on Different Sources of Piper nigrum L. Adulterants.	Research J. Pharm. and Tech Vol.-11(9): 813-821	Dec., 2018
152	Pratap Shankar K.M., Lal A.M. & Radhakrishnan	A Review on Platelet Enhancing Property of Vasa (Adhatoda Vasica Nees) in Dengue Fever and Dengue Haemorrhagic Fever	AYUHOM Vol 5, Issue 1, pg: 11-16.	Jan – Jun 2018
153	Sarkar B.K., Kumar V., Reeta, Singh H. & Kumar R.	A Review on Stability Studies of Ayurvedic Pharmaceutical Dosage Form	Journal of Hospital Pharmacy, (1), Supplement issue pp 58-64	2018
154	Kuldeep, Tiwari S.K., Tewari V. & Choudhary S.A.	A Review on Takradhara: Special Panchkarma Therapy	International journal of Ayurveda and Pharmaceutical Chemistry, Volume 8, Issue 3, P.No. 135-142	May, 2018
155	Tewari D., Kuldeep, Tiwari S.K., Choudhary S.A. & Tewari V.	A Scientific Review on Sanjivani Vati with special reference to its Pharmacological actions, Therapeutic indications and Pharmaceutics	International journal of Ayurveda and Pharmaceutical Chemistry, Volume 9 issue 3, 2018, P.No. 82-92	Nov., 2018
156	Ratha K.K., Meher S.K. & Rao M.M.	An Enumeration and Review of Medicinal Plants Mentioned in Bhela Samhita.	Journal of Drug Research in Ayurvedic Sciences,; 3(1): 53-62	Sept., 2018
157	Bhavya B.M. & Tejaswini C.	An overview on Bell's palsy with special reference to Ardita in Ayurvedic perspective	International Journal of Research in Ayurveda & Pharmacy (IJRAP), Volume-10 Issue-1:1-3.	Feb., 2019
158	Bhavya. B.M.	An overview on clinical Dentistry: A conceptual framework in Ayurveda	Intl Jour.of Res. in Ayurveda & Pharmacy (IJRAP) 9(4):1-4	July, 2018
159	Nair P., Shreedeepti & Mohod P.	Animal utilization in Ayurvedic Surgical and Parasurgical Measures mentioned by Sushruta	Universal Review ISSN NO. 2277 2723, Vol. 7. Issue XI Page 525-530	Nov., 2018
160	Panda P., Das B., Meher S.K., Bhuyan G.C. & Hazra J.	Arka Kalpana & Its Importance in Ayurveda.	International Ayurvedic Medical journal, Vol -7, Issue 3, (Pg 413-418)	March, 2019
161	Sahu S.K., Sinha A.K. & Ghuse R.	Ashwagandha-Nature's Boon for a Healthy Life	World Journal of Pharmaceutical Research, Volume 7, Issue 18, 598-612. ISSN 2277-7105	Jan., 2019



162	Murali Krishna C., Siva Ram G., Venkateswarlu B., Malini S., Dhoke S.P., Gopod S. & Babu G.	Ayurvedic Drugs in the Management of Hirsutism (Avanchita Roma) – A Review	International Journal of Ayurvedic Medicine, 9(3); page no. 144-147; ISSN: 0976-5921	June – Sept., 2018
163	Kumar P., Salini. S., Krishna rao S. Indu S., Radhakrishnan P. & Deep V.C.	Ayurvedic Perspective and management guidelines in Carpel tunnel syndrome	Journal of Ayurveda and Holistic medicine Vol. VI, Issue IV, ISSN-2321-1563,87-93	July – Aug., 2018
164	Krishana kumar V. & Makhija P.	Ayurvedic treatment of Diabetic Retinopathy-A Review	International Journal of Ayurvedic and Herbal Medicine; Volume 8 Issue 3; 3235–3240	July, 2018
165	Prasad A. & Rai A.K. et. al.	Ayurvedic approach in the management of Sandhigatavata: A critical review	IJRAP, vol – 9(2), pp.12-17	April 2018
166	Goel S. & Rao B.C.S.	Book review: Ayurvedic Management of Common Disease Conditions	JRAS, Volume 2, Issue 1, January-March 2018, p 60-61	July, 2018
167	Goel S. & Maheshwar T.	Book review: Evidence-based Ayurvedic Practice.	JRAS, Volume 1, (4), October-December 2017 P.,314	April, 2018
168	Goel S. & Mangal A.K.	Book review: Research Publications in Ayurvedic Sciences.	JDRAS, Volume 2, Issue 4, October-December 2017.P, 313-314	April, 2018
169	Potbhare B.M. & Wakode V.	Buddhist Councils (Sangiti) and its literature: A Review.	International Journal of Ayurveda and Pharma Research, January 2019, Vol.- 7, Issue – 1, 13-17	March 2019
170	Gundeti M.S., Saketh Ram T., Reddy R.G., Marlewar S. & Bhurke L.	Comprehensive Integrated format for systematic documentation of cancer management through Ayurveda interventions	JRAS, October-December 2017;1(4):263-282	April 2018.
171	Upadhyay S.N., Bora M., Kawlani L., Mukherjee K. & Hazra J.	Comprehensive Pharmacology Review of [Guduchi (Tinospora cordifolia Willd. Miers)]	Journal of Drug Research in Ayurvedic Sciences, 3(1): 48-52.	Sept., 2018
172	Sharma S.	Concept of ageing and certain single drug intervention in Ayurveda: a review	IJRAP, Vol.9, Issue 2, Pages 45-48	April, 2018
173	Siva Ram G., Murali Krishna C., Panchajanya Kumar D., Midhuna K., Mohan & Babu G.	Conceptual Review on Vijaya (Cannabis Sativa Linn.): A forgotten Ambrosia	International Journal of research in Ayurveda and Pharmacy 2018, 9(2),18-27	April, 2018
174	Sharma N., Sharma U. & Sharma N.	Critical appraisal of shadkriyakala in context of carcinogenesis.	World Journal of Pharmaceutical and Medical Research; 4(4), 161 -164	April, 2018
175	Nair P.G., Nair P.P., Deep V.C. & Radhakrishnan. P	Critical Review on Ellumnishadi Lepa: A Ayurvedic topical applicant in Knee Joint Swellings associated with Rheumatoid arthritis	International Journal of Research in Ayurveda & Pharmacy Vol.-9, Issue 3, Page: 1-4	May-June, 2018
176	Rohit K.S., Dhanya N.S, Deep V.C., Radhakrishnan. P. & Kumar P.	Critical Study on Amavata VIS-À-VIS Rheumatoid Arthritis with its research updates	International Journal of Recent Scientific Research Vol.9, Issue 6 (B), pp.27303-08	June, 2018



177	Sharma S.	Dietetic and lifestyle approach of Ayurveda in certain urinary disorders	IJAPC, Vol.10 Issue 2, Pages 25-34	March, 2019
178	Kabra A., Sharma R., Rao M.M. & Baghel U.S.	Emerging and alternative therapies for Parkinson disease: an updated review	Current Pharmaceutical Design 2018; Vol 24: Issue-22	August, 2018
179	Das J.R. & Borah T.	Etiopathological study of avabahuka with special reference to frozen shoulder: a review	International journal of Research in Ayurveda and Pharmacy, Volume 9, Issue 2, 9(4):140-143	September 2018
180	Deepshikha, Rai A.K. & Bharti	Evidence based management of Insomnia through Ayurveda	IJAPC, Vol. – 8 (3), pp.- 273-289, 2018	May, 2018
181	Khanduri S., Goel S., Sharma B.S., Maheshwar T. & Srikanth N.	Generation of Evidence on Clinical Safety and Efficacy of Classical Ayurveda Formulations: A Short Appraisal of CCRAS Initiatives.	J Res Ayurvedic Sci 2018; 2(2):140-143.	Oct., 2018
182	Sharma R., Kabra A., Rao M.M. & Prajapati P.K.	Herbal and Holistic Solutions for Neurodegenerative and Depressive Disorders: Leads from Ayurveda	Current Pharmaceutical Design 2018;24:22:2597-2608	Aug., 2018
183	Bharti	Integrated approach to management of lifestyle disorders	IJRMST, Vol. 6,	Dec., 2018
184	Singh R., Ota S., Khanduri S., Rani S., Bhadula A., Sharma R., Shahi V.K., Bharti, Srikanth N. & Dhiman K.S.	Integration of AYUSH (Ayurveda and Yoga) with National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS): An Appraisal of Central Council for Research in Ayurvedic Sciences Research and Development Initiatives	Journal of Research in Ayurvedic Sciences, January-March 2018; 2(1): 27-36	July, 2018
185	Antony C.	Ksheeralsaka vis a vis Cow's milk Allergy, A critical review	IJAPR, Vol.6, Issue 6.	June, 2018
186	Krishna Rao S., Indu S. & Pradeep Kumar P.P.	Lipid Based Drug Delivery System in Ayurveda – An Overview	International Journal of Ayurveda and Pharmaceutical Chemistry Vol. 8, Issue 3, ISSN 2350-0204, Pages 101-112	May, 2018
187	Negi V.K., Susheela P., Vyas A., Sharma Om & Sharma S.K.	Marma and Marma Therapy: A Review	World Journal of Pharmaceutical Research vol- 7, issue 15:258-271	Aug., 2018
188	Bansode S., D Bamnikar M. & Baheti S.R.	Mechanism of Nasya: An overview	World Journal of Pharmaceutical Research, 2019, Vol-8, Issue-3, 343-351	March, 2019
189	Nair P.P., Sreedeepti G.N. & Rohit K.S.	Need of Pharmacovigilance in Ayurveda: A review	International Journal of Research in Ayurveda and Pharmacy ISSN (online) 2229-3566, ISSN (Print) 2277-4343	Aug., 2018
190	Das B., Panda P., Meher S.K., Bhuyan G. C. & Hazra J.	Non Communicable Diseases in Ayurveda.	International Ayurvedic Medical journal, Vol -7, Issue 3, 398-402	March, 2019
191	Ekka R., Baslingappa K. & Rohra P.	Padabhyanga in general life style and its clinical aspect	International Ayurveda Publication, May-Jun 2018, Volume III, Issue 3; 928-932	June, 2018



192	Kabra A., Thakur S., Sharma R., Garg R. & Baghel U.S.	Parkinson's Disease and Depression- Together or Apart: A Review	Asian J. Adv. Basic Sci.: 2018, 6(2), 27-34	Sep., 2018
193	Kumar P., Shankar K.M., Rohit K.S. & Rao K.	Pathophysiology of uterine fibroid an Ayurvedic perspective : A review	International Journal of Research in Ayurveda and Pharmacy, Vol.9, issue 4, Page: 5-8	Sept., 2018
194	Panda P., Das B. Meher S.K., Bhuyan G.C. & Hazra J.	Pippali: A potent drug used for hepatic disorder W.S.R Yakritodara - A review	International Ayurvedic Medical Journal Vol- 6, Issue 10	Oct., 2018
195	Kumar V., Singh S., Sidhu G.K., Datta S., Dhanjal D.S., Koul B., Janeja H.S. & Singh J.	Plant growth promoting rhizobacteria from heavy metal contaminated soil and their plant growth promoting attributes for <i>Pisum sativum L.</i>	Biocatalysis and Agricultural Biotechnology, 17, 665-671, 2019	Feb., 2019
196	Asha S.	Primary tooth eruption - An Ayurvedic overview	Published in IAMJ Journal, Volume VII, Issue I, Page no: 126 - 132	Jan., 2019
197	Das B.R.	Prophylactic aspect of Homoeopathy an overview from ancient to modern era	International Journal of Ayurveda and Pharma Research, Vol 6, Issue 11, pg. 22-28	Nov., 2018
198	Venkateswarlu B., Anumol K., Mithuna M., Bai, P. Murali Krishna C. & Babu G.	Review on Evidence Based Ayurvedic Treatment Practices for Psoriasis	International Journal of Ayurvedic Medicine, 9(2), Pp.39-41	July, 2018
199	Dighe D.P., Panda P., Pradeepkumar P. P., Swani P.S. & Rao M.M.	Review on pharmacological properties of arishta kalpana with a glance on arishta kalpas of Bhaishajya Ratnavali	International Journal of Research in Ayurveda and Pharmacy, 9(2), Pg: 6-11	April 2018
200	Sumedhan V., Meghna P.P. & Ratheesh P.	Review on Pottali Kalpana	Journal of Ayurveda and Integrated Medical Sciences, Vol 3, Issue 4; 96.102	Sept., 2018
201	Meghna P.P.	Review on Utharavasthi (Urogenital route of medicine administration)	Journal of Research in Traditional Medicine science, Vol.- 4, Issue 1; 26-32	May, 2018
202	Kumawat V.B.	Role of Adhatoda Vasaca in management of respiratory Disorders	Environment Conservation Journal, Vol. 19, Issue 3, Page-73-75	Nov., 2018
203	Nair D.R. & Hazra J.	Scope and Concept of Panchakarma therapy as a tool to prevent disease recurrence- A critical review.	Indian Journal of Applied Research (IJAR), Volume -8, Issue 5.	May, 2018
204	Dedge A.P., Gundeti M.S. & Reddy R.G.	Scope of Ayurveda Interventions to improve palliative care practices in terminally ill cancer patients.	Journal of Research in Ayurvedic Sciences, 2(3): 193-201 July – September 2018	March, 2019
205	Nair D.R., Sahu D. & Rao M.M.	Sirodhara as a management tool for neuro-endorcrine and psycho-somatic disorders – a comprehensive review.	Indian Journal of Applied Research (IJAR), Volume-8, Issue 11.	November, 2018
206	Bhat S., Naik R., Deshmukh S. & Lavaniya V.K.	Status of Evidence-based Ayurveda Dietetics and Challenges in Research: A Review	Journal of Research in Ayurvedic Sciences, 2018; 2(3):188-192	March, 2019



207	Asha S.	Sthanyajanana Dashemani And its Galactogogue Action – A Review	International Ayurvedic Medical Journal, Volume 6, Issue 4; 880-886	April, 2018
208	Kumar H., Ekta, Soni R. K. & Prasad M.	Study of Ambu in relation to pathophysiology	Journal of AYUSH, Volume 7, Issue 3; 11-15	Oct., 2018
209	Gajarmal A.A., Rath S.	The Critical Analysis of Ashtavidha Virya	International Journal of Ayurveda and Pharmaceutical Chemistry (IJAPC), ISSN 2350-0204, 2018, Vol. 8 Issue 2, 191-202.	Mar-Apr 2018
210	Kumawat V.B.	The scope of Ayurvedic medicine & therapy in the management of Infertility	IJAPR Journal, Vol. 6, Issue 10, Page-87-90	Oct., 2018
211	Balakrishnan P.	The theoretic frame work of Srotorodham and its clinical applications	Arya Vaidya Sala, Kottakkal publication	2018
212	Kumawat V.B. & Sharma B.K.	The use of Pan (Tambul) in medicine and health	Ayush Darpan Journal, Vol. 10, Issue. 1, Page –5-7	March, 2019
213	Doddamani S.H., Naik R., Shubhashree M. N., Giri S.K. & Bhat S.	Understanding prevention and management of metabolic syndrome – an ayurvedic prospective.	Ayur Anveeksha-Quarterly health journal. vol-1, issue-1, pg no 3-4	January – March
214	Negi V.K., Nariyal V., Sharma Om & Sharma S.K	Marma therapy in Avabahuka (Frozen Shoulder); A retrospective Cohort	World Journal of Pharmaceutical Research Vol.7, issue 19,1328-1334	Nov., 2018



Table – 63(b): Details of research Conference Proceedings, Sourveniers etc.

S. No.	Name of the Author	Title of paper	Name of Conference, Proceedings, Sourveniers	Date of Publication
A. Clinical Research				
1	Surendran E.S.	A comparative study on the effect of Nyagrodhadi gana kashaya with madhu in Dysfunctional Uterine bleeding with that of Asoka valkala ksheera kashaya-abstract	Published in the Souvenir of 39 th annual IABMS (Indian Association of Bio Medical Scientists) conference	Nov., 2018
2	Sinimol. T.P.	Anti-dyslipidemic (Medohara) effect of the stem bark of Cirabilwa (Holoptelea integrifolia Roxb. Planch.)- A clinical trial- abstract	Published in the Souvenir of 39 th annual IABMS (Indian Association of Bio Medical Scientists) conference	Nov., 2018
3	Surendran E.S.	Ayurvedic management of female Pelvic Organ prolapse –A Case series	World Ayurveda Congress and Expo 2018, World Ayurveda Foundation and Ministry of AYUSH, Govt. Of India	Dec.,2018
4	Chaudhari S.	Clinical efficacy of Hridayarnava Rasa in Hyperlipidemia	8 th World Ayurveda Congress- Ahmedabad, Gujarat.	14 th -18 th Dec-, 2019
5	Thakur R.	Clinical Evaluation of Ayurvedic Intervention in the management of Vyanga (Chloasma)	E-Souvenir NIRVISHA, 2 nd National Conf. & Workshop on Agadtantra, 24 th -27 th October at Shri. B.M.K. Ayurveda Mahavidyalaya, Belagavi. Pg No-119	Oct., 2018
6	Ghuse R.	Clinical study on Cerebral Palsy and its Management with Shastika Shali Pinda Sweda & Yoga basti	JAIM Issue 9 (2)	Feb., 2019
7	Barik L. D.	Management of Anorectal disorders in Ayurveda	Doctor's forum, Brahmapur, Ganjam, Odisha	7 th Oct., 2018
8	Giri S.K.	Management of Jalodara vis-à-vis Ascites with special reference to Virechana Yoga by Jalodarari Rasa	World Ayurveda Congress and Expo 2018, World Ayurveda Foundation and Ministry of AYUSH, Govt. of India	Dec.,2018
9	Ratheesh P.	Mode of Ayurvedic Intervention in Diabetic retinopathy (sannipathika kacha) associated with chronic renal failure- A case study - abstract	Published in the Souvenir of National seminar on RM& PHISSM, Sidha regional Research institute , Trivandrum	April, 2018
10	Doddamani S.H., Naik R., Shubhashree M.N. & Bharali B.K.	The effect of Pippali Guda Rasayana in the management of Subclinical hypothyroidism	Souvenir, 8 th World Ayurveda Congress and Arogya 2018.	14 th -17 th Dec., 2018



B Health Care Research and Ethno-medicine				
11	Shubhashree M.N., Bhavanagouri & Bharali B. K.	A glimpse of traditional Ayurvedic food for restoration of health	Souvenir-National conf. on indigenous knowledge system: A multidisciplinary exploration - returning to the roots” pg 89	Sept., 2018
12	Sumedhan V.	Community health services in kerala – abstract	Published in the Souvenier of National seminar on RM& PHISSM, Sidha regional Research institute , Trivandrum	April, 2018
C. Dravya Guna, Medico -Botanical Survey & Cultivation				
13	Das M., Banerjii A., Dutta S. & Rao M.M.	Investigation of selected Indian medicinal plants	Abstract book Proceedings of the 106 th Indian Science Congress	Jan., 2019
14	Dutta S., Mitra A., Rao M.M.	Scientific exploration of the controversy of nomenclature of Ayurvedic drug ‘Brahmi’ with scientific reference to classic principles and modern parameters	E-Abstract Book 5 th Convention Society for Ethnopharmacology, India	7 th -8 th Sept., 2018
E. Pharmacological Research				
15	Naik R., Nariya M., Acharya R. & Bharali B.K.	Adaptogenic activity of four botanical source plants of jīvantī - A comparative experimental evaluation	8 th World Ayurveda Congress and Arogya 2018.14 th – 17 th December	Dec., 2018
16	Ghosal S., Hazra K., Bolleddu R., Dutta S., Mitra A., Paria D. & Rao M.M.	Comparative Physicochemical and Chromatography Profile of Fresh, Shade dried and Sun Dried leaves of Bacopa monnieri.	E-Abstract Book 5 th Convention Society for Ethnopharmacology, India	7 th Sept., 2018
17	Gajarmal A.A.	Immunomodulatory activity of Chaturthamalaka Rasayana, an experimental evaluation	Abstract cum souvenir book of World Ayurveda Congress 2018.	14 th – 17 th Dec., 2018
18	Paria D., Hazra K., Bolleddu R., Dutta S., Mitra A., Ghosal S. & Rao M.M.	Pharmacognostic, Physico- chemical and Chromatography Profile of Bacopa monnieri Collected from Different Local Markets/ Vendors	E-Abstract Book 5 th Convention Society for Ethnopharmacology, India	Sept., 2018
19	Bolleddu R. & Rao M.M.	Pharmacognostical and phytochemical analysis of Bacopa monnieri (Brahmi),	E-Abstract Book 5 th Convention Society for Ethnopharmacology, India	Sept., 2018
20	Das M., Banerjii A. & Rao M.M.	Physico-chemical analysis, phytochemical screening and HPTLC finger printing profile of Bacopa monnieri (L) Whole Plant Extracts	E-Abstract Book 5 th Convention Society for Ethnopharmacology, India	7 th -8 th Sept., 2018
21	Mitra A.	Relevance of Chemical study in revealing the efficacy of Swarna Bhasma (Gold ash), a popular Ayurvedic formulation.	8 th WAC on 14-17 December 2018.	14 th -17 th Dec., 2018



F. Literary & Miscellaneous				
22	Mane S. & Gajarmal A.A.	A Comprehensive Study on animal product and their practices in Indian Traditional System of medicine	Abstract cum souvenir book of National Seminar on Environmental Changes and its Impact on Faunal diversity in Indian Agro Eco System.	
23	Shubhashree M.N. & Naik R.	A glimpse of research activities at CCRAS for enrichment of Dravyaguna	Souvenir, Dravyaguna Prabodhini 2019, Page no 151-157	Feb., 2019
24	Rajesh Bolleddu, M.M. Rao	Anthelmintic and anti oxidant activity of Karamarda fruits Carissa carandas Lin.	8 th World Ayurveda Congress- Ahmedabad, Gujarat.	Dec., 14-18, 2018
25	Choudhary K.	Ayurveda way of promoting Child health care	KAUMARCON-2019 International conference on “ Mother and Child health care through Ayurveda”	Feb., 2019
26	Shubhashree M.N., Bhavanagouri & Bharali B.K.	Ayurvedic perspective of Nano medicine	BIORIUVITH 2018 Int. Conf. On Multidisciplinary Approach Of Science: Nanotechnology - A Boon For Mankind page 39 Garden city college	Sept., 2018
27	Meghna P.P.	Food and health habits related to seasonal changes –An Ayurvedic Perspective- abstract	Published in the Souvenir of National seminar on RM& PHISSM, Sidha regional Research institute , Trivandrum	April, 2018
28	Sharma R.	Indigenous herbs as drug leads for Alzheimer’s disease.	E-Abstract Book 5th Convention Society for Ethnopharmacology, India	Sept., 2018
29	Ratha K.K. & Hazra J.	Management of Chronic Disease through Ayurveda.	Souvenir of “ Ayurveda Parv” organized by CARIHD, Bhubaneswar, and Vinoba Seva Pratisthane, held at Gapabandhu Ayurveda Mahavidyalaya, Puri	25 th Nov., 2018
30	Sengar A.S. & Singh N.K.	Management of Lifestyle Disorders through Ayurveda	Manthanam 2018- Seminar on Health through Ayurveda in current scenario organized by Bundelkhand Govt. Ayurvedic Medical college, Jhansi U.P.	1 st Dec., 2018
31	Bhuyan G.C., Das B. & Hazra J.	Management of Medical Emergencies in Ayurveda	3 rd National conference on scope of employment, research and development in Ayurveda organized by Odisha chapter (OSAC, Bhubaneswar) of AIAC, New Delhi, held at Gaopabandhu Ayurveda Mahavidyalaya, Puri	26 th Nov., 2018
32	Soumya M.C.	Pharmaco epidemiology-A review – abstract	Published in the Souvenir of National seminar on RM& PHISSM, Sidha regional Research institute , Trivandrum	April, 2018



33	Bolleddu R. & Rao M.M.	Present Scenario of medicinal plants as source of novel Anti-Diabetic Drugs.	National seminar on Pharmacy & Healthcare Traditional Knowledge to Modern Techniques,	14 th Sept., 2018
34	Naik R., Nakum S.B. & Acharya R.	Prevention and management of Gastro-Intestinal tract diseases through traditional vegetables of Ayurveda	Souvenir- 1st International Conference 2019, IPS Healthmedicon, on 21st and 22nd January 2019 at Bhubhaneswar Odisha Page No.-68	Jan., 2019
35	Shetty N. & Naik R.	Recent Research Updates on Adaptogenic drugs in Ayurveda- A Review.	EUGENICON 2019, National seminar on Rasayana and Vajeekarana, in SDM College of Ayurveda, Udupi. – Page no 88	Feb., 2019
36	Barik L.D.	Relevance of Sushruta's Contribution on public health	3rd National Ayurveda day at KATS Ayurvedic College, Brahmapur, Odisha	5 th Nov., 2018
37	Barik L.D.	Relevance of Yoga ratnakar in the management of Bhagandar	All India Yoga Ayurveda Seminar-2018 by Academy of Yoga and Oriental studies, Bhubaneswar, Odisha.	21 st Oct., 2018
38	Naik R., Panda P. & Acharya R.	Role of Classical vegetables (Shaka dravya) of Ayurveda in Prevention and management of Respiratory tract diseases	1st International Conference 2019, IPS Healthmedicon, on 21st and 22nd January 2019 at Bhubhaneswar Odisha, Page no-69	Jan., 2019
39	Naik R., Kapadiya K. & Acharya R.	Role of Classical vegetables of Ayurveda in Prevention and management of Cardio-vascular diseases –A Review study	1st International Conference 2019, IPS Healthmedicon, on 21st and 22nd January 2019 at Bhubhaneswar Odisha, Page no-69	Jan., 2019
40	Balakrishnan P.	Standardization of Assessment Criteria of Ayurveda description of Senile Cataract	World Ayurveda Congress and Expo 2018, World Ayurveda Foundation and Ministry of AYUSH, Govt. Of India	Dec., 2018
41	Shubhashree M.N., Bhavanagouri & Bharali B. K.	Unexplored potential of nanotechnology in Ayurveda	Souvenir- National conf. on Advances and innovations in Biotechnology : Multidisciplinary approaches to food, health, environmental and energy issues page 167 ,NTPP03	Nov., 2018



Table – 63 (c): Details of Research publications in Books/ bookslets/ technical reports

S. No.	Contributor	Contribution & Title of the Book/ booklets etc.	Publisher	Date of Publication
1	Radhesham M.P.,	कौमारभृत्य एकल वनौषधि सार संग्रह	Akinik Publication, New Delhi; ISBN: 978-93-5335-077-2	Nov., 2018
2	Jain S.	Ayurveda Based Diet and Lifestyle Guidelines for Prevention of Cardiac Disorders	CCRAS	April, 2018
3	Mukherjee D., Singh S., Kumar M., Kumar V., Datta S. & Dhanjal D.S.	Fungi and their Role in Sustainable Development; Chapter Title: Fungal Biotechnology: Role and Aspects Current Perspectives	Springer Nature Singapore Pte Ltd. 2018. Page No. 93-105.	Aug., 2018
4	Kaur S., Wani A.B., Kumar V., Sethi B. & Upadhyay N.	Phytomicrobiome in Stress Regulation; Chapter Title: Metal ion – Acquisition strategies by biosynthetic chelates in plants	Springer Nature Singapore Pte Ltd. 2018. Manuscript ID: SPP/Si/014/2018, 2018.	July, 2018
5	Balakrishnan P.	Published a book on the theoretical framework of Srotorodham and its clinical applications The theoretical framework of Srotorodham and its clinical applications	Aryavaidya sala, Kottakkal	2018
6	Shirolkar A., Malgaonkar M., Pawase A., Gaidhani S.N. & Pawar S.	Mass spectrometry based techniques for assessment of pharmacological responses of ayurvedic drugs Anticancer Plants: Properties and Application, Volume 1, Edited by Mohd Sayeed Akhtar and Mallappa Kumara Swamy	Springer Publication: 167-194.	2018
7	Karnwal A., Singh S., Kumar V., Sidhu G.K., Dhanjal D.S., Datta S., Amin D.S., Saini M. & Singh J.	Fungal Enzymes for the Textile Industry. In: Yadav A., Mishra S., Singh S., Gupta A. (eds) Recent Advancement in White Biotechnology Through Fungi. Advancement in White Biotechnology Through Fungi.	Fungal Biology. Springer, Cham. Pg 459 - 482, 2019	Jan., 2019
8	Singh S., Sidhu G.K., Kumar V., Dhanjal D.S., Datta S. & Singh J.	Fungal Xylanases: Sources, Types, and Biotechnological Applications. In: Yadav A., Mishra S., Singh S., Gupta A. (eds) Recent Advancement in White Biotechnology Through Fungi.	Fungal Biology. Springer, Cham, Pg. 405 - 428, 2019.	Feb., 2019
9	Chaudhary S. & Sudha Kumari K.G.	Ayurveda Based Dietary and Lifestyle Advocacy for Mental Health and Psychiatric Disorders	CCRAS Publication- (On the occasion of Ayurveda Diwas 2018 (5 th November 2018))	Nov., 2018
10	Otta S.P.	Health Related Demography in Thiruvananthapuram District – Kerala, Technical Report	Research Oriented Public Health Care Service SRP Series-1	Oct., 2018



7. OUTREACH ACTIVITIES

Council has undertaken 5 programmes as outreach activities viz.

1. Tribal Health Care Research Programme under Tribal Sub Plan
2. Ayurveda Mobile Health Care Programme under Scheduled Castes Sub Plan
3. Swasthya Rakshan Programme
4. Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)
5. Ayurvedic Health Centres under North East Plan

Details of programmes are as under:-

7.1 Tribal Health Care Research Programme under Tribal Sub Plan

This programme has been initiated with the aim to study the living conditions of tribal people, folk medicines and Local Health Traditions used by them, availability of medicinal plants in the area and for propagation of knowledge about hygiene, prevention of diseases, use of common medicinal plants in the area and to extend medical aid at their door steps and continued at 15 peripheral Institutes/ Centres in 14 States viz.. CARIHD Bhubaneswar, CARIDD Kolkata, RARIECD Jaipur, RARIDD Gwalior, RARISD Vijayawada, RARIMCH Nagpur, RARIMD Bangalore, RARIID Patna, RARIGID Guwahati, RARI Gangtok, RARIUD Jammu, NIIMH, Hyderabad, ALRCA Chennai, RRCA Port Blair, and NRISR Leh under Tribal Sub Plan (TSP). During the period under report, 208 folk claims were documented which will be published in future, 145676 population were covered out of them 127683 were tribal people across 183 villages and incidental medical aid and counseling on prevention and hygiene was extended to 61968 patients out of them 52513 were tribal patients. (Table No. 64)

Activities carried out under this programme are

1. To Study the living conditions of tribal people
2. To Collect information related to health statistics
3. Study of dietetic habits
4. Nature and frequency of prevalent diseases etc.
5. Use of common medicinal plants in the area
6. To Provide medical aid at their door steps
7. Propagation of knowledge about Ayurvedic concept of Pathyapathya including hygiene habits, dietary practice.
8. Prevention of diseases by adopting healthy way of living & clean environment (Swachhata)



Table - 64: Institute wise outcome of Tribal health care research programme

S. No.	Name of villages Covered	Population covered			No. of patients treated												
		SC	ST	Others	Total	New			Follow up			Total					
						SC	ST	Other	Total	SC	ST	Other	Total	SC	ST	Other	Total
I. CARIHD, Bhubaneswar																	
1	Badamasinabila	05	1186	00	1191	01	176	03	180	01	167	03	171	02	343	06	351
2	Balijudi	31	1146	09	1186	01	180	01	182	01	171	01	173	02	351	02	355
3	Bhanjatipura	05	711	04	720	01	157	01	159	01	152	01	154	02	309	02	313
4	Dehuripada	14	747	06	767	02	169	01	172	01	163	01	165	03	332	02	337
5	Golabandha	13	608	04	625	02	149	01	152	02	143	01	146	04	292	02	298
6	Melana	60	1162	38	1260	06	174	04	184	06	165	04	175	12	339	08	359
7	Medimipur	05	650	16	671	01	157	02	160	00	149	02	151	01	306	04	311
8	Panupasi	00	808	04	812	01	158	01	160	01	149	01	151	02	307	02	311
9	Sanabarbeda	21	644	00	665	02	154	00	156	02	147	00	149	04	301	00	305
10	Sunaripasi	05	680	08	693	02	163	03	168	02	161	00	163	04	324	03	331
	Total	159	8342	89	8590	19	1637	17	1673	17	1567	14	1598	36	3204	31	3271
II. CARIDD, Kolkata																	
1	Madan Dih	74	63	42	179	27	20	20	67	00	00	00	00	27	20	20	67
2	Namobathan	06	129	00	135	01	48	00	49	00	00	00	00	01	48	00	49
3	Joradih	00	240	00	240	00	104	00	104	00	00	00	00	00	104	00	104
4	Saluni	00	324	12	336	0	100	3	103	0	71	0	71	0	171	3	174
5	Dagara	34	374	11	419	8	137	2	147	0	30	0	30	8	167	2	177
6	Bindajom	78	288	96	462	33	111	33	177	17	8	8	33	50	119	41	210
7	Ranagara	60	344	21	425	21	75	4	100	0	37	0	37	21	112	4	137
8	Tilabani	20	289	79	388	4	114	18	136	2	43	4	49	6	157	22	185
9	Kamo	93	364	89	546	31	131	30	192	11	45	11	67	42	176	41	259
10	Budkhila	46	475	47	568	16	145	14	175	6	57	9	72	22	202	23	247
11	Chilagara	56	511	8	575	14	146	3	163	6	77	0	83	20	223	3	246
12	Shimuldanga	115	160	17	292	38	55	4	97	0	82	0	82	38	137	4	179
13	Sirishgora	140	438	22	600	47	161	4	212	56	21	1	78	103	182	5	290
14	Dahitanr	5	180	110	295	1	102	0	103	2	56	0	58	3	158	0	161
15	Basabura	00	403	00	403	0	79	0	79	0	4	0	4	0	83	0	83



16	Duan	610	669	570	1849	214	228	195	637	11	16	4	31	225	244	199	668
17	Debra	446	623	448	1517	146	228	138	512	12	26	0	38	158	254	138	550
18	Radhamohanpur	710	612	748	2070	222	190	246	658	14	50	5	69	236	240	251	727
19	Bishnupur	299	561	380	1240	81	205	117	403	12	39	3	54	93	244	120	457
20	Aarbelia	93	101	145	339	25	41	50	116	00	00	00	00	25	41	50	116
21	Jhabalpara	97	52	106	255	42	35	52	129	00	00	00	00	42	35	52	129
22	Hadrakali	77	61	127	265	32	23	65	120	00	00	00	00	32	23	65	120
23	Narayangarh	08	0	0	08	05	00	00	05	00	00	00	00	05	00	00	05
24	Bimpur	14	50	23	87	04	21	12	37	00	00	00	00	04	21	12	37
25	Ranibandh	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
26	Kakra	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
27	Madpur	69	00	01	70	22	00	1	23	09	05	02	16	31	05	03	39
28	Balichok	74	47	88	209	24	16	43	83	02	00	12	14	26	16	55	97
	Total	3224	7358	3190	13772	1058	2515	1054	4627	160	667	59	886	1218	3182	1113	5513

III. RARIECD, Jaipur

1	Ummedgarhi	00	3646	00	3646	00	1101	00	1101	00	609	00	609	00	1710	00	1710
2	Sogapura	00	2940	00	2940	00	1001	00	1001	00	898	00	898	00	1899	00	1899
3	Pindarama	00	1064	00	1064	00	367	00	367	00	16	00	16	00	383	00	383
	Total	00	7650	00	7650	00	2469	00	2469	00	1523	00	1523	00	3992	00	3992

IV. RARIDD, Gwalior

1	Miyapura	0	1329	0	1329	0	409	0	409	0	96	0	96	0	505	0	505
2	Gugali	0	1016	0	1016	0	408	0	408	0	111	0	111	0	519	0	519
3	Sodhpur	0	1822	0	1822	0	544	0	544	0	230	0	230	0	774	0	774
4	Kasai	0	284	0	284	0	472	0	472	0	189	0	189	0	661	0	661
5	Surahi	0	763	0	763	0	356	0	356	0	170	0	170	0	526	0	526
6	Bharga	0	665	0	665	0	413	0	413	0	162	0	162	0	575	0	575
7	Patan	0	1096	0	1096	0	656	0	656	0	255	0	255	0	911	0	911
8	Aamai	0	712	0	712	0	326	0	326	0	165	0	165	0	491	0	491
	Total	0	7687	0	7687	0	3584	0	3584	0	1378	0	1378	0	4962	0	4962

V. RARISD, Vijayawada

1	Dharmalakshmi puram	14	1146	26	1186	09	315	18	342	0	56	02	58	09	371	20	400
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2	Neelakanta puram	0	675	63	738	0	219	55	274	0	67	20	87	0	286	75	361
3	Dandsura	0	816	01	817	0	216	01	217	0	83	0	83	0	299	01	300
4	Gangannadora valasa	0	211	0	211	0	95	0	95	0	48	0	48	0	143	0	143
5	Lovalaxmipuram	01	1063	06	1070	01	385	08	394	0	69	0	69	01	454	08	463
6	Chintalapadu	0	793	01	794	0	197	01	198	0	11	0	11	0	208	01	209
7	Duddukhallu	112	952	10	1074	0	135	0	135	0	41	0	41	0	176	0	176
8	Jumbiri	12	1440	21	1473	09	320	24	353	01	87	03	91	10	407	27	444
9	Gorjapadu	03	459	0	462	0	76	0	76	0	13	0	13	0	89	0	89
	Total	142	7555	128	7825	19	1958	107	2084	01	475	25	501	20	2433	132	2585

VI. RARIMCH, Nagpur

1	Lakhmapur	0	263	3	266	0	59	2	61	0	74	4	78	0	133	6	139
2	Ambazari	8	662	129	799	4	113	17	134	4	86	17	107	8	199	34	241
3	Yerangaon	0	434	65	499	2	60	7	69	0	76	7	83	2	136	14	152
4	Bhansoli	135	293	67	495	18	63	7	88	25	68	11	104	43	131	18	192
5	Bid-Borgaon	5	323	22	350	1	112	2	115	1	84	0	85	2	196	2	200
6	Mowada	0	485	233	718	0	193	64	257	0	164	59	223	0	357	123	480
7	Asala	0	505	210	715	1	193	112	306	0	178	149	327	1	371	261	633
8	Alphara Satara	0	412	110	522	0	264	110	374	0	211	66	277	0	475	176	651
9	Gunjala	9	403	67	479	5	228	61	294	8	300	57	365	13	528	118	659
10	Borgaon-Bhosle	0	356	43	399	0	219	27	246	0	292	27	319	0	511	54	565
11	Dadapur	54	469	392	915	21	163	110	294	23	195	138	356	44	358	248	650
12	Khemjai	143	810	810	1763	35	124	127	286	53	141	156	350	88	265	283	636
13	Arjini	54	1028	346	1428	2	190	97	289	1	140	77	218	3	330	174	507
14	Susa	13	489	195	697	3	144	94	241	5	177	141	323	8	321	235	564
15	Pichdura	15	624	248	887	0	120	88	208	0	102	106	208	0	222	194	416
16	Chinora	60	559	534	1153	23	77	119	219	22	74	154	250	45	151	273	469
17	Bodakha	29	323	207	559	0	77	147	224	0	80	173	253	0	157	320	477
18	Sumthana	14	374	236	624	3	70	64	137	3	74	86	163	6	144	150	300
19	Mangali Devitale	33	359	399	791	11	55	75	141	12	62	84	158	23	117	159	299
20	Bandra	4	449	304	757	2	68	28	98	2	82	33	117	4	150	61	215
	Total	576	9620	4620	14816	131	2592	1358	4081	159	2660	1545	4364	290	5252	2903	8445



3	Tariwanwa	00	1472	31	1503	00	587	14	601	00	372	14	386	00	959	28	987
4	Kunai Lachhampur	00	1273	18	1291	00	498	05	503	00	405	05	410	00	903	10	913
5	Bhelahi	06	1287	44	1337	01	519	21	541	01	361	14	376	02	880	35	917
	Total	42	7034	288	7364	16	2771	136	2923	10	1803	114	1927	26	4574	250	4850
IX. RARIGID Guwahati																	
1	Khatira	6	1021	5	1032	4	287	1	292	0	195	1	196	4	482	2	488
2	Chakrapani	38	1405	16	1459	28	336	4	368	28	276	2	306	56	612	6	674
3	Upur Dhania	26	1248	4	1278	5	315	0	320	0	243	1	244	5	558	1	564
4	Katah Bari Bakarapara	114	1960	0	2074	42	316	5	363	31	187	2	220	73	503	7	583
5	Nijbagai	5	1485	0	1490	1	244	0	245	1	217	0	218	2	461	0	463
	Total	189	7119	25	7333	80	1498	10	1588	60	1118	6	1184	140	2616	16	2772
X. RARI, Gangtok																	
1	Changylakha	40	873	49	962	40	232	49	321	19	297	39	355	59	529	88	676
2	RiwaMachong	28	1093	43	1164	28	284	43	355	17	211	30	258	45	495	73	613
3	Sirwani /Chisopani	40	1735	48	1823	40	369	48	457	28	470	34	532	68	839	82	989
4	SamdongKambal	18	734	18	770	18	162	18	198	13	195	16	224	31	357	34	422
5	YanthangMelli	25	1609	26	1660	25	334	26	385	14	765	18	797	39	1099	44	1182
6	ThinglingKhichpiri	28	3118	57	3203	28	522	57	607	17	817	45	879	45	1339	102	1486
7	Chakung	25	1449	41	1515	25	273	41	339	21	468	48	537	46	741	89	876
8	Chumbung	19	906	28	953	19	163	28	210	19	287	31	337	38	450	59	547
	Total	223	11517	310	12050	223	2339	310	2872	148	3510	261	3919	371	5849	571	6791
XI. RARIUD, Jammu																	
1	Dingla	00	2054	130	2184	0	418	27	445	0	183	11	194	0	601	38	639
2	Saral	00	1254	78	1332	0	382	25	407	0	177	10	187	0	559	35	594
3	Noorkote	00	1130	90	1220	0	322	49	371	0	154	32	186	0	476	81	557
4	Chandak	00	2959	440	3399	0	539	55	594	0	240	23	263	0	779	78	857
5	Kalia	00	2507	113	2620	0	545	28	573	0	223	13	236	0	768	41	809
	Total	0	9904	851	10755	0	2206	184	2390	0	977	89	1066	0	3183	273	3456
XII. NIIMH, Hyderabad																	
1	Kollapur	71	1027	490	1588	15	270	199	484	10	157	96	263	25	427	295	747
2	Damaravancha	45	1337	280	1662	23	367	135	525	16	119	254	389	39	486	389	914



3	Teegalaveni	124	1660	495	2279	34	337	160	531	19	128	211	358	53	465	371	889
4	Matwada	74	2180	521	2775	16	629	108	753	7	314	43	364	23	943	151	1117
5	Boddugonda	41	1353	665	2059	10	378	120	508	17	127	127	271	27	505	247	779
	Total	355	7557	2451	10363	98	1981	722	2801	69	845	731	1645	167	2826	1453	4446

XIII. ALRCA Chennai

1	Thirukalukundram	0	2865	162	3027	0	585	50	635	0	552	21	573	0	1137	71	1208
2	Kattankolathur	0	1777	101	1878	0	388	36	424	0	310	7	317	0	698	43	741
3	Ellapuram	0	1733	33	1766	0	144	9	153	0	69	3	72	0	213	12	225
4	Jawwadhumalai	0	406	0	406	0	91	0	91	0	0	0	0	0	91	0	91
5	St Thomas mount	0	50	0	50	0	17	0	17	0	35	0	35	0	52	0	52
	Total	0	6831	296	7127	0	1225	95	1320	0	966	31	997	0	2191	126	2317

XIV. RARC, Port Blair

1	Jharukona Area	00	60	00	60	00	6	00	6	00	00	00	00	00	6	00	6
2	Kamorta	00	322	00	322	00	28	30	58	00	00	00	00	00	28	30	58
3	Champin	00	584	00	584	00	59	00	59	00	00	00	00	00	59	00	59
4	Katchal Islands	00	1110	0	1110	0	133	0	133	0	0	0	0	0	133	0	133
5	Arong Village	0	1117	0	1117	0	76	0	76	0	9	0	9	0	82	0	82
6	Perka Village,	0	703	0	703	0	102	0	102	0	5	0	5	0	120	0	120
7	Kinyuka Village	0	1117	0	1117	0	125	0	125	0	0	0	0	0	130	0	130
8	Small Lapathy	0	368	0	368	0	63	0	63	0	9	0	9	0	63	0	63
9	Chuckchucha	0	1071	0	1071	0	149	1	150	0	6	0	6	0	149	1	150
10	Tapoiming Village	0	480	0	480	0	108	1	109	0	0	0	0	0	108	1	109
11	Campbell Bay	0	150	0	150	0	54	0	54	0	0	0	0	0	54	0	54
	Total	00	7082	00	7082	00	903	32	935	00	29	00	29	00	932	32	964

XV. NRISR Leh

1	Alchi	00	235	00	235	00	43	00	43	00	0	00	0	00	43	00	43
2	Ang	00	180	00	180	00	22	00	22	00	36	00	36	00	58	00	58
3	Baima	00	397	00	397	00	40	00	40	00	64	00	64	00	104	00	104
4	Chemday	00	176	00	176	00	29	00	29	00	14	00	14	00	43	00	43
5	Chuchot	00	511	00	511	00	125	00	125	00	0	00	0	00	125	00	125
6	Dha	00	690	00	690	00	68	00	68	00	73	00	73	00	141	00	141
7	Domkhar	00	632	00	632	00	85	00	85	00	134	00	134	00	219	00	219



8	Gangles	00	76	00	76	00	00	28	00	00	28	00	00	00	00	00	00	28	00	00	28	00	00	00	28
9	Gonpa	00	165	00	165	00	00	57	00	00	57	00	00	10	00	00	00	67	00	00	67	00	00	00	67
10	Hanu	00	972	00	972	00	00	85	00	00	85	00	00	211	00	00	00	296	00	00	296	00	00	00	296
11	Hemis	00	344	00	344	00	00	73	00	00	73	00	00	23	00	00	00	96	00	00	96	00	00	00	96
12	Igoo	00	82	00	82	00	00	21	00	00	21	00	00	13	00	00	00	21	00	00	21	00	00	00	21
13	Lamayuru	00	465	00	465	00	00	72	00	00	72	00	00	18	00	00	00	90	00	00	90	00	00	00	90
14	Leh-do	00	441	00	441	00	00	26	00	00	26	00	00	27	00	00	00	53	00	00	53	00	00	00	53
15	liker	00	364	00	364	00	00	67	00	00	67	00	00	7	00	00	00	74	00	00	74	00	00	00	74
16	Matho	00	455	00	455	00	00	37	00	00	37	00	00	83	00	00	00	120	00	00	120	00	00	00	120
17	Nurla	00	95	00	95	00	00	11	00	00	11	00	00	17	00	00	00	28	00	00	28	00	00	00	28
18	Phey	00	166	00	166	00	00	41	00	00	41	00	00	21	00	00	00	65	00	00	65	00	00	00	65
19	Phuktsey	00	41	00	41	00	00	18	00	00	18	00	00	0	00	00	00	18	00	00	18	00	00	00	18
20	Pyang	00	997	00	997	00	00	112	00	00	112	00	00	110	00	00	00	222	00	00	222	00	00	00	222
21	Sakti	00	488	00	488	00	00	81	00	00	81	00	00	21	00	00	00	102	00	00	102	00	00	00	102
22	Saspol	00	189	00	189	00	00	35	00	00	35	00	00	0	00	00	00	35	00	00	35	00	00	00	35
23	Shara	00	461	00	461	00	00	84	00	00	84	00	00	32	00	00	00	116	00	00	116	00	00	00	116
24	Shey	00	422	00	422	00	00	66	00	00	66	00	00	23	00	00	00	89	00	00	89	00	00	00	89
25	Singaylajok	00	312	00	312	00	00	58	00	00	58	00	00	0	00	00	00	58	00	00	58	00	00	00	58
26	Skindyang	00	172	00	172	00	00	34	00	00	34	00	00	8	00	00	00	42	00	00	42	00	00	00	42
27	Skurbuhan	00	479	00	479	00	00	84	00	00	84	00	00	111	00	00	00	195	00	00	195	00	00	00	195
28	Spituk	00	458	00	458	00	00	73	00	00	73	00	00	42	00	00	00	115	00	00	115	00	00	00	115
29	Stakna	00	344	00	344	00	00	58	00	00	58	00	00	22	00	00	00	80	00	00	80	00	00	00	80
30	Takmachik	00	150	00	150	00	00	9	00	00	9	00	00	17	00	00	00	36	00	00	36	00	00	00	36
31	Taru & surrounding	00	336	00	336	00	00	72	00	00	72	00	00	30	00	00	00	102	00	00	102	00	00	00	102
32	Temisgam	00	289	00	289	00	00	33	00	00	33	00	00	60	00	00	00	93	00	00	93	00	00	00	93
33	Thiksay	00	659	00	659	00	00	131	00	00	131	00	00	30	00	00	00	161	00	00	161	00	00	00	161
34	Tia	00	568	00	568	00	00	63	00	00	63	00	00	107	00	00	00	170	00	00	170	00	00	00	170
35	Wanla	00	392	00	392	00	00	121	00	00	121	00	00	17	00	00	00	138	00	00	138	00	00	00	138
	Total	00	13203	0	13203	00	1686	2062	00	2062	38284	650	20090	1381	00	2944	23684	3443	00	3443	7119	00	3443	61968	
	Grand Total	5178	127683	12815	145676	1686	32423	4175	38284	650	20090	1381	2944	23684	2336	52513	7119	61968							



TRIBAL HEALTH CARE RESEARCH PROGRAMME

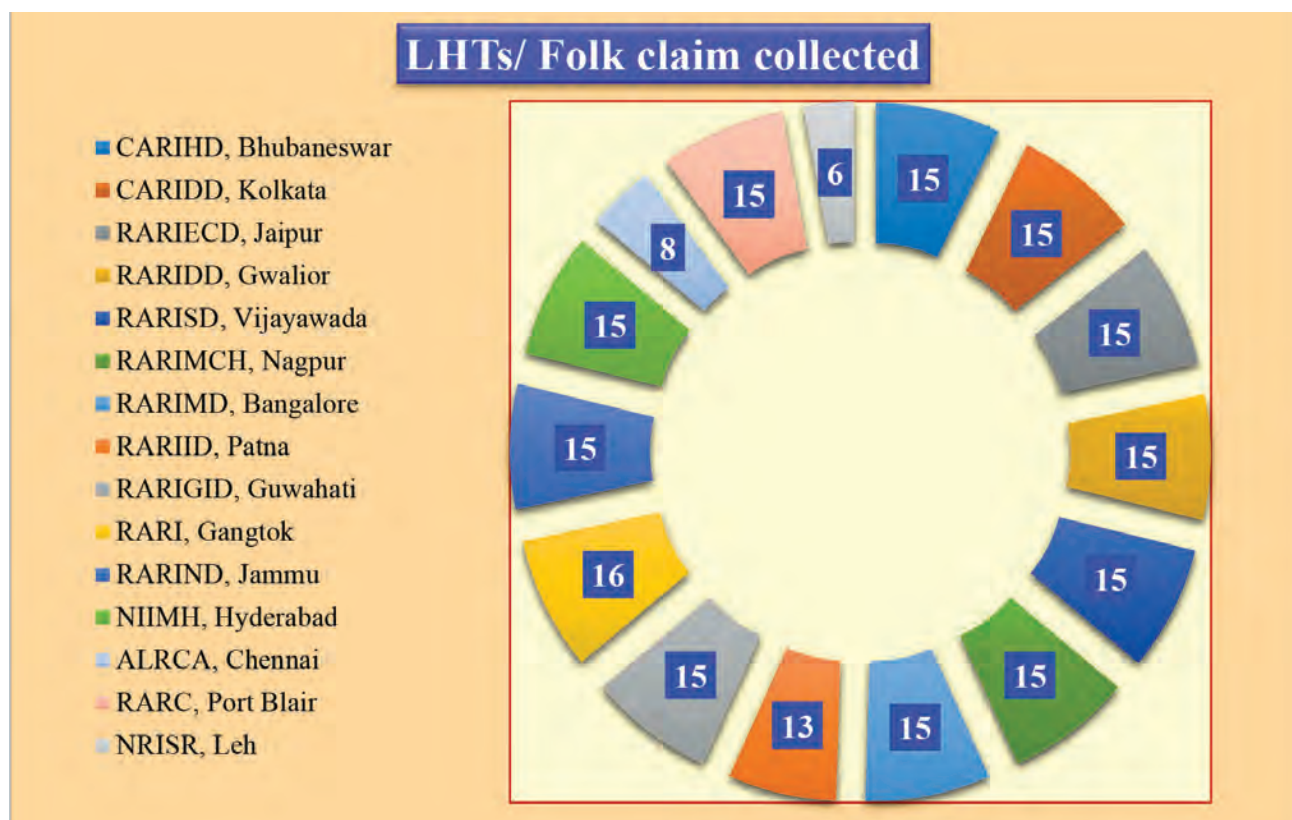
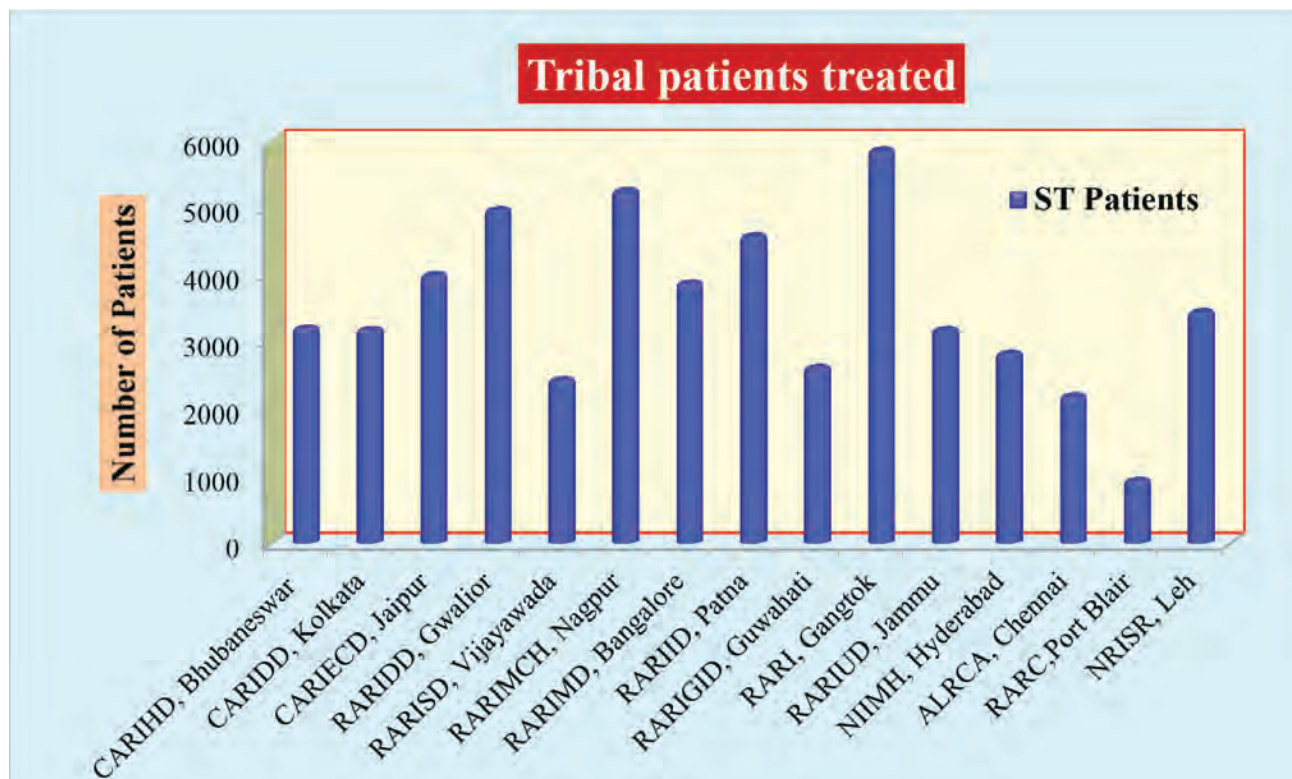




Table- 65: Prevalent diseases under THCRP

S.No.	Name of Institute	Prevalent Diseases
1	CARIHD, Bhubaneswar	Sandhivata, Amalpitta, Kasa, Balakasa, Vicharchika, Atisara, Jwara, Shirshoola, Koshthbadhta, Mutrakrichha
2	CARIDD Kolkata	Vatavyadhi, Katishoola, Tawakroga, Kasa, Balakasa, Udarshoola, Krimiroga, Aamvata, Jwara
3	RARIECD Jaipur	Sandhivata, Amalpitta, Pratishyaya, Daurbalya, Katishoola, Vrana, Udarshoola
4	RARIDD, Gwalior	Daurbalya, Sandhivata, Asthisosha, Dadru, Kushtha, Kasa, Parshavshoola, Pratishyaya, Jwara, Pradara
5	RARISD Vijayawada	Vatavyadhi, Kasa, Sandhivata, Sandhishoola, Kushtha, Jwara, Twakaroga, Katishoola, Shirahshoola, Daurbalya, Vyanbal vayshamya
6	RARIMCH Nagpur	Sandhigatavata, Daurbalya, Pratishyaya/Peenas, Vatavyadhi, Kasa, Gridhrasi, Kushtha, Panduroga, Vibandha, Amalpitta, Arsha
7	RARIMD Bangalore	Daurbalya, Sandhivata, Kasa, Shirahshoola, Pratishyaya, Gridhrasi, Kushtha, Jwara, Agnimandhya
8	RARIID, Patna	Vatavyadhi, Trikshoola, Hridroga, Artavdosha/Artavdushti/ Rajodosha, Daurbalya, Kasa, Shwetapradar, Arsha, Granthi, Madhumeha
9	RARIECD, Guwahati	Amalpitta, Trikshoola, Sandhivata, Shirshoola, Dadru, Vatavyadhi, Pratishyaya, Kandu, Kasa
10	RARI, Gangtok	Sandhivata, Vatavyadhi, Shirahshoola, Kasa, Amlpitta, Adhman/Anah, Kandu, Madhumeha, Arsha
11	RARIUD, Jammu	Sandhivata, Kasa, Amlapitta, Kushtha, Agnimandya, Daurbalya, Prtishyaya, Mutrakrichha, Krimi
12	NIIMH, Hyderabad	Sandhivata, Kasa, Agnimandya, Asthishosha, Daurbalya, Gridhrasi, Amlapitta, Swasa, Madhumeha, Jwara
13	ALRCA Chennai	Kasa, Vatavyadhi, Kushtha, Daurbalya, Jwara, Gridhrasi, Shirshoola, Trikgraha, Sandhivata
14	RARC, Port Blair	Sandhivata, Kasa, Trikshoola, Kushtha, Jwara, Swasa, Shirahshoola, Kukshishoola, Avabahuka
15	NRISR, Leh (Sowa-Rigpa)	Traig-drum(Arthritis), Khal-nad (Kidney disease), Pho-wai-nad (Stomach), Trsa- kar –nad (Neuritis and peripheral Neuritis), mGo- nad (Headache), Trag-rlung stodsang (Hypertension), Champa (Common cold and flue), Pad-kan smugpo (Peptic ulcer), Trugs-nad (Traumatic disease)



7.2 Ayurveda Mobile Health Care Programme under Scheduled Castes Sub Plan (SCSP)

Ayurveda Mobile Health Care Programme under Scheduled Castes Sub Plan (SCSP) has been initiated at 20 institutes in 18 states across the country with the aim to study the living conditions of scheduled castes people, for propagation of knowledge about hygiene, prevention of diseases and to provide medical aid at their door steps.

Objective:

1. Provide medical aid at their door steps.
2. Study of the living conditions of scheduled castes people
3. Study of dietetic habits
4. Socio-demographic profile
5. Prevalence of diseases and collection of information related to health status
6. Propagation of knowledge about hygiene, and prevention of diseases
7. Propagation of ayurveda concept on preventive health in relation to pathyapathya, sadvitta etc.

Work carried out

During the reporting year, a total 216275 scheduled castes population surveyed, 162 villages/colonies covered through 4744 tours in 18 states and medical aid provided to 120907 scheduled castes patients.

Institute and village wise population covered, patients treated shown in table No. 66



Table-66: Institute wise status of Ayurveda Mobile Health Care Programme (SCSP)

S. No.	Name of the Institute	Name of Villages covered	No. of tour conducted	Population covered			Patient treated												
				SC	ST	Other	Total	New			Old			Total					
								SC	ST	Other	Total	SC	ST	Other	Total	SC	ST	Other	Total
1.	CARICD, New Delhi	Raghubir Nagar	48	2127	0	88	2215	823	2	241	1066	308	2	197	507	1131	4	438	1573
		Mangolpuri	50	1996	0	67	2063	631	0	190	821	474	0	189	663	1105	0	379	1484
		Shakurpur	48	2011	13	147	2171	417	1	186	604	310	0	150	460	727	1	336	1064
		Ranjit Nagar	49	2154	11	128	2293	543	4	182	729	292	1	128	421	835	5	310	1150
		Jahangirpuri	45	1745	0	288	2033	460	1	233	694	268	0	207	475	728	1	440	1169
		Total	240	10033	24	718	10775	2874	8	1032	3914	1652	3	871	2526	4526	11	1903	6440
2.	NARIP, Cheruthuruthy	Thrikkadeeri	44	1601	0	106	1707	560	0	97	657	981	0	145	1126	1541	0	242	1783
		Muthuthala	48	2460	0	138	2598	746	0	104	850	1441	0	184	1625	2187	0	288	2475
		Nagalassery	46	1556	0	96	1652	481	0	72	553	882	0	72	954	1363	0	144	1507
		Thrihala	49	1807	0	150	1957	526	0	111	637	1140	0	179	1319	1666	0	290	1956
		Pazhayannur	44	1827	2	123	1952	597	1	104	702	906	1	106	1013	1503	2	210	1715
		Ongallur	26	912	0	25	937	288	0	20	308	347	0	16	363	635	0	36	671
Total	257	10163	2	638	10803	3198	1	508	3707	5697	1	702	6400	8895	2	1210	10107		
3.	CARIHD, Bhubaneswar	Satyabhamapur	11	410	0	0	410	84	0	0	84	213	0	0	213	297	0	0	297
		Sarakana	21	1093	0	0	1093	242	0	0	242	378	0	0	378	620	0	0	620
		Brahmansuanlo	10	301	0	0	301	52	0	0	52	139	0	0	139	191	0	0	191
		Baligundi	11	401	0	0	401	69	0	0	69	155	0	0	155	224	0	0	224
		Kaijanga	10	256	0	0	256	44	0	0	44	157	0	0	157	201	0	0	201
		Hirapur	11	506	0	0	506	93	0	0	93	208	0	0	208	301	0	0	301
		Jasupur	11	463	0	0	463	57	0	0	57	164	0	0	164	221	0	0	221
		Bentapur	21	728	0	0	728	158	0	0	158	257	0	0	257	415	0	0	415
		Benupur	26	1134	0	0	1134	227	0	0	227	332	0	0	332	559	0	0	559
		Ramachandrapur	15	667	0	0	667	119	0	0	119	246	0	0	246	365	0	0	365
		Bhingarpur	20	1147	0	0	1147	213	0	0	213	336	0	0	336	549	0	0	549
		Jitikarsuanlo	22	1019	0	0	1019	236	0	0	236	375	0	0	375	611	0	0	611
		Jayarsan	11	342	0	0	342	108	0	0	108	203	0	0	203	311	0	0	311
		Jagannathpur	15	590	0	0	590	99	0	0	99	222	0	0	222	321	0	0	321
		Gohal	11	403	0	0	403	126	0	0	126	205	0	0	205	331	0	0	331
		Alarpur	15	725	0	0	725	95	0	0	95	208	0	0	208	303	0	0	303
Total	16	10185	0	0	10185	2022	0	0	2022	3798	0	0	3798	5820	0	0	5820		



4. CARIDD, Kolkata	Tardaha Kap asati	41	1826	0	208	2034	357	0	57	414	997	0	110	1107	1354	0	167	1521	
	Bagu	7	77	0	0	77	19	0	0	19	74	0	10	84	93	0	10	103	
	Bazetaraf	39	1055	0	8	1063	171	0	2	173	229	0	0	229	400	0	2	402	
	Radhanagar	43	2132	0	29	2161	268	0	8	276	535	0	22	557	803	0	30	833	
	Dihhi	7	209	0	39	248	19	0	10	29	40	0	23	63	59	0	33	92	
	Chakpachuria	31	2288	0	31	2319	178	0	1	179	101	0	0	101	279	0	1	280	
	Nayabad	18	369	0	0	369	33	0	0	33	301	0	41	342	334	0	41	375	
	Hadia	30	1282	0	0	1282	138	0	0	138	109	0	0	109	247	0	0	247	
	Gangapur	12	417	0	10	427	71	0	3	74	14	0	2	16	85	0	5	90	
	Andulgari	12	352	0	13	365	80	0	3	83	168	0	6	174	248	0	9	257	
Total	10	10007	0	338	10345	1334	0	84	1418	2568	0	214	2782	3902	0	298	4200		
5. CARIRD, Patiala	Ram nagar	50	1236	0	413	1649	770	0	217	987	1067	0	517	1584	1837	0	734	2571	
	Rajla	47	1789	0	536	2325	627	0	408	1035	691	0	1233	1924	1318	0	1641	2959	
	Suniar heri	26	1140	0	295	1435	326	0	50	376	456	0	94	550	782	0	144	926	
	Duladi	24	1501	0	342	1843	471	0	84	555	706	0	159	865	1177	0	243	1420	
	Jansua	49	2968	0	139	3107	1408	0	226	1634	1946	0	515	2461	3354	0	741	4095	
	Chaurason	47	1399	0	841	2240	630	0	242	872	741	0	689	1430	1371	0	931	2302	
	Total	6	10033	0	2566	12599	4232	0	1227	5459	5607	0	3207	8814	9839	0	4434	14273	
	6. RARIED, Lucknow	Sarosabharosa	44	2147	00	00	2147	469	00	125	594	1082	00	279	1361	1551	00	404	1955
		Jalalapur	50	2231	00	00	2231	582	00	124	706	1255	00	265	1520	1837	00	389	2226
		Garhi	50	2340	00	00	2340	582	00	119	701	1348	00	268	1616	1930	00	387	2317
Barauna		46	2179	00	00	2179	471	00	108	579	1109	00	268	1377	1580	00	376	1956	
Gaundamauzzm		46	1338	00	00	1338	470	00	265	735	948	00	606	1554	1418	00	871	2289	
Total		5	10235	00	00	10235	2574	00	741	3315	5742	00	1686	7428	8316	00	2427	10743	
7. CARIC, Mumbai	Lumbinibaug	54	3524	314	614	4452	646	18	82	746	757	5	87	849	1403	23	169	1595	
	Patilwadi	46	2375	278	777	3430	561	46	197	804	905	78	260	1243	1466	124	457	2047	
	Tata Nagar	44	2895	622	850	4367	148	5	73	226	104	0	36	140	252	5	109	366	
	Tulasiwadi	53	3386	617	1731	5734	466	73	302	841	482	75	242	799	948	148	544	1640	
	Municipal Chawl	48	3310	436	680	4426	313	3	29	345	285	2	21	308	598	5	50	653	
	Total	5	15490	2267	4652	22409	2134	145	683	2962	2533	160	646	3339	4667	305	1329	6301	



8. RARIECD Jaipur	Raghunath Pura	25	604	0	27	631	495	9	57	561	178	1	27	206	673	10	84	767
	Mishra Ka Barh	23	1043	11	13	1067	426	39	83	548	86	4	19	109	512	43	102	657
	Jamwaramgarh	47	2080	19	20	2119	741	36	143	920	265	12	73	350	1006	48	216	1270
	Dodhsar	24	1024	5	57	1086	404	8	45	457	147	5	10	162	551	13	55	619
	Girdhari Pura	15	493	0	0	493	311	10	11	332	92	6	1	99	403	16	12	431
	Anop Pura	23	928	0	30	958	403	10	171	584	133	0	57	190	536	10	228	774
	Bhutura	24	757	0	0	757	333	7	41	381	168	6	18	192	501	13	59	573
	Hardhyan Pura	12	798	0	25	823	220	7	52	279	84	3	31	118	304	10	83	397
	Narsingh Pura	24	1082	0	0	1082	414	1	17	432	227	0	4	231	641	1	21	663
	Kherlawas	23	1191	0	7	1198	560	6	16	582	215	2	13	230	775	8	29	812
Total	10	10000	35	179	10214	4307	133	636	5076	1595	39	253	1887	5902	172	889	6963	
9. RARIDD, Gwalior	Dhai, Dabra	24	1138	0	58	1196	334	0	154	488	168	0	99	267	502	0	253	755
	Lidhora, Dabra	23	1106	0	146	1252	313	2	202	517	103	1	96	200	416	3	298	717
	Hastinapur, Morar	24	1385	0	16	1401	425	25	212	662	268	23	90	381	693	48	302	1043
	Sukhapatha	24	990	0	51	1041	265	3	181	449	118	0	110	228	383	3	291	677
	Chhapra, Dabra	25	1163	0	43	1206	226	0	182	408	147	0	183	330	373	0	365	738
	Salvai, Dabra	24	1373	0	0	1373	299	0	182	481	219	0	146	365	518	0	328	846
	Chiruli, Dabra	24	1062	0	0	1062	292	2	80	374	240	0	52	292	532	2	132	666
	Chaproli, Morar	25	2091	0	0	2091	490	0	15	505	293	0	9	302	783	0	24	807
	Virampura, Morar	25	1140	0	0	1140	376	0	123	499	233	0	54	287	609	0	177	786
	Sahona, Dabra	22	1257	0	0	1257	336	0	105	441	228	0	62	290	564	0	167	731
Total	10	12705	0	314	13019	3356	32	1436	4824	2017	24	901	2942	5373	56	2337	7766	
10. RARISD, Vijayawada	Ventraragada	50	1729	0	9	1738	402	0	9	411	702	0	17	719	1104	0	26	1130
	Telaprolu	50	1883	0	58	1941	411	0	25	436	480	0	96	576	891	0	121	1012
	Kotikalapudi	48	2437	0	35	2472	468	0	22	490	458	0	24	482	926	0	46	972
	Reddygudem	47	2045	0	51	2096	425	0	26	451	432	0	13	445	857	0	39	896
	Manikonda	47	1969	0	64	2033	339	0	35	374	625	0	123	748	964	0	158	1122
Total	5	10063	0	217	10280	2045	0	117	2162	2697	0	273	2970	4742	0	390	5132	



11. RARIMCH, Nagpur	Waghoda	42	1805	130	316	2251	318	31	159	508	1047	76	469	1592	1365	107	628	2100	
	Khapa	44	1824	111	288	2223	317	60	212	589	1098	155	555	1808	1415	215	767	2397	
	Satgaon	42	1900	134	325	2359	306	51	126	483	933	166	385	1484	1239	217	511	1967	
	Isasani	42	1901	96	297	2294	344	37	117	498	1044	93	317	1454	1388	130	434	1952	
	Borkhedi	22	649	72	186	907	148	38	131	317	380	58	296	734	528	96	427	1051	
	Kocchi	15	531	62	104	697	147	14	29	190	375	35	62	472	522	49	91	662	
	Badegaon	20	819	63	45	927	193	27	90	310	423	47	199	669	616	74	289	979	
	Khubala	15	645	51	113	809	107	8	123	238	213	11	220	444	320	19	343	682	
	Total	8	10074	719	1674	12467	1880	266	987	3133	5513	641	2503	8657	7393	907	3490	11790	
	12. RARILSD, Trivandrum	Kottukal	42	2317	26	173	2516	615	9	43	667	753	9	52	814	1368	18	95	1481
Kattakkada		42	2511	41	189	2741	583	14	40	637	934	14	50	998	1517	28	90	1635	
Vithura		46	1136	934	58	2128	248	333	11	592	317	373	16	706	565	706	27	1298	
Vilavoorkkal		40	2166	55	211	2432	587	12	51	650	786	16	61	863	1373	28	112	1513	
Vellanad		45	2103	87	574	2764	635	17	63	715	873	20	60	953	1508	37	123	1668	
Chirayinkeezhu		27	1958	12	136	2106	491	5	37	533	377	5	35	417	868	10	72	950	
Total		5	12191	1155	1341	14687	3159	390	245	3794	4040	437	274	4751	7199	827	519	8545	
13. RARIID, Patna		Bhelaura	49	2056	0	30	2086	423	0	8	431	949	0	6	955	1372	0	14	1386
		Alabakhshpur	47	1841	0	129	1970	384	0	30	414	899	0	41	940	1283	0	71	1354
		Simra	48	2099	0	153	2252	426	0	37	463	1108	0	36	1144	1534	0	73	1607
	Chainpura	33	1352	0	68	1420	265	0	18	283	553	0	30	583	818	0	48	866	
	Kurkuri	49	1912	0	70	1982	425	0	18	443	884	0	24	908	1309	0	42	1351	
	Nurichak	16	775	0	36	811	180	0	9	189	413	0	3	416	593	0	12	605	
	Total	6	10035	0	486	10521	2103	0	120	2223	4806	0	140	4946	6909	0	260	7169	
	14. RARIGID, Guwahati	Manahkuchi	23	1128	0	162	1290	250	0	35	285	301	0	29	330	551	0	64	615
		Dihina	47	2209	0	21	2230	489	0	13	502	502	0	0	502	991	0	13	1004
		Amingaon Lachit	38	1418	7	156	1581	332	2	40	374	371	1	32	404	703	3	72	778
Bagta		64	3029	0	283	3312	551	0	72	623	571	0	73	644	1122	0	145	1267	
Japia		40	1373	0	246	1619	321	0	49	370	384	0	29	413	705	0	78	783	
Nij Dimoria		28	1206	0	0	1206	249	0	0	249	244	0	0	244	493	0	0	493	
Total		6	10363	7	868	11238	2192	2	209	2403	2373	1	163	2537	4565	3	372	4940	



15. RARI, Gangtok	Chengey-Lakha	18	1089	17	20	1126	252	17	20	289	350	17	16	383	602	34	36	672	
	Riwa Machong	19	1323	21	20	1364	276	21	20	317	382	20	21	423	658	41	41	740	
	Sirwani Chisopani	14	814	13	17	844	183	13	17	213	218	09	11	238	401	22	28	451	
	Samdong Kambal	11	770	10	12	792	168	10	12	190	173	07	07	187	341	17	19	377	
	Rakdong Tintek	16	776	29	24	829	243	29	24	296	266	10	12	288	509	39	36	584	
	Tazagpu	15	797	16	14	827	168	16	14	198	232	13	10	255	400	29	24	453	
	Melligpu	16	906	17	14	937	215	17	14	246	264	11	09	284	479	28	23	530	
	Rangpo	12	596	12	10	618	122	12	10	144	242	10	09	261	364	22	19	405	
	Ravong	09	562	09	11	582	87	09	11	107	128	05	07	140	215	14	18	247	
	Jorethang	08	436	08	08	452	69	08	08	85	126	08	06	140	195	16	14	225	
	Namli	03	195	02	03	200	42	02	03	47	31	01	01	33	73	03	04	80	
	Central Pandam	03	184	03	03	190	40	03	03	46	30	02	02	34	70	05	05	80	
	Ward No. 03	04	222	04	04	230	51	04	04	59	42	03	03	48	93	07	07	107	
	Chanmari	04	186	04	04	194	33	04	04	41	34	03	03	40	67	07	07	81	
	Arithang	04	187	03	04	194	50	03	04	57	34	01	02	37	84	04	06	94	
	Development area	03	160	02	02	164	36	02	02	40	28	02	02	32	64	04	04	72	
	Dara Gaon	02	81	02	02	85	16	02	02	20	11	01	01	13	27	03	03	33	
Total	17	9284	172	172	9628	2051	172	172	2395	2591	123	122	2836	4642	295	294	5231		
16. RARIUD, Jammu	Pahariwalla	48	2594	9	967	3570	499	1	232	732	361	0	118	479	860	1	350	1211	
	Gigrial	45	2507	4	572	3083	616	2	101	719	320	0	143	463	936	2	244	1182	
	Nandwal	47	2458	0	610	3068	547	0	147	694	415	0	126	541	962	0	273	1235	
	Pangari	36	1005	0	399	1404	300	0	102	402	238	0	101	339	538	0	203	741	
	Gandharwan	47	1813	196	773	2782	412	23	216	651	300	11	174	485	712	34	390	1136	
	Total	5	10377	209	3321	13907	2374	26	798	3198	1634	11	662	2307	4008	37	1460	5505	
	17. RARIND, Mandi	Chachyot	24	1263	0	0	1263	215	0	59	274	212	7	59	278	427	7	118	552
		Naun	26	1040	0	0	1040	169	1	65	235	264	0	154	418	433	1	219	653
		Sarao	25	1449	0	0	1449	286	0	245	531	346	0	714	1060	632	0	959	1591
		Shala	26	642	0	0	642	163	0	134	297	149	0	243	392	312	0	377	689
Kharsi		23	685	0	0	685	63	0	80	143	115	0	153	268	178	0	233	411	
Seri		25	988	0	0	988	173	0	208	381	297	0	485	782	470	0	693	1163	
Sianj		25	1355	0	0	1355	155	0	273	428	106	0	416	522	261	0	689	950	
Nandi		24	1185	0	0	1185	206	0	53	259	183	0	78	261	389	0	131	520	
Gohar		24	1301	0	0	1301	141	0	184	325	220	0	351	571	361	0	535	896	
Baasa		24	1018	0	0	1018	84	0	94	178	139	0	182	321	223	0	276	499	
Total	10	10926	0	0	10926	1655	1	1395	3051	2031	7	2835	4873	3686	8	4230	7924		



18. RARISD, Ahmedabad	Saraspur	5	154	3	31	188	109	1	25	135	125	2	27	154	234	3	52	289
	Rakhiyal	6	207	8	59	274	162	7	42	211	183	7	48	238	345	14	90	449
	Bapunagar	5	179	7	30	216	146	4	12	162	144	3	19	166	290	7	31	328
	Sabarmati	2	75	5	3	83	29	4	0	33	11	2	0	13	40	6	0	46
	Ranip	5	179	9	44	232	128	8	42	178	138	4	37	179	266	12	79	357
	Gomtipur	4	104	4	37	145	45	2	15	62	25	0	25	50	70	2	40	112
	Juna Vadaj	43	2882	9	148	3039	729	9	147	885	1294	6	347	1647	2023	15	494	2532
	Odhav	41	2271	11	88	2370	662	10	75	747	1155	17	145	1317	1817	27	220	2064
	Isanpur	43	2569	18	131	2718	693	15	121	829	1230	38	226	1494	1923	53	347	2323
	Girharnagar	41	2807	19	89	2915	545	8	63	616	679	6	79	764	1224	14	142	1380
	Rajpur	45	2860	17	76	2953	658	5	71	734	1002	5	155	1162	1660	10	226	1896
Total	240	14287	110	736	15133	3906	73	613	4592	5986	90	1108	7184	9892	163	1721	11776	
19. ACAMH & NS, Bangalore	Vinobha Nagar	15	673	0	0	673	269	0	0	269	140	0	0	140	409	0	0	409
	Gulbarga colony	9	400	0	0	400	160	0	0	160	88	0	0	88	248	0	0	248
	Bhavani Nagar	32	1208	0	55	1263	442	0	20	462	270	0	7	277	712	0	27	739
	Austin Town	45	1784	0	9	1793	613	0	5	618	404	0	0	404	1017	0	5	1022
	K S Garden	49	2035	0	57	2092	723	0	21	744	496	0	16	512	1219	0	37	1256
	T R.Shamanna Nagar	45	1821	15	179	2015	628	4	42	674	444	0	4	448	1072	4	46	1122
	Sanyasi Kunte	30	1137	0	0	1137	337	0	0	337	230	0	0	230	567	0	0	567
	Vasanthapura	19	692	47	60	799	247	14	12	273	135	1	3	139	382	15	15	412
	Total	244	9750	62	360	10172	3419	18	100	3537	2207	1	30	2238	5626	19	130	5775
	20 ALRCA, Chennai	Manamathy	36	1552	0	5	1557	509	0	0	509	212	0	0	212	721	0	0
Nellikuppam		36	1508	0	34	1542	530	0	12	542	221	0	2	223	751	0	14	765
Kelambakkam		36	1366	0	117	1483	454	0	46	500	215	0	36	251	669	0	82	751
Pallavaram		36	1477	0	91	1568	500	0	27	527	268	0	13	281	768	0	40	808
Saidapet		36	1597	0	167	1764	526	0	59	585	222	0	34	256	748	0	93	841
Thiruvalluvarnagar		36	1587	0	44	1631	530	0	14	544	274	0	7	281	804	0	21	825
Vadanemalli		24	987	5	20	1012	378	2	8	388	166	0	4	170	544	2	12	558
Total		240	10074	5	478	10557	3427	2	166	3595	1578	0	96	1674	5005	2	262	5269
Grand Total	162	216275	4767	19058	240100	54242	1269	11269	66780	66665	1538	16686	84889	120907	2807	27955	151669	



Ayurveda Mobile Health Care Programme under SCSP

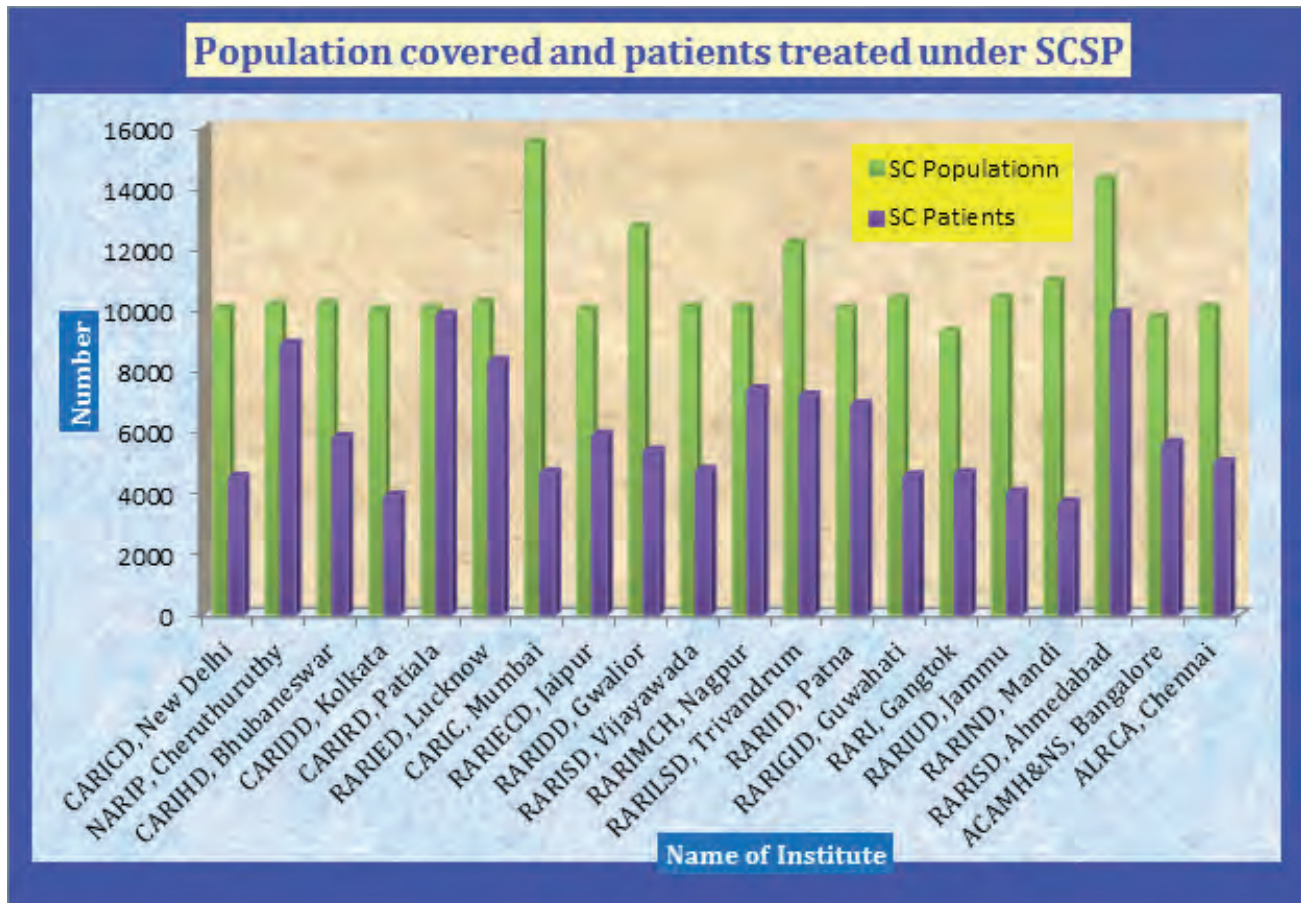




Table - 67: Prevalent Diseases under SCSP

S. No.	Name of The Institute	Prevalent Disease
1.	CARICD, New Delhi	Sandhivata, Kasa, Daurbalya, Amlapitta, Madhumeha, Kushtha, Sheetpitta, Swasa, Shwathu,
2.	NARIP, Cheruthuruthy	Vatavyadhi, Sandhivata, Trikshoola, Pandu-roga, Gridhrasi, Shwasa, Avabhuhka, Kushtha, Kasa, Amlapitta
3.	CARIHD, Bhubaneswar	Sandhivata, Pratishyaya, Kasa, Madhumeha, Daurbalya, Amlapitta, Aamvata, Kandu, Swasa, Agnimandya
4.	CARIDD, Kolkata	Sandhivata, Amlapitta, Kasa, Madhumeha, Kandu, Daurbalya, Grahanidosha, Swasa, Krimi, Shwetpradara
5.	CARIRD, Patiala	Vatarakta, Amlapitta, Sandhivata, Gridhrasi, Kasa, Pama, Peenas, Swasa
6.	RARIED, Lucknow	Vatavyadhi, Twakaroga, Sandhivata, Grahanidosha, Udarroga, Amlpitta, Pandu, Gridhrasi, Jwara, Prameha
7.	CARIC, Mumbai	Sandhigatvata, Kasa, Madhumeha, Trikshoola, Amlapitta, Pratishyaya, Daurbalya, Kandu, Vibandha
8.	RARIECD Jaipur	Twakroga, Kosthbadhata, Sandhishoola, Kandu, Pratishyaya, Kasa, Sandhivata, Pradara, Amlapitta, Jwara
9.	RARIDD, Gwalior	Sandhigatavata, Kasa, Vatavyadhi, Vibandha, Pratishyaya, Daurbalya, Swasa, Gridhrasi
10.	RARISD, Vijayawada	Sandhigatavata, Vatavyadhi, Prameha, Katishoola, Kushtha, Amlapitta, Shirahshoola, Daurbalya, Swasa, Gridhrasi
11.	RARIMCH, Nagpur	Sandhivata, Vatavyadhi, Amlapitta, Daurbalya, Padshool, Vibandha, Gridhrasi, Shirshoola, Kasa, Arsha
12.	RARILSD, Trivandrum	Sandhivata, Vatavyadhi, Sandhishoola, Gridhrasi, Twakaroga, Swasa, Katishoola, Kasa, Prameha
13.	RARIID, Patna	Vatavyadhi, Sandhigatavata, Trikshoola, Kushtha, Daurbalya, Arsha, Udaravikara, Vibandha, Sirahshoola, Swasa
14.	RARIGID, Guwahati	Sandhivata, Amlapitta, Madhumeha, Jwara, Shirahshoola, Amlapitta, Kasa, Agnimandhya Arsha
15.	RARI, Gangtok	Vatavyadhi, Sandhivata, Shirahshoola, Amlapitta, Kasa, Agnimandhya, Arsha
16.	RARIUD, Jammu	Kasa, Sandhivata, Kushtha, Rajodosha, Vatavyadhi, Ajirna, Vatarakta Jwara, Agnimandhya, Arsha
17.	RARIND, Mandi	Sandhivata, Katishoola, Vatarakta, Shwetapradara, Raktagatvata, Amlapitta, Pratishyaya, Jwara, Gridhrasi, Pandu
18.	RARISD, Ahmedabad	Sandhivata, Daurbalya, Madhumeha, Ajirna, Panduroga, Kushtha Vibandha, Kasa, Amlapitta
19.	ACAMH&NS, Bangalore	Sandhivata, Vatavyadhi, Prameha, Amlapitta, Gridhrasi, Rajodosha, Kasa, Panduroga, Pradara, Vibandha
20.	ALRCA, Chennai	Vatavyadhi, Daurbalya, Pratishyaya, Sandhivata, Prameha, Trikagraha, Amlapitta, Kushtha, Swasa, Shirahshoola



7.3 Reproductive and Child Health Care (RCH) Programme under Scheduled Castes Sub Plan (SCSP)

Ayurveda the ancient tradition of Indian Systems of Medicine has sustained the population for centuries, with effective cures and remedies for numerous conditions, including those relating to women and children, with minimal side effects. As an apex body of research in Ayurveda, under the programme Schedule Caste sub-plan CCRAS is providing health care services and creating awareness for maintenance and promotion of health of SC communities by Ayurvedic approaches through its different Institutes across the country. Considering the strength of Ayurveda in the management of health related problems of women and children, the Council has also decided extend its activities specially for women and children through RCH under SCSP programme at 19 Institutes in 17 States (approved by 81st Standing Finance Committee) across the country. The programme has been undertaken with following aim and objectives-

Aims:

1. To provide mother and child health care awareness and medical services in the Schedule Caste (SC) dominant community.
2. To provide health care services and to create awareness about health hygiene and diet among woman and children of Schedule Caste (SC) dominant Community.

Objectives:

1. To study the Socio-Economic status, living conditions, Educational status, dietetic habits, life styles and health care seeking behaviour of SC Women and Children
2. To generate awareness on Ayurvedic concepts i.e. Swasthavrita, Pathyapathya, Sadvitta, etc. for promotion and maintenance of health and improvement OF the quality of life
3. To provide primary health care services at their door steps through Ayurveda especially to women and children of SC community to reduce the mortality & morbidity.
4. To Collect the data regarding Traditional Practices during Pre-conception, Antenatal, Postnatal period and Children.

Methodology

Each Institute has selected 05 villages considering the predominance of SC population with the yearly target of health survey of 5000 women and children. The approval of Institutional Ethics Committee has been obtained at each participating Institute for this programme. The specific data capturing form have also been developed for collection of the data. Following activities carried out in the programme:

1. Health care services to pregnant women and mother
2. Management of various gynaecological disorders
3. Health care services to children up to 12 years of age.
4. Awareness activities for prevention of diseases and promotion of health

Work carried out during the reporting year

The project work has been initiated on January 2019. Under this programme, total 95 villages (5 villages at each Institute) have been selected based of SC dominated population at 19 Institutes. Total 29372 Population Surveyed for their health and socio-economic status through 887 Tours in 17 States. Total 12445 women & child were treated from which 10,106 (8332 Women & 1774 child) were schedule caste. Further, 2359 required laboratory investigations were carried out. Total 281 health related awareness activities were conducted during the reporting period. The detail comprehensive data on the activities is presented below (Table No. 68)-

Table- 68: Institute wise status of work done under RCH (SCSP)

S. No.	Name of the Institute	Name of Villages covered	No. of visits made	SC Population Surveyed	Patient treated						Total ANC visits	Total Investigations	Total Awareness Activities	
					Women		Child		Other					
					SC	ST	Other	SC	ST	Other				
1.	CARICD, Delhi	Sultan puri	9	356	115	0	11	51	0	5	182	1	25	3
		Mangolpuri	10	403	136	0	3	47	0	1	187	0	38	3
		Shahabad dairy	10	346	152	0	11	47	0	5	215	5	44	3
		Madipur	9	293	95	0	0	26	0	0	121	0	18	2
		Pandav nagar	11	383	123	0	6	43	0	2	174	2	40	4
		Total	49	1781	621	0	31	214	0	13	879	8	165	15
		Total	11	146	124	0	57	5	0	0	186	5	105	6
2.	NARIP Cheruthuthy`	Ananganady	14	223	167	0	88	26	0	1	282	7	149	8
		Chalavara	12	272	332	0	24	87	0	4	447	2	100	8
		Shoranur	12	210	171	0	75	18	0	4	268	6	147	6
		Nellaya	13	183	228	0	69	37	0	7	341	4	146	9
		Total	62	1034	1022	0	313	173	0	16	1524	24	647	37
		Total	7	141	48	0	0	14	0	0	62	0	0	0
		Total	8	161	37	0	0	6	0	0	43	0	0	0
3.	CARIHD, Bhuwaneswar	Dhauri	9	278	70	0	0	13	0	0	83	0	0	0
		Kalarahanga	6	176	53	0	0	18	0	0	71	0	0	1
		Basuaghai	6	227	53	0	0	14	0	0	67	0	0	1
		Total	36	983	261	0	0	65	0	0	326	0	0	2
		Total	5	187	41	0	0	14	0	0	55	0	24	0
		Total	5	228	37	0	0	5	0	0	42	0	12	0
		Total	4	132	42	0	0	13	0	0	55	3	12	2
4.	CARIDD, Kolkata	Beonta	4	97	18	0	0	7	0	0	25	0	8	3
		Kulberia	5	134	31	0	0	6	0	0	37	0	16	3
		Total	23	778	169	0	0	45	0	0	214	3	72	8
		Total	11	343	77	0	15	10	0	4	106	6	0	4
		Total	13	333	126	0	12	20	0	4	162	1	0	3
		Total	13	513	235	0	16	32	0	1	284	9	21	5
		Total	12	398	123	0	9	7	0	4	143	1	15	2
5.	CARIRD, Patiala	Sanour, patiala	13	427	94	0	19	14	0	6	133	2	6	3
		Total	62	2014	655	0	71	83	0	19	828	19	42	17



S. No.	Name of the Institute	Name of Villages covered	No. of visits made	SC Population Surveyed	Patient treated						Total ANC visits	Total Investigations	Total Awareness Activities	
					Women		Child		Total					
				SC	ST	Other	SC	ST	Other					
6.	RARIED Lucknow	Hullaskhera	11	309	162	0	28	31	0	00	221	3	10	2
		Bhadoi	13	362	147	0	53	28	0	04	232	4	49	2
		Shivpuri	13	464	180	0	21	33	0	04	238	11	69	2
		Kallipacshim	12	335	133	0	38	23	0	00	194	5	43	2
		Ratnapur	13	287	212	0	29	11	0	05	257	5	42	2
		Total	62	1757	834	0	169	126	0	13	1142	28	213	10
7.	RARIED Jaipur	Regaro ka mohalla,	10	493	230	0	22	27	0	7	286	0	7	1
		Boltya , benar	10	360	176	3	4	41	0	7	231	6	2	1
		Jhalana dungari,	10	348	165	1	3	88	1	0	258	24	7	0
		Sitawari,	10	524	232	0	0	40	0	0	272	3	23	1
		Ghatgate	9	554	100	0	1	27	0	0	128	0	1	1
		Total	49	2279	903	4	30	223	1	14	1175	33	40	4
8.	CARIC Mumbai	Siddhartha Bandra	4	276	9	0	0	05	0	0	14	0	0	1
		Ahinsanagar,	2	117	0	0	1	03	0	0	4	1	0	0
		Jijamata	4	178	7	0	1	01	0	0	9	0	28	2
		Premnagar,	3	166	2	0	1	01	0	2	6	0	0	1
		Siddhartha Worli	4	314	14	0	6	00	0	0	20	2	0	1
		Total	17	1051	32	0	9	10	0	2	53	3	28	5
9.	RARIDD Gwalior	Adupura, morar	13	643	140	0	2	20	0	0	162	10	6	4
		Kalyani, dabra	12	624	101	13	40	19	5	5	183	13	10	1
		Badi akawai,	12	695	92	1	0	38	0	0	131	7	0	7
		Bijoli, morar	12	510	181	0	51	25	0	0	257	4	18	2
		Chak mahroli,	11	688	109	0	13	25	0	3	150	10	12	1
		Total	60	3160	623	14	106	127	5	8	883	44	46	15
10.	RARISD, Vijayawada	Velageru	6	269	52	0	21	15	0	0	88	0	41	3
		Mustabada	12	387	73	4	3	29	0	0	109	0	40	3
		Surampalli	9	383	67	3	2	20	0	2	94	6	47	3
		Velvadam	7	297	92	0	7	14	0	0	113	9	46	3
		Vellaturu	8	334	77	6	7	16	2	0	108	4	33	3
		Total	42	1670	361	13	40	94	2	2	512	19	207	15



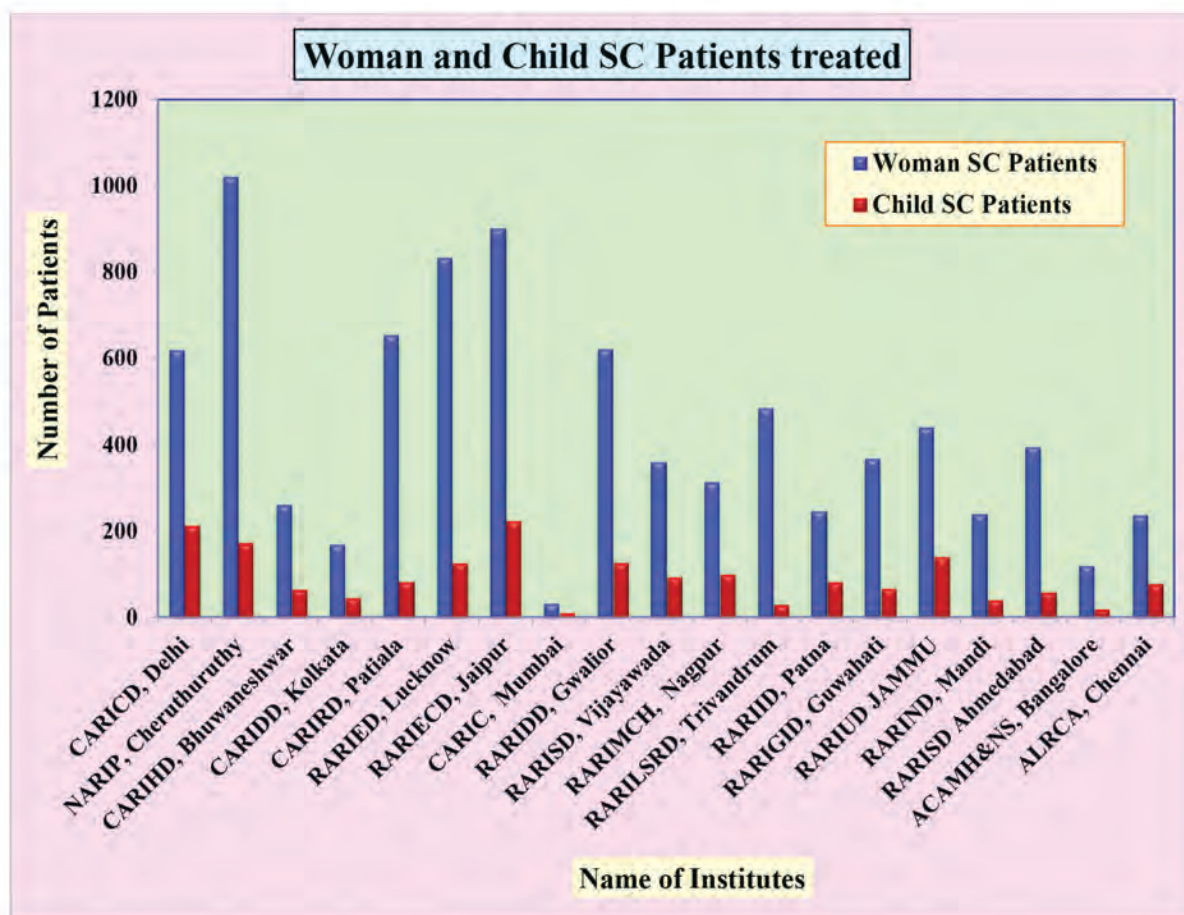
S. No.	Name of the Institute	Name of Villages covered	No. of visits made	SC Population Surveyed	Patient treated						Total ANC visits	Total Investigations	Total Awareness Activities	
					Women		Child		Total					
				SC	ST	Other	SC	ST	Other					
11.	RARIMCH Nagpur	Kandri	10	125	86	43	88	21	5	40	283	4	30	3
		Patansawangi	11	130	63	23	156	11	10	32	295	4	28	3
		Walani	10	142	61	0	201	31	0	54	347	11	45	3
		Godhani	9	155	52	7	84	24	8	33	208	13	35	3
		Sillewada	11	148	52	16	193	13	0	49	323	2	42	4
		Total	51	700	314	89	722	100	23	208	1456	34	180	16
12.	RARILSRD Trivandrum	Maranalloor	15	252	70	0	10	10	0	1	91	2	4	1
		Venganoor	13	254	104	0	24	6	0	0	134	6	7	2
		Vilappil	14	357	144	1	43	6	0	1	195	2	5	2
		Poorachal	9	281	118	0	9	0	0	0	127	3	9	2
		Neyyattinkara	9	233	50	0	2	8	0	0	60	3	3	2
		Total	60	1377	486	1	88	30	0	2	607	16	28	9
13.	RARIID Patna	Chipura	6	223	41	0	0	12	0	0	53	2	30	2
		Mahamda	7	252	48	0	0	19	0	0	67	6	39	6
		Kandap	7	400	83	0	0	20	0	0	103	2	53	5
		Gopalpur	6	424	40	0	0	14	0	0	54	2	28	5
		Mirchi	7	213	35	0	0	17	0	0	52	8	31	7
		Total	33	1512	247	0	0	82	0	0	329	20	181	25
14.	RARIGID Guwahati	Dihingsatra	9	291	62	0	5	11	0	0	78	1	11	3
		Kuttingpahar	10	320	60	0	2	19	0	0	81	0	9	2
		Monikarneswar	10	359	72	0	3	7	0	0	82	1	21	2
		Majortol	10	345	96	0	1	15	0	1	113	0	41	2
		Borkuchi colony	10	346	79	0	3	16	0	0	98	1	21	2
		Total	49	1661	369	0	14	68	0	1	452	3	103	11
15.	RARIUD JAMMU	Badyal quazian	10	251	89	3	0	36	0	0	128	6	4	10
		Bala Chak	12	289	72	1	6	30	0	0	109	12	3	12
		Phinder	10	364	111	2	1	22	4	0	140	5	6	10
		Jindlehar	10	267	79	0	0	34	0	1	114	1	4	10
		Chohala	12	314	90	3	6	18	4	5	126	5	4	12
		Total	54	1485	441	9	13	140	8	6	617	29	21	54



S. No.	Name of the Institute	Name of Villages covered	No. of visits made	SC Population Surveyed	Patient treated						Total ANC visits	Total Investigations	Total Awareness Activities	
					Women			Child						
					SC	ST	Other	SC	ST	Other				
16.	RARIND, Mandi	Kummi	8	164	77	0	2	7	0	1	87	4	39	3
		Tandu	9	195	49	0	14	8	0	3	74	2	46	4
		Chailchowk	9	178	37	0	0	5	0	4	46	4	23	4
		Shivabadar	8	183	22	0	5	15	0	4	46	1	21	2
		Behna	9	190	55	3	17	5	0	0	80	0	36	4
		Total	43	910	240	3	38	40	0	12	333	11	165	17
17.	RARISD Ahmedabad	Ranip	6	302	37	2	26	4	0	2	71	0	11	1
		Bapunagar	8	454	146	6	9	24	0	1	186	1	23	1
		Sajpur	7	471	40	1	3	1	0	1	46	0	11	1
		Saraspur	6	457	107	1	13	15	0	3	139	0	16	1
		Chandkheda	6	516	66	6	30	14	0	6	122	0	10	3
		Total	33	2200	396	16	81	58	0	13	564	1	71	7
18.	ACAMH&NS Bangalore	Rayapuram	11	426	13	1	4	0	0	0	18	3	3	2
		Sudhamnagar	10	382	55	3	14	10	0	3	85	7	1	1
		Chalavadipalya	12	528	11	0	1	1	0	1	14	7	5	1
		Subhashnagar	11	355	29	1	11	3	0	2	46	4	8	1
		Sarvajnanagar	12	378	12	0	3	5	0	0	20	7	2	2
		Total	56	2,069	120	5	33	19	0	6	183	28	19	7
19.	ALRCA Chennai	Tirusulam	11	215	47	0	2	16	0	2	67	2	22	1
		Velachery	10	239	63	0	21	30	0	5	119	2	22	1
		Alandur	9	202	40	0	5	11	0	2	58	4	23	2
		Venkatapuram	9	202	45	0	7	11	0	0	63	2	32	1
		Sembakkam	7	93	43	0	8	9	0	1	61	2	32	2
		Total	46	951	238	0	43	77	0	10	368	12	131	7
Grand Total			887	29372	8332	154	1801	1774	39	345	12445	335	2359	281



REPRODUCTIVE AND CHILD HEALTH CARE UNDER SCSP





7.4 Swasthya Raksha Programme

The Ministry of AYUSH, Government of India has launched Swasthya Rakshan Program (SRP) through Central Council for Research in Ayurvedic Sciences (CCRAS) in selected districts / villages in October, 2015 with objective to take care of the health of the people in selected areas/ villages and to promote awareness about linkage between sanitation and health. Providing of high quality AYUSH health care facilities along scientific lines is the major objective of the programme.

The programme also reflects the impact of 'Swachh Bharat Abhiyan' of the Government of India by promoting of cleanliness in surroundings by raising awareness about cleaning the environment both domestic and outside. Health education is an important component in programme for promotion of environmental and social hygiene especially in the villages.

While promoting health and cleanliness through this programme, special emphasis is to be given on collection of demographic data of the selected area. The information to be retrieved from data may vary from area to area and will show the food habits, living style, etc. of that particular region. Survey will be undertaken to know the prevalent diseases in the large areas/ villages before selection of particular area.

Since, the diseases and poor health conditions mainly arise out of the unhygienic and poor sanitation conditions in the villages, people will also be educated on the communicable/ non-communicable diseases and the ways to prevent these diseases through the Swasthya Rakshan OPDs organized in each area/ village on a weekly basis. Free distribution of medicines will also be done for various prevailing disease conditions. Also the individual health screening of the people of the areas/ villages coming for treatment will be done. SRP is likely to improve significantly the Council's outreach in terms of planning and implementation of the various programmes of Public Health Research.

Aims and objectives:-

1. To organize Swasthya Rakshan OPDs, Swasthya Parikshan Camps and Health/Hygiene awareness programme
2. Awareness about cleanliness of domestic surroundings and environment.
3. Provide medical aid/incidental support in the adopted Colonies/villages.
4. Documentation of demographic information, food habits, hygiene conditions, seasons, lifestyle etc., incidence/prevalence of disease and their relation to the incidence of disease.
5. Assessment of health status and propagation of Ayurvedic concept of pathya-apathya and extension of health care services.

This programme is being executed through 21 CCRAS institutes in 19 states. During the year 2018-19, the SRP was running in 162 villages/colonies. During the period, 4985 tours conducted and Medical aid provided to 1,49,940 patients during the programme (Table No. 69). Awareness about hygiene & sanitation was also created among the people through various IEC activities.

Table -69: Institute wise status of Swasthya Rakshan Programme

S. No.	Name of Institute	Name of Village/ Area	No. of tour conducted	Patients treated																Grand Total (M+F)
				New						Old						Total				
				Adult		Child		Total		Adult		Child		Total		M	F	M	F	
				M	F	M	F	M	F	M	F	M	F	M	F					
1.	CARICD, New Delhi	Badli	48	402	513	32	24	434	537	138	261	4	3	142	264	576	801	1377		
		Kirari	96	636	1709	134	98	770	1807	178	443	9	4	187	447	957	2254	3211		
		Rohini	32	387	346	12	12	399	358	226	128	3	3	229	131	628	489	1117		
		Samaypur	44	289	541	37	27	326	568	58	111	2	0	60	111	386	679	1065		
		Vishnu Garden	16	91	214	6	7	97	221	31	48	1	0	32	48	129	269	398		
		Raja vihar	4	25	54	1	4	26	58	5	55	0	2	5	57	31	115	146		
Total		6	1830	3377	222	172	2052	3549	636	1046	19	12	655	1058	2707	4607	7314			
2.	CARINMSD, Cheruthuruthy	Erumapetty Panchayath	53	175	744	80	54	255	798	244	1179	36	36	280	1215	535	2013	2548		
		Mulankunathukavu Panchayath	40	153	521	32	37	185	558	165	779	30	10	195	789	380	1347	1727		
		ottappalam Municipality	46	205	544	42	29	247	573	239	708	15	18	254	726	501	1299	1800		
		Pattambi municipality	46	212	464	23	47	235	511	227	735	12	21	239	756	474	1267	1741		
		Thirumittacode Panchayat	57	304	686	23	35	327	721	409	1375	15	14	424	1389	751	2110	2861		
		Total		5	1049	2959	200	202	1249	3161	1284	4776	108	99	1392	4875	2641	8036	10677	
3.	CARIHD, Bhubaneswar	Kargil Basti (w-62)	45	157	278	37	28	194	306	60	149	12	7	72	156	266	462	728		
		Mundasahi 7SandhaSahi(W-24)	49	123	203	17	17	140	220	68	126	3	4	71	130	211	350	561		
		Subash Nagar& Raghunaath nagar 9 w-65 & 66)	49	203	393	16	17	219	410	115	392	4	2	119	394	338	804	1142		
		Tapovan Basti(W-63)	50	160	249	29	26	189	275	86	167	12	11	98	178	287	453	740		
		Tarini Basti(W-60)	47	182	274	31	24	213	298	136	227	10	7	146	234	359	532	891		
		Total		5	825	1397	130	112	955	1509	465	1061	41	31	506	1092	1461	2601	4062	



4. CARIDD, Kolkata	Dhakuria	48	130	141	4	2	134	143	723	589	18	0	741	589	875	732	1607	
	Mathkal	51	102	141	7	3	109	144	416	781	3	11	419	792	528	936	1464	
	Nagerbazar	49	110	188	4	4	114	192	532	1052	4	21	536	1073	650	1265	1915	
	PhoolBagan/ Patuli	43	89	157	15	7	104	164	277	612	2	3	279	615	383	779	1162	
	Sobhabazar	49	88	141	3	4	91	145	492	549	1	1	493	550	584	695	1279	
	Total	5	519	768	33	20	552	788	2440	3583	28	36	2468	3619	3020	4407	7427	
	5. CARIRD, Patiala	Anand Nagar	26	143	262	11	5	154	267	347	589	21	10	368	599	522	866	1388
		Baran	24	86	108	1	1	87	109	117	109	1	1	118	110	205	219	424
		Dhakla	25	104	238	8	15	112	253	128	294	7	18	135	312	247	565	812
		Deep Nagar	25	173	303	15	6	188	309	509	700	10	7	519	707	707	1016	1723
Lang		24	104	211	4	5	108	216	243	226	5	0	248	226	356	442	798	
Ranjit Nagar		26	128	359	9	2	137	361	438	1213	7	1	445	1214	582	1575	2157	
Rattan Nagar		22	112	275	6	7	118	282	364	669	13	6	377	675	495	957	1452	
Rurki Kasba		23	210	401	14	21	224	422	367	887	19	16	386	903	610	1325	1935	
Seona		24	74	181	16	2	90	183	141	320	9	1	150	321	240	504	744	
Theri		23	132	322	11	17	143	339	304	489	2	24	306	513	449	852	1301	
Total	10	1266	2660	95	81	1361	2741	2958	5496	94	84	3052	5580	4413	8321	12734		
6. RARIED, Lucknow	Rajouli	24	82	90	44	40	126	130	140	178	75	59	215	237	341	367	708	
	Paharpur	26	176	279	40	49	216	328	235	443	41	53	276	496	492	824	1316	
	Ganeshpur rahman pur	24	167	256	35	27	202	283	297	366	59	46	356	412	558	695	1253	
	Makariya kala	26	71	104	29	19	100	123	222	328	74	52	296	380	396	503	899	
	Sarsawa	24	109	175	13	9	122	184	241	360	33	22	274	382	396	566	962	
	Behta	24	166	371	63	56	229	427	211	490	95	59	306	549	535	976	1511	
	Uttar dhauna	23	97	141	11	23	108	164	184	321	28	47	212	368	320	532	852	
	Ahimamau	22	88	195	12	10	100	205	138	378	17	5	155	383	255	588	843	
	Harihar pur	23	48	87	62	40	110	127	103	235	155	90	258	325	368	452	820	
	Devri rokhara	21	139	160	30	15	169	175	244	259	35	4	279	263	448	438	886	
Total	11	1267	2076	369	322	1636	2398	2198	3686	635	475	2833	4161	4469	6559	11028		



7.	CARIC, Mumbai	Agripada	48	235	383	16	5	251	388	345	695	42	8	387	703	638	1091	1729		
		Kurla	42	275	563	61	54	336	617	132	530	10	24	142	554	478	1171	1649		
		Mazon	51	241	305	14	14	255	319	227	361	12	8	239	369	494	688	1182		
		New prabhadevi	56	269	242	21	34	290	276	216	265	8	23	224	288	514	564	1078		
		Sion koliwada	48	133	248	12	8	145	256	200	420	4	9	204	429	349	685	1034		
		Total	245	1153	1741	124	115	1277	1856	1120	2271	76	72	1196	2343	2473	4199	6672		
		8.	RARIED, Jaipur	Adarsh Nagar	45	294	510	39	48	333	558	146	376	9	9	155	385	488	943	1431
				Khatipura	47	304	386	15	16	319	402	247	306	2	6	249	312	568	714	1282
				Hasanpura	46	274	611	126	126	400	737	137	346	34	47	171	393	571	1130	1701
				Sanganer	59	498	414	44	40	542	454	352	225	18	22	370	247	912	701	1613
Panchyawala	43			212	406	48	45	260	451	104	181	12	11	116	192	376	643	1019		
Total	240			1582	2327	272	275	1854	2602	986	1434	75	95	1061	1529	2915	4131	7046		
9.	RARIDD, Gwalior	Gaoshapura	25	108	302	25	37	133	339	73	320	18	23	91	343	224	682	906		
		Halvat Khana	24	93	282	34	48	127	330	126	407	21	27	147	434	274	764	1038		
		Hanuman Bandh Road	27	125	414	47	47	172	461	118	320	6	7	124	327	296	788	1084		
		Harijan Basti	24	77	351	23	28	100	379	76	497	18	22	94	519	194	898	1092		
		jama Masjid	24	161	313	19	17	180	330	99	277	6	3	105	280	285	610	895		
		Kala Saiyad	22	60	269	38	30	98	299	48	241	12	16	60	257	158	556	714		
		Kishan Bag Road	24	54	229	54	71	108	300	56	176	15	29	71	205	179	505	684		
		Ramai ka pura	22	73	255	55	52	128	307	44	161	19	17	63	178	191	485	676		
		Shri Krishna Nagar	23	61	293	35	60	96	353	68	298	30	40	98	338	194	691	885		
		Sikasdar kampoo	25	48	305	36	21	84	326	22	257	15	7	37	264	121	590	711		
Total	240	860	3013	366	411	1226	3424	730	2954	160	191	890	3145	2116	6569	8685				
10	RARISD, Vijayawada	Christurajapuram	49	261	275	15	21	276	296	144	181	7	9	151	190	427	486	913		
		Kothapeta	49	235	216	18	16	253	232	156	174	4	7	160	181	413	413	826		
		Krishnalanka	49	243	363	25	21	268	384	149	236	7	4	156	240	424	624	1048		
		New Raja rajeswari peta	48	238	283	45	37	283	320	168	162	15	15	183	177	466	497	963		
		Ranigarithota	47	261	340	18	20	279	360	167	205	7	10	174	215	453	575	1028		
Total	5	1238	1477	121	115	1359	1592	784	958	40	45	824	1003	2183	2595	4778				



11. RARIMCH, Nagpur	Ajani	15	85	161	3	6	88	167	121	203	2	4	123	207	211	374	585	
	Bhugaon	16	118	201	21	8	139	209	117	189	12	4	129	193	268	402	670	
	Bidgaon	21	108	292	16	20	124	312	113	432	25	28	138	460	262	772	1034	
	Bina	21	118	141	12	2	130	143	132	104	8	0	140	104	270	247	517	
	Tarsa	19	120	170	2	5	122	175	127	208	1	1	128	209	250	384	634	
	Chacher	19	89	158	11	10	100	168	111	143	4	4	115	155	215	323	538	
	Dahegaon	22	79	158	9	5	88	163	63	192	4	4	67	195	155	358	513	
	Nagardah	43	237	433	12	10	249	443	509	643	8	8	5	517	648	766	1091	1857
	Wadoda	22	115	284	13	13	128	297	149	305	10	6	159	311	287	608	895	
	Wagdara	42	99	354	15	26	114	380	159	625	13	25	172	650	286	1030	1316	
Total	240	1168	2352	114	105	1282	2457	1601	3044	87	88	1688	3132	2970	5589	8559		
12. RARIMD, Bangalore	Binnypete	58	275	354	16	15	291	369	303	336	5	10	308	346	599	715	1314	
	Gangaon	49	197	286	116	39	313	325	200	335	84	39	284	374	597	699	1296	
	Ragigudda	54	225	226	31	34	256	260	452	167	61	130	513	297	769	557	1326	
	Shrinagar	44	151	217	16	6	167	223	144	380	26	50	170	430	337	653	990	
	Someshwagar	42	137	160	5	41	142	201	146	295	19	61	165	356	307	557	864	
	Total	5	985	1243	184	135	1169	1378	1245	1513	195	290	1440	1803	2609	3181	5790	
	Pallichal	47	203	497	10	13	213	510	163	538	10	4	173	542	386	1052	1438	
13. RARILSD, Trivandrum	Peroorkada	47	210	437	6	3	216	440	165	494	4	3	169	497	385	937	1322	
	karakulum	48	177	550	5	9	182	559	144	477	6	6	150	483	332	1042	1374	
	Balarampuram	50	185	479	16	3	201	482	155	603	14	1	169	604	370	1086	1456	
	Nemon	48	213	399	15	8	228	407	221	447	8	8	229	455	457	862	1319	
	Total	5	988	2362	52	36	1040	2398	848	2559	42	22	890	2581	1930	4979	6909	
	Chowk shikharpur	43	131	203	11	9	142	212	320	409	17	12	337	421	479	633	1112	
14. RARIID, Patna	Hanuman mandir	47	135	167	19	7	154	174	327	368	19	6	346	374	500	548	1048	
	Kumhara	46	101	157	18	12	119	169	272	472	23	13	295	485	414	654	1068	
	Mangal akhada	44	97	219	12	18	109	237	191	462	20	25	211	487	320	724	1044	
	Vijayanagar	46	100	211	15	11	115	222	262	596	20	17	282	613	397	835	1232	
	Total	5	564	957	75	57	639	1014	1372	2307	99	73	1471	2380	2110	3394	5504	



15. RARIGID, Guwahati	Jyoti Nagar	22	97	179	13	12	110	191	56	79	4	5	60	84	170	275	445	
	New Colony	24	88	209	6	8	94	217	118	276	8	4	126	280	220	497	717	
	Padumbari	22	67	130	9	6	76	136	75	168	13	6	88	174	164	310	474	
	Dakshin gaon	24	139	117	26	16	165	133	125	43	2	4	127	47	292	180	472	
	Azara	23	84	153	13	13	97	166	51	124	6	6	57	130	154	296	450	
	Madhavdeb Nagar	24	68	190	29	31	97	221	45	113	12	8	57	121	154	342	496	
	Joymoti nagar	25	67	65	4	4	71	69	94	89	0	3	94	92	165	161	326	
	Japorigog	30	71	82	3	5	74	87	105	113	2	4	107	117	181	204	385	
	Bakrapara	24	97	158	8	7	105	165	55	173	3	5	58	178	163	343	506	
	Krishna Nagar	23	40	93	11	17	51	110	35	83	5	8	40	91	91	201	292	
Total	10	241	818	1376	122	119	940	1495	759	1261	55	53	814	1314	1754	2809	4563	
16. RARI, Gangtok	Pachey-Samsing GPU	20	87	112	12	11	99	123	54	78	9	10	63	88	162	211	373	
	Chanmari GMC	19	67	76	4	0	71	76	82	139	6	0	88	139	159	215	374	
	Samlik-Marchak GPU	27	167	148	6	4	173	152	135	148	3	4	138	152	311	304	615	
	Syari-Tatanchen GPU	18	138	129	4	1	142	130	96	107	2	2	98	109	240	239	479	
	Nandok-Saramsa GPU	29	149	146	12	6	161	152	197	204	13	3	210	207	371	359	730	
	Arithang, GMC	24	157	140	1	4	158	144	122	146	0	4	122	150	280	294	574	
	Aho Yangtam GPU	45	209	257	10	11	219	268	143	242	5	8	148	250	367	518	885	
	Development Area GMC	26	179	211	14	9	193	220	166	194	5	5	171	199	364	419	783	
	Total	8	208	1153	1219	63	46	1216	1265	995	1258	43	36	1038	1294	2254	2559	4813
	17. RARI, Itanagar	Chipu	20	101	108	18	16	119	124	54	50	19	14	73	64	192	188	380
Doimukh		24	84	129	23	22	107	151	27	34	4	4	31	38	138	189	327	
Golpur		17	67	63	12	6	79	69	71	62	7	4	78	66	157	135	292	
Jollang		44	182	196	35	30	217	226	114	158	41	32	155	190	372	416	788	
Lekhi village		15	44	36	8	9	52	45	31	24	6	10	37	34	89	79	168	
Model village		27	78	109	29	25	107	134	60	103	17	25	77	128	184	262	446	
Nirjuli blocks		32	83	96	25	35	108	131	58	77	10	12	68	89	176	220	396	
Pagtara		13	61	38	8	12	69	50	47	27	6	5	53	32	122	82	204	
Papu		20	47	86	46	55	93	141	35	97	13	15	48	112	141	253	394	
Senki view		18	77	82	9	9	86	91	55	97	8	11	63	108	149	199	348	
Total	10	230	824	943	213	219	1037	1162	552	729	131	132	683	861	1720	2023	3743	



18. RARIUD, Jammu	Bhalwal	38	136	462	64	90	200	552	91	228	18	32	109	260	309	812	1121
	Sungal	35	171	378	51	64	222	442	105	183	23	23	128	206	350	648	998
	Baran	26	87	247	42	34	129	281	58	134	12	14	70	148	199	429	628
	Gajansoo	28	84	282	52	36	136	318	50	121	18	11	68	132	204	450	654
	Gurah Brahmana	29	115	241	47	33	162	274	62	168	17	14	79	182	241	456	697
	Malpur	19	102	223	20	25	122	248	48	104	13	10	61	114	183	362	545
	Kanachak	19	73	242	51	46	124	288	40	76	16	13	56	89	180	377	557
	Gurah Jagir	20	134	307	39	49	173	356	63	90	16	15	79	105	252	461	713
	Total	8	902	2382	366	377	1268	2759	517	1104	133	132	650	1236	1918	3995	5913
	19. RARIND, Mandi	Syanj	12	40	63	1	2	41	65	93	127	1	0	94	127	135	192
Kandha		13	59	87	4	2	63	89	108	117	3	3	111	120	174	209	383
Gohar		13	72	112	4	6	76	118	89	146	4	2	93	148	169	266	435
Basa		12	27	92	3	1	30	93	28	146	3	0	31	146	61	239	300
Bada		13	35	164	7	8	42	172	32	255	4	1	36	256	78	428	506
Mustrani		11	28	32	2	1	30	33	79	76	5	5	84	81	114	114	228
Nandi		12	50	72	3	7	53	79	92	113	3	12	95	125	148	204	352
Jhiri		11	41	44	5	1	46	45	84	69	6	2	90	71	136	116	252
Balhari		13	38	71	11	12	49	83	60	106	6	11	66	117	115	200	315
Bela		12	39	93	7	11	46	104	83	121	0	4	83	125	129	229	358
Sarao		14	56	84	10	7	66	91	107	153	9	5	116	158	182	249	431
Aut		11	46	63	3	1	49	64	72	127	3	3	75	130	124	194	318
Jagar		11	48	55	5	12	53	67	85	112	4	4	89	116	142	183	325
Bharoun		13	26	119	14	4	40	123	38	214	14	2	52	216	92	339	431
Taamdi		11	48	86	10	5	58	91	62	124	5	4	67	128	125	219	344
Parvada	11	44	67	17	7	61	74	70	89	17	7	87	96	148	170	318	
Noun	13	53	73	13	16	66	89	59	126	6	3	65	129	131	218	349	
Kharsi	13	42	76	11	16	53	92	68	102	15	11	83	113	136	205	341	
Chachyot	10	31	68	14	24	45	92	45	103	12	11	57	114	102	206	308	
Tharjun	9	59	75	0	7	59	82	60	91	0	2	60	93	119	175	294	
Total	20	882	1596	144	150	1026	1746	1414	2517	120	92	1534	2609	2560	4355	6915	



20. RARISD, Ahmedabad	Chandheda	5	41	69	2	2	43	71	64	84	2	3	66	87	109	158	267	
	Thakkar Nagar	5	44	69	6	0	50	69	71	85	5	0	76	85	126	154	280	
	kuber Nagar	5	26	81	5	6	31	87	24	87	7	7	31	94	62	181	243	
	Adinath Nagar	5	42	78	5	3	47	81	45	82	3	4	48	86	95	167	262	
	Motera	40	297	372	5	13	302	385	480	538	6	17	486	555	788	940	1728	
	Krishna Nagar	43	432	596	15	8	447	604	821	1026	28	19	849	1045	1296	1649	2945	
	SP Stadium	40	197	291	16	16	213	307	339	512	21	36	360	548	573	855	1428	
	Nava Naroda	51	290	566	35	28	325	594	540	1139	12	2	552	1141	877	1735	2612	
	Nikol	41	331	474	20	14	351	488	457	643	2	18	459	661	810	1149	1959	
	Total	9	1700	2596	109	90	1809	2686	2841	4196	86	106	2927	4302	4736	6988	11724	
	21. ALRCA, Chennai	Alanthur	48	154	346	14	11	168	357	162	421	9	10	171	431	339	788	1127
		Indra Nagar	47	158	398	25	23	183	421	113	257	9	10	122	267	305	688	993
Kk Nagar		49	142	402	14	21	156	423	122	309	4	9	126	318	282	741	1023	
Pallavapuram		47	133	335	17	28	150	363	86	296	9	25	95	321	245	684	929	
Ramapuram		49	179	376	32	23	211	399	112	282	6	2	118	284	329	683	1012	
Total		5	766	1857	102	106	868	1963	595	1565	37	56	632	1621	1500	3584	5084	
Grand Total	162	4985	22339	40678	3476	3265	25815	43943	26340	49318	2304	2220	28644	51538	54459	95481	149940	



Swasthya Rakshan Programme

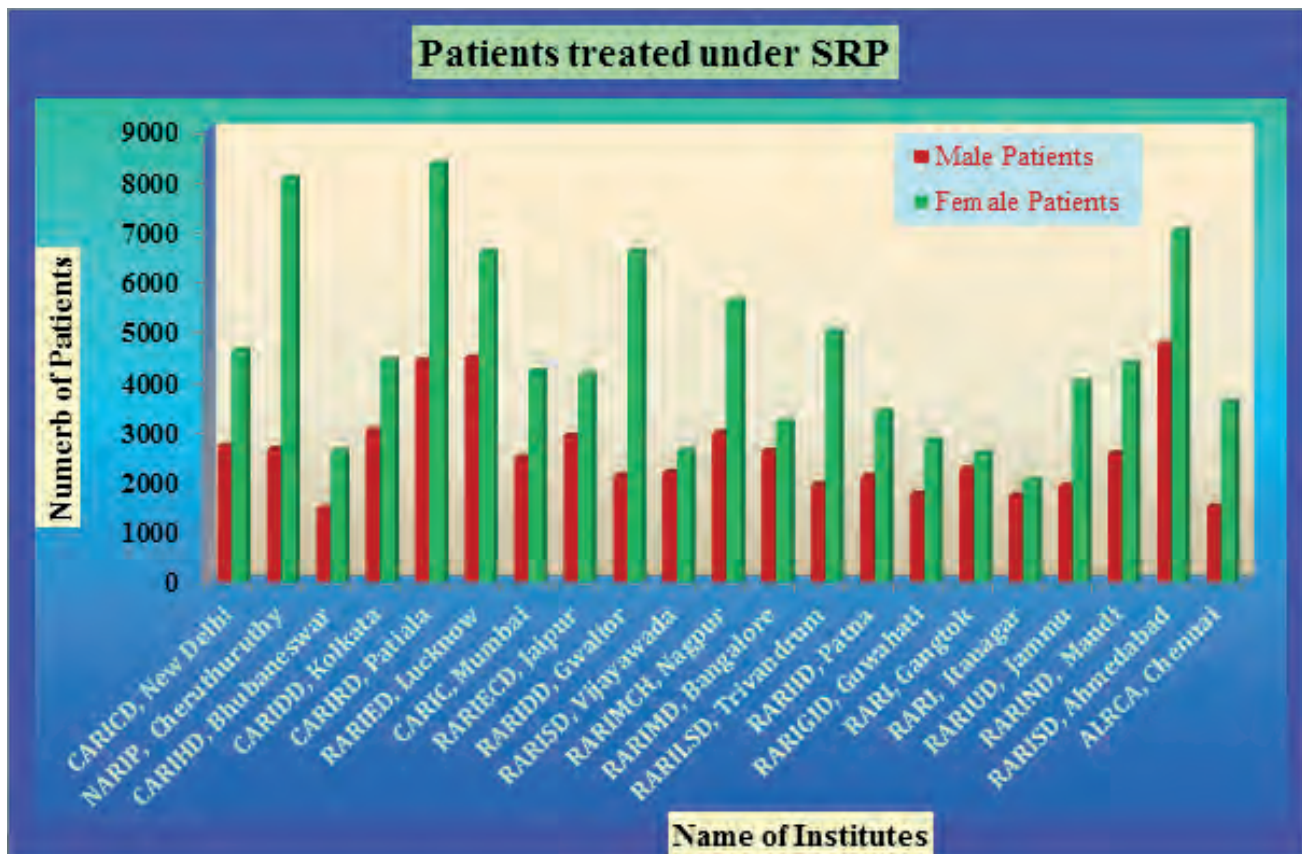




Table - 70: List of Prevalent Diseases under SRP

S. No.	Name of the Institute	Name of Diseases
1.	CARICD, Delhi	Sandhivata, Vibandha, Bhagandar, Aamavata, Amalpitta, Jwara, Madhumeha, Daurbalya, Kasa
2.	NARIP, Cheruturthy	Sandhivata, Vatavyadhi, Prameha, Shlipada, Sandhisula, Daurbalya, Madhumeh, Amlapitta
3.	CARIHD, Bhubaneswar	Amlapitta, Sandhivata, Aamvata, shirasula, Madhumeha, Gradhraasi, Daurbalya, Urustambha, Pratishtyaya
4.	CARIDD Kolkata	Sandhivata, Amlapitta, Vibandha, Madhumeha, Medoroga, Kustham, Shasa, Daurbalya
5.	CARIRD, Patiala	Vatavyadhi, Sandhivata, Vatarakta, Madhumeha, Amlapitta, Gradhrasi, Medoroga, Daurbalya, Pinasa
6.	RARIED Lucknow	Sandhivata, Kustha, Jwara, Daurbalya, Kasa, Aadhman, Amlapitta, Madhumeha, Shirasula, Agnimadhya
7.	CARIC, Mumbai	Amavata, Amlapitta, Kasa, Daurbalya, Pratishtyaya, Madhumeha, Sandhivata, Gradhrasi
8.	RARIED, Jaipur	Sandhivata, Daurbalya, Tvaka Roga, Vibandha, Prameha, Kasa, Pratishtyaya, Vatavyadhi, Udarasula
9.	RARIDD, Gwalior	Sandhivata, Pratishtyaya, Triksula, Pandu, Kasa, Jwara, Pravahika, Pama, Vata vyadhi
10.	RARISD, Vijayawada	Sandhivata, Vatavyadhi, Tvakgatkusta, Prameha, Pandu, Daurbalya, Amlapitta, Kasa
11.	RARIMCH, Nagpur	Sandhivata, Vatavyadhi, Triksula, Vibandha, Amalpitta, Gradhrasi, Arsha, Somaroga, Kasa, Kandu
12.	RARIMD, Bengaluru	Daurbalya, Sandhivata, Kasa, Amlapitta, Jwara, Kusta, Ajirna, Vibandha, Pandu, Kandu, Vrana
13.	RARILSD, Thiruvananthapuram	Sandhivata, Vata vyadhi, Asthishosh, Kasa, Kushta, Madhumeha, Gradhrasi, Vatarakta, Avabahuka
14.	RARIID, Patna	Sandhivata, Vibandha, Vatavyadhi, Madhumeha, Triksula, Kushta, Kasa, Kandu, Arsha, Amlapitta
15.	RARIGD, Guwahati	Anaah, Kandu, Daurbalya, Amlapitta, Kasa, Jwara, Madhumeha, Kandu
16.	RARI, Gangtok	Sandhivata, Daurbalya, Vatavyadhi, Amalpitta, Shirasula, Madhumeha, Kasa, Kandu, Arsha,
17.	RARI, Itanagar	Amlapitta, Daurbalya, Sandhivata, Pandu, Krimi, Dadru, Swasa, Shirasula, Kasa,
18.	RARIUD, Jammu	Kasa, Daurbalya, Krimi, Agnimadha, Vatavyadhi, Kushta, Sandhivata, Amalpitta, Pratishtyaya, Triksula
19.	RARIND, Mandi	Amlapitta, Sandhivatva, Triksula, Vatavyadhi, Vatarakta, Kasa, Triksula, Pratishtyaya, Madhumeha
20.	RARISD, Ahmedabad	Sandhivata, Vibandha, Kasa, Amavata, Kandu, Madhumeha, Pratishtyaya, Arsha, Avabahuka
21.	ALARCA Chennai	Sandhivata, Kasa, Gradhrasi, Madhumeha, Daurbalya, Kusta, Swasa, Ajirna, Amlapitta, Pratishtyaya, Vicharchika



7.5 Integration of AYUSH (Ayurveda) with National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)

Non Communicable Diseases (NCDs) kills 41 million people each year, equivalent to 71% of all deaths globally. Every year, 15 million people die from a NCD between the ages of 30 and 69 years; over 85% of these “premature” deaths occur in low- and middle-income countries. Cardiovascular diseases account for most NCD deaths, followed by Cancer (9 million), respiratory diseases (3.9 million), and Diabetes (1.6 million). These 4 groups of diseases account for over 80% of all premature NCD deaths. It is projected that globally NCDs will account for nearly 44 million deaths in 2020 (Global status report on non-communicable diseases 2010).

Keeping in view the mortality rate due to NCDs the Ministry of Health and Family Welfare, Government of India has launched the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) in 2008, to prevent the projected increase in the burden of Non-Communicable Diseases, on pilot basis and thereafter it was launched in 21 states during the year 2010-12 with the aim of health promotion; prevention and control of NCDs through early screening.

The leading cause of NCDs is lifestyle changes and Ayurveda, the age old indigenous system of health care primarily focuses on prevention of diseases through life style modifications. Therefore it was felt that AYUSH (Ayurveda) interventions (based on the fundamental concepts) can play a pivotal role in prevention, control and treatment of NCDs. With this view, several meetings were held under the chairmanship of Secretary, AYUSH, Ministry of AYUSH and officials of Directorate General of Health Services, Ministry of Health & Family Welfare and arrived at a conclusion to initiate the programme “Integration of AYUSH (Ayurveda) with NPCDCS programme” through CCRAS for execution in 3 identified Districts viz. Bhilwara (Rajasthan), Surendranagar (Gujarat), Gaya (Bihar) to prevent and control the projected increase in the burden of NCDs through early screening. Therefore, in view of the above, Integration of AYUSH (Ayurveda, Yoga, Unani & Homoeopathy) for promotion of health and prevention of diseases has been made one of the mandates of NPCDCS programme.

Therefore the aforesaid programme was launched at 3 districts viz. Surendranagar (Gujarat), Bhilwara (Rajasthan) and Gaya (Bihar) having functional NCD cells., being executed through peripheral institutes viz. RARISD, Ahmedabad; RARIED, Jaipur and RARIID Patna of CCRAS. The Dte.GHS would provide support for basic laboratory investigations through its CHCs and requisite support (transportation etc.) for organizing camps. The main objectives of this programme are as under:

- Integration of Ayurveda to the existing healthcare system for promotion, prevention and control of non-communicable diseases through NPCDCS program.
- Early diagnosis of NCDs for management through food & life style changes through principles of Ayurveda.
- In chronic cases, to reduce drug dependency through Ayurveda, Yoga practices and Lifestyle changes.
- As an adjuvant therapy to reduce complications and associated symptoms.
- Capacity building of human resources
- Evaluation, monitoring and Surveillance of NCDs



The details about identified 03 districts are as under:

Table- 71: Districts selected for integrating NPCDCS

Sl. No.	State	Name of the CCRAS Nodal Institute	Districts	No. of CHCs + District Hospital (DH)	No. of PHCs in the District
1.	Bihar	RARIID, Patna	Gaya	17 CHCs & 1 DH	71
2.	Gujarat	RARISD, Ahmedabad	Surendranagar	10 CHCs & 1DH	37
3.	Rajasthan	RARIED, Jaipur	Bhilwara	22 CHCs & 1DH	75
4.	3 - States	3 – Institutes	3 - Districts	49 CHCs & 3 DH (52 Centres)	183

Table - 72: Staff engaged in project

Name of the District & State	Total posts	Senior Consultant (Ay.)	Research Associate (Ay.)	Pharmacist (Ay.)	Yoga Instructor	Data Entry Operator (DEO)	Multi Tasking Staff (MTS)
CCRAS Hqrs., New Delhi & Dte. GHS	04	CCRAS Hqr.	1	-	-	-	-
		At Dte. GHS	-	-	-	-	-
Surendranagar Distt., Gujarat	77	02	20	22	11	11	11
Bhilwara Distt., Rajasthan	161	02	44	46	23	23	23
Gaya Distt., Bihar	126	02	34	36	18	18	18
Total	368						

To determine the extent of progress towards outcomes and level of success in achieving the set goals, it was decided to carry out the Quarterly Monitoring visit by a monitoring team comprising of Officers from CCRAS Hqrs, New Delhi, Dte. GHS, Nirman Bhawan, an outside expert from Reputed Institution and representatives from District authorities to evaluate the modus operandi of the programme and also to evaluate the work done during particular quarter, so that corrective measures, if any, may be suggested to the implementing authorities. Further, it helps in assessing that how economically resources or inputs (such as funds, expertise and time) are being converted in to results.

In view of the above, Quarterly Monitoring visits were conducted at Bhilwara (Rajasthan), & Gaya (Bihar) on 17th - 19th May 2018, 19th -21st November 2018 respectively. The Quarterly Monitoring Committee in all the districts found that the services provided in AYUSH-NPCDCS Clinics were instrumental in achieving the goals of lowering the burden of NCDs in these areas and also create awareness to protect the health by adopting Ayurvedic intervention, Lifestyle modifications and Yoga practices. The Committee appreciated the work done so far and supposed that this programme will be success with visible improvement, if sufficient basic facilities are provided.



Further, an Interim-analysis has revealed that the dosage or components of Conventional medicines/ prescription were either reduced or discontinued, in consultation and supervision of Allopathic doctors, after integrating the intervention of Ayurveda, lifestyle modification & Yoga in patients of Diabetes and Hypertension. Ayurveda-Allopathy Integrative Health Care Services seems to be a successful attempt of functional Integration through delivering in the context of Non- Communicable Diseases with encouraging benefits of stand-alone Ayurveda therapies as well as benefits as add-on therapies.

The aforesaid programme is functional at 52 centres i.e. 49 Community Health Centres (CHCs) and 3 District Hospitals of 3 identified districts, through AYUSH-NPCDCS Clinic/Lifestyle modification Clinics, established for prevention through early screening and management of selected Non-Communicable Diseases (NCDs) by Ayurvedic intervention, Lifestyle modifications and Yoga advices.

Table - 73: Details of Service Delivery

Name of the District (State)	Total No. of Patients Screened	Total No. of Patients Enrolled	Total No. of Patients Enrolled/ Registered for Yoga Classes	Camps conducted	No. of Persons attended the Camps
Bhilwara (Rajasthan)	243969	8265	190936	2001	219381
Gaya (Bihar)	140366	7852	48294	420	26109
Surendranagar (Gujarat)	152639	8611	20462	187	18078
Total	536974	24728	259692	2608	263568

With the approval of Secretary, Ministry of AYUSH the said project has been extended till 30-06-2019 vide letter no D-17022/02/2018-RD dated 28th February 2019.

7.6 Ayurvedic Health Centres under NE Plan

In North Eastern States, 20 Ayurvedic Health Centres in 20 districts of North-East states viz. 10 Ayurvedic Health Centres in Assam state, 6 Ayurvedic Health Centres in Arunachal Pradesh state and 4 Ayurvedic Health Centres in Sikkim state are functioning under the supervision of 3 CCRAS peripheral institutes viz. RARIGID, Guwahati, RARI, Gangtok and RARI, Itanagar in their states under outreach activities. The core objectives of the programme encompassing to provide health care services through OPDs; select research cases of allotted disease and refer to the concerned institutes; create Awareness about hygiene; distribute IEC material among the masses in local language & English/Hindi and document health related demography. During the period, the Council has started 10 new Ayurvedic Health Centres (OPDs) viz. 5 Ayurvedic Health Centres in Assam state, 3 Ayurvedic Health Centres in Arunachal Pradesh state and 2 Ayurvedic Health Centres in Sikkim state. Details are as under (Table No. 74):

1. **Assam** – 10 Ayurvedic Health Centres viz. Kamrup (R), Nalbari, Morigaon, Darang, Barpeta, Sonitpur, Golaghat, Goalpara, Raha & Jorhat, are functioning and the Council has also started 5 new Ayurvedic Health Centres (OPDs) in newly selected districts of Assam state i.e. Dhubri, Hojai, Bongaigaon, Karbi Anglong & Biswanath during 2018-19 under the supervision of Regional Ayurveda Research Institute for Gastro-intestinal Disorders (RARIGID) Guwahati. A total 69710 patients were attended in these 15 centres.



2. **Sikkim** – 4 Ayurvedic Health Centres viz. Geyzing (West Sikkim), Jorethang (South Sikkim), Mangan (North Sikkim) & Rangpo (East Sikkim) are functioning and the Council has also started 2 new Ayurvedic Health Centres (OPDs) in newly selected districts of Sikkim state i.e. Soreng (West Sikkim) & Pakyong (East Sikkim) during 2018-19 under the supervision of Regional Ayurveda Research Institute (RARI), Gangtok. A total 27736 patients were attended in these 6 centres.
3. **Arunachal Pradesh** – 6 Ayurvedic Health Centres viz. Tezu, Pasighat, Namsai, Bomdila, Seppa and Likabali are functioning and the Council has also started 3 new Ayurvedic Health Centres (OPDs) in newly selected districts of Arunachal Pradesh state i.e. Doimukh, Mechuka & Ziro during 2018-19 under the supervision of Regional Ayurveda Research Institute (RARI) Itanagar. A total 26745 patients were attended in these 9 centres.

Table – 74: Details on beneficiaries at Ayurvedic Health Centres in North East States under NE Plan

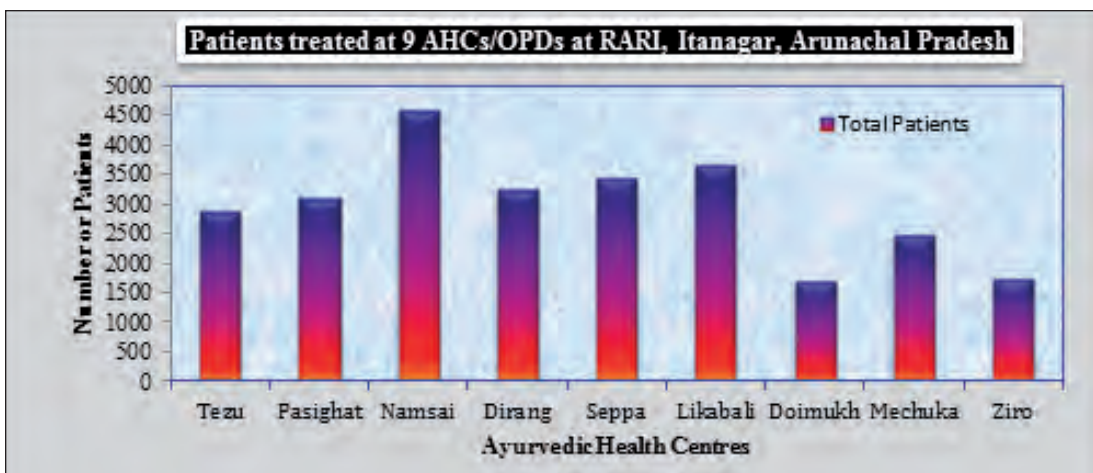
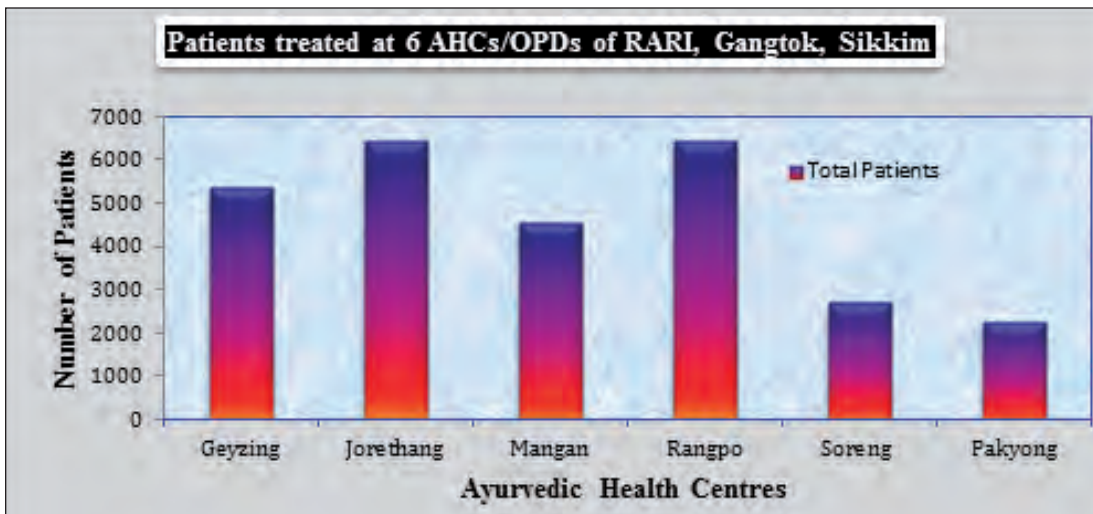
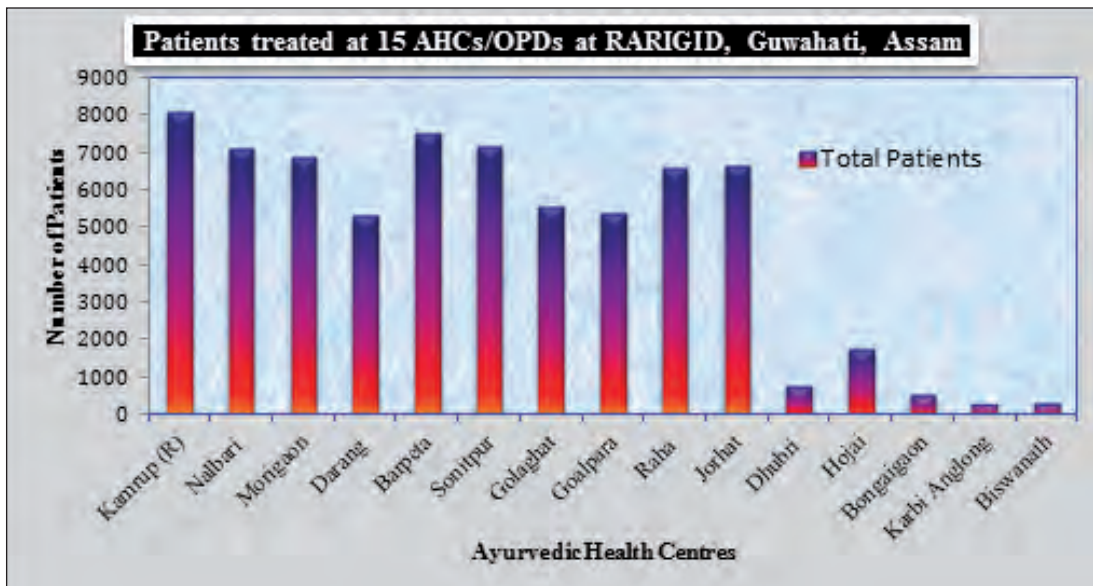
S. No.	Name of Institute	Name of Ayurvedic Health Centre	Out Patient Department (OPD)						
			New Patient		Old Patient		Total Patient		Grand Total
			M	F	M	F	M	F	
1.	RARIGID, Guwahati	Kamrup (R)	2812	4091	425	725	3237	4816	8053
		Nalbari	2490	3315	507	778	2997	4093	7090
		Morigaon	1759	2116	1415	1558	3174	3674	6848
		Darang	2298	2704	143	174	2441	2878	5319
		Barpeta	1474	2731	1240	2031	2714	4762	7476
		Sonitpur	1395	1594	2004	2187	3399	3781	7180
		Golaghat	1611	1854	925	1179	2536	3033	5569
		Goalpara	1772	1974	616	998	2388	2972	5360
		Raha	2290	2906	630	779	2920	3685	6605
		Jorhat	2384	2186	1122	933	3506	3119	6625
		Dhubri	159	212	154	226	313	438	751
		Hojai	533	851	123	227	656	1078	1734
		Bongaigaon	226	129	124	56	350	185	535
		Karbi Anglong	91	127	16	33	107	160	267
		Biswanath	122	129	25	22	147	151	298
		Total (15)	21416	26919	9469	11906	30885	38825	69710
2.	RARI, Gangtok	Geyzing	1559	1148	1567	1103	3126	2251	5377
		Jorethang	1254	925	2268	1961	3522	2886	6408
		Mangan	485	504	2059	1504	2544	2008	4552
		Rangpo, Majhitar	1693	1188	1975	1575	3668	2763	6431
		Soreng	795	768	569	589	1364	1357	2721
		Pakyong	619	650	490	488	1109	1138	2247
				Total (6)	6405	5183	8928	7220	15333



3.	RARI, Itanagar	Tezu	1185	1015	341	323	1526	1338	2864
		Pasighat	628	735	766	958	1394	1693	3087
		Namsai	1707	1792	541	542	2248	2334	4582
		Dirang	1181	1087	461	502	1642	1589	3231
		Seppa	1379	899	685	468	2064	1367	3431
		Likabali	1511	1054	579	493	2090	1547	3637
		Doimukh	348	641	203	511	551	1152	1703
		Mechuka	631	874	434	541	1065	1415	2480
		Ziro	388	886	163	293	551	1179	1730
		Total (9)	8958	8983	4173	4631	13131	13614	26745
Grand Total		36779	41085	22570	23757	59349	64842	124191	



Ayurvedic Health Centres/OPDs of North East Region





8. HEALTH CARE SERVICES

8.1 Health care services through Out-Patient Department (OPD) and In-Patient Departments (IPDs)

Research oriented health care services have been provided through Out-Patient Departments (OPDs) and In-Patient Departments (IPDs) at 24 peripheral institutes and 4 co-located units of the Council. A total 6,13,781 patients were benefited during the reporting period.

Table - 75: Details on beneficiaries in OPD & IPD at CCRAS Institutes

S. No.	Name of Institute/Centres/ Unit	Out Patient Department (OPD)						In Patient Department (IPD)			Bed Occupancy %		
		New Patient		Old Patient		Total Patient		Admitted		Discharged			
		M	F	M	F	M	F	M	F	M		F	
		Grand Total											
1.	CARICD, New Delhi	15962	13321	26431	21732	42393	35053	77446	368	379	369	386	58.70%
2.	NARIP, Cheruthuruthy	6369	8138	14520	22532	20889	30670	51559	508	368	457	347	90.30%
3.	CARIHD Bhubaneswar	5196	4251	3496	2962	8692	7213	15905	323	204	311	197	53.21%
4.	CARIDD Kolkata	5767	4708	12304	11704	18071	16412	34483	105	132	110	136	79.16%
5.	CARIRD Patiala	4655	4497	9620	10757	14275	15254	29529	IPD not functioning				
6.	RARIED Lucknow	7351	6328	16346	15007	23697	21335	45032	IPD not Functioning				
7.	CARIC Mumbai	2493	2792	5344	6889	7837	9681	17518	42	160	41	150	26.93%
8.	RARIECD Jaipur	9196	7398	8078	7692	17274	15090	32364	154	184	148	178	42.63%
9.	RARIDD Gwalior	7514	7804	5247	6718	12761	14522	27283	151	171	149	169	21.61%
10.	RARISD Vijayawada	6191	6904	19636	22679	25827	29583	55410	81	92	85	85	96.4%
11.	RARIMCH Nagpur	2953	4709	6491	11800	9444	16509	25953	177	183	181	187	87.77%
12.	RARIMD Bangalore	3002	2168	6843	4776	9845	6944	16789	IPD not available				
13.	RARILSD Trivandrum	2603	4602	4034	9684	6637	14286	20923	159	170	155	163	78.38%



14.	RARIID Patna	3835	4177	6292	8026	10127	12203	22330	IPD not Functioning				
15.	RARIGID Guwahati	3446	3843	3226	4074	6672	7917	14589	IPD not available				
16.	RARI Gangtok	2435	2197	4090	3655	6525	5852	12377	IPD not Functioning				
17.	RARI Itanagar	1664	1910	1721	2025	3385	3935	7320	IPD not Functioning				
18.	RARIUD Jammu	2987	2408	3366	3107	6353	5515	11868	104	49	109	55	22.06%
19.	RARIND Mandi	3888	6306	1311	2961	5199	9267	14466	IPD not Functioning				
20.	RARISD Ahmedabad	1618	1758	3507	3967	5125	5725	10850	IPD not available				
21.	RARI Ranikhet	1512	2424	2235	3784	3747	6208	9955	IPD not available				
22.	ACAMH & NS Bangalore	2821	2186	3610	2972	6431	5158	11589	238	134	236	138	52.70%
23.	ALRCA Chennai	377	609	776	1717	1153	2326	3479	IPD not available				
24.	RARC Port Blair	948	837	780	665	1728	1502	3230	IPD not available				
25.	ACK Safdarjung ND	6078	3641	7909	5089	13987	8730	22717	IPD not available				
26.	ATC Lady Harding ND	2542	2049	1481	1483	4023	3532	7555	IPD not available				
27.	ACK RML Hospital ND	1919	1155	2069	1339	3988	2494	6482	IPD not available				
28.	FAP Supreme Court ND	1684	788	1586	722	3270	1510	4780	IPD not available				
	Total	117006	113908	182349	200518	299355	314426	613781	2410	2226	2351	2191	59.15%*

*Average Bed Occupancy



8.2 Special clinics for Geriatric Health care

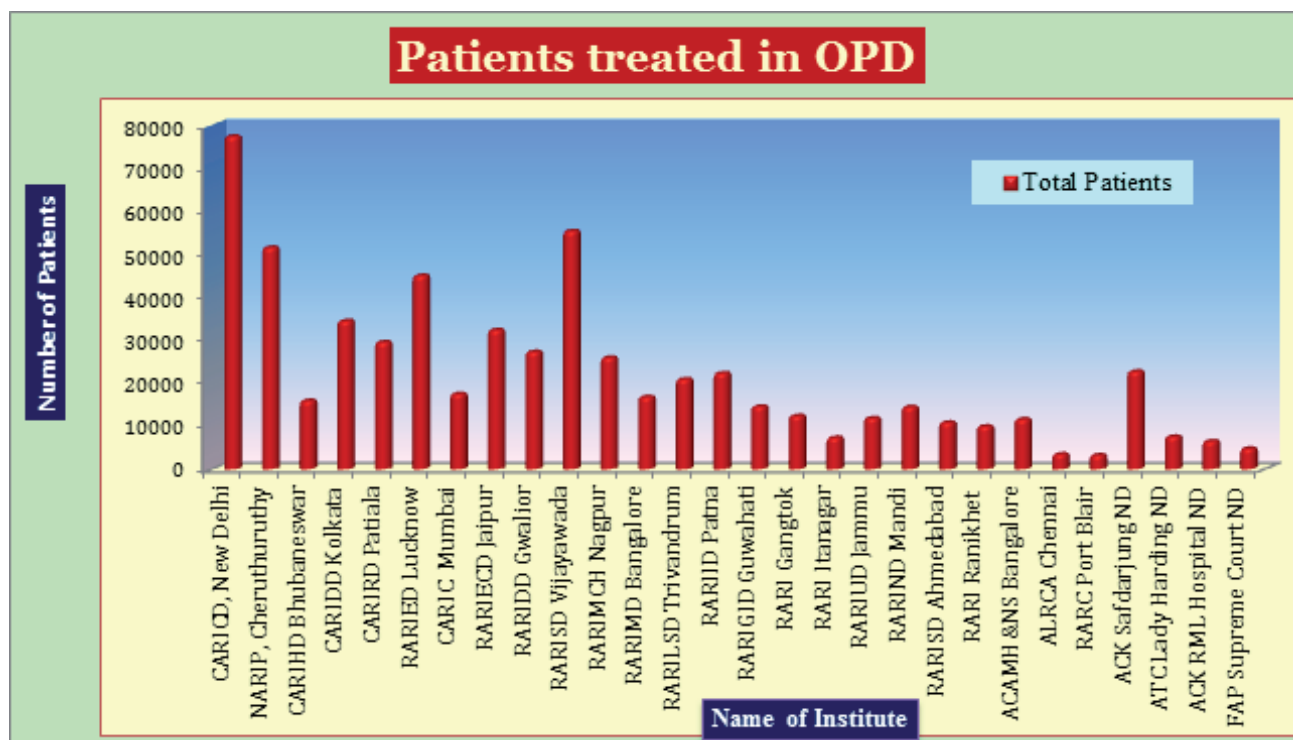
The Council has initiated promotion of special Ayurveda services for Geriatric health through special clinics for Geriatric health care at 24 CCRAS peripheral institutes. 1,09,773 patients have been benefited during the reporting period.

Table - 76: Details on beneficiaries in special Geriatric clinics

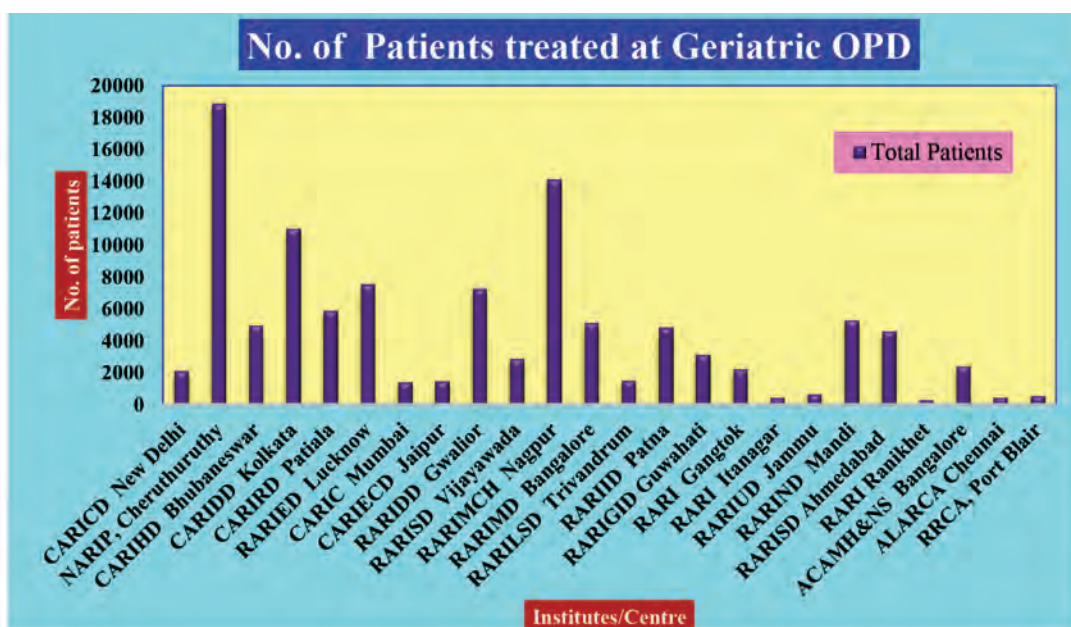
S. No.	Name of Institutes/Centre	Geriatric OPD Patients				Total Patient		Grand Total
		New Patient		Old Patient		M	F	
		M	F	M	F			
1.	CARICD New Delhi	421	319	862	568	1283	887	2170
2.	NARIP, Cheruthuruthy	2023	2383	6786	7691	8809	10074	18883
3.	CARIHD Bhubaneswar	1612	848	1739	810	3351	1658	5009
4.	CARIDD Kolkata	1463	968	5021	3606	6484	4574	11058
5.	CARIRD Patiala	1056	539	2960	1348	4016	1887	5903
6.	RARIED Lucknow	1218	570	4253	1525	5471	2095	7566
7.	CARIC Mumbai	154	159	632	477	786	636	1422
8.	CARIECD Jaipur	435	218	608	264	1043	482	1525
9.	RARIDD Gwalior	2340	1208	2577	1207	4917	2415	7332
10.	RARISD Vijayawada	290	223	1446	927	1736	1150	2886
11.	RARIMCH Nagpur	1406	1631	5524	5568	6930	7199	14129
12.	RARIMD Bangalore	637	377	2703	1446	3340	1823	5163
13.	RARILSD Trivandrum	190	339	385	625	575	964	1539
14.	RARIID Patna	773	590	1928	1579	2701	2169	4870
15.	RARIGID Guwahati	734	478	1262	683	1996	1161	3157
16.	RARI Gangtok	419	288	1028	499	1447	787	2234
17.	RARI Itanagar	107	79	160	109	267	188	455
18.	RARIUD Jammu	149	103	275	166	424	269	693
19.	RARIND Mandi	1411	1539	1107	1277	2518	2816	5334
20.	RARISD Ahmedabad	822	543	2003	1254	2825	1797	4622
21.	RARI Ranikhet	31	56	110	130	141	186	327
22.	ACAMH&NS Bangalore	565	339	972	567	1537	906	2443
23.	ALARCA Chennai	26	29	61	354	87	383	470
24.	RRCA, Port Blair	127	76	214	166	341	242	583
Total		18409	13902	44616	32846	63025	46748	109773



OPD PATIENTS (General)



OPD PATIENTS (Geriatric)





8.3 AYUSH WELLNESS CLINIC

AYUSH Wellness Clinic was established in President Estate during the month of July, 2015 with a view to provide medical care through various streams of AYUSH (viz. Ayurveda, Yoga and Naturopathy, Unani, Siddha & Homeopathy) to the President, officials of President's Secretariat and residents of the President's Estate. The Clinic was inaugurated by Hon'ble President of India Sh. Pranab Mukherjee on 25th July, 2015. During the reporting period, health care services were provided through OPD and Panchakarma therapy to the patients (Male and Female Section). A total 7398 patients were treated in Ayurveda Out Patient Department out of them 4507 were males and 2891 were females. The details are as under:

Table - 77: Details of patients visiting AYUSH Wellness Clinic

S. No.	Ayurveda	OPD Patients						Grand Total
		New		Follow-up		Total		
		M	F	M	F	M	F	
1.	Out Patient Department	1517	734	2990	2157	4507	2891	7398

During the reporting year, Janu Sandhigata vata, others Vatavyadhi (viz. Katigraha, Gridhrasi, Avbahuka etc.), Medoroga, Madhumeha, Vyanabala Vaishamya, Amlapitta, Jwara, Kasa, Pratishaya, Shwasa, Khalitya-palitya and Pandu roga diseases were found prevalent in OPD.

Besides this, a total 4048 patients were treated through various Panchakarma Therapies (viz. *Abhyanga, Swedana, Kativasti, Januvasti, Shirodhara, Udwartan, Nasya, Patra potali sweda, Churna Pinda sweda* etc.) out of them 2259 were males and 1789 were females patients.



9. MISCELLENOUS ACTIVITIES

9.1. AYUSH Ph.D. Fellowship/SRF Scheme

AYUSH Ph.D. Fellowship Programme has been initiated by Ministry of AYUSH in the year 2016 in all Research Councils through CCRAS as a nodal council to encourage quality research in AYUSH Systems, to further enhance research opportunities for meritorious AYUSH Scholars and to generate good human resource for quality research in AYUSH sector. UGC has mutually recognized AYUSH-NET with UGC-NET for admission to Ph.D. programme and Secretary, AYUSH has requested Vice Chancellors of all universities to extend exemption to AYUSH-NET qualified candidates from their own University Entrance Test.

This fellowship is also awarded to Non-AYUSH aspirants who have already qualified NET of CSIR, UGC, DBT etc. to pursue Ph.D. in AYUSH related fields in life sciences.

In another component of this scheme, applications are invited for selection of Universities/ Institutes running Ph.D. Fellowships/ Junior Research Fellowships (JRF) for streams in Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy to grant them fellowships. The applications are to be considered by the Ministry of AYUSH for selection of appropriate University/Institute on merits.

The Advertisement for AYUSH-NET 2018 was published on 08.09.2018 in all leading National newspapers and in 15th - 21st September, 2018 edition of Employment News. AYUSH-NET, 2018 Examination was conducted on 13.11.2018 at 5 Centres at Delhi- NCR, Mumbai, Kolkata, Chennai and Guwahati. Result was declared on 09.01.2019 and AYUSH-NET Certificates were also issued to qualified candidates. Total 103 candidates qualified the AYUSH-NET examination in all 5 streams except Yoga & Naturopathy (92 in Ayurveda, 4 in Homoeopathy, 5 in Siddha & 2 in Unani)

9.2. CCRAS Award Scheme

AYUSH Award Scheme was introduced in the year 2016 for giving awards in four different categories with 3 sub-categories in each (total 12 awards) namely Best Research Paper Award (for Literary, Clinical & Drug Research), Young Scientist Award (for Literary, Clinical, & Drug Research), Life Time Achievement Award (for Best Practitioner, Best Academician & Best Researcher) and Best Teacher Award (for Literary Research Teaching, Clinical Research Teaching & Drug Research Teaching) to encourage Ayurveda fraternity and other scientists for outstanding contribution in the field of Ayurveda.

The AYUSH Award of CCRAS, 2017 were presented to the 11 selected awardees on 28th April, 2018 by Shri Shripad Yesso Naik, Hon'ble Minister of State (Independent Charge), Ministry of AYUSH in the inaugural session of 'National Consultative Meet on Intra AYUSH Collaboration' held at A.P. Shinde Symposium Hall, NASC Complex, Pusa, New Delhi. Awardees were presented with Cheque of respective award's prize, Certificate, Citation and Plaque. 3 scientists of CCRAS also received AYUSH Award of CCRAS, 2017 in different categories.

The Advertisement for AYUSH Award Scheme of CCRAS, 2018 has been published on 29.09.2018 in all leading National newspapers and last date for receiving applications for nomination was 15th November, 2018. The applications have been scrutinized and the expert committee will examine the eligible applications shortly.



9.3. Social Media Activities and Initiatives of the Council

The Council has carried out various activities through social media with an objective of making relevant information accessible for the welfare of general public. The blog created on the website for this purpose is being updated with creative and informative content received from the scientists of the council from time to time. Further, in this direction the Council has taken other initiatives including the following:

1. The Council has organised Level-I and Level-2 workshop-cum-training programmes for AYUSH professionals at Hyderabad and Mumbai. The training programmes were organized through CCRAS peripheral institutes namely, NIIMH in Hyderabad and CARIC in Mumbai. NIIMH, Hyderabad organised level – 1 of the training program from 9th and 10th April, and level – 2 of the training program from 7th and 8th May, in the committee room of the Institute. CARIC, Mumbai organised level – I of the training program on 6th and 7th April, 2018 in the Conference Hall of the NIRRH (ICMR), Parel, Mumbai and level – II on 4th and 5th May, 2018 at Dr. Bhanuben Nanavati College of Pharmacy, Vile Parle, Mumbai. A total of 176 participants attended the training sessions.
2. In continuation of above *Workshop on Advanced Social Media Insights for AYUSH Professionals* was organized by Council in collaboration with IIMC, New Delhi, on 22nd December 2018 at AYUSH Auditorium, Council Hqrs., New Delhi. A total of 56 participants attended the workshop.
3. The Council blog on the website i.e. www.ccras.nic.in, is being updated with articles and write-ups on relevant topics received from council scientists all across the country. So far, 59 write-ups have been uploaded on the blog page.
4. All the peripheral institutes of CCRAS are being encouraged to develop brief and general interest articles pertaining to the latest developments in Ayurveda research and topics from Ayurveda and related domains. Such write-ups are being received and collected on the dedicated email account created for this purpose, i.e. ccras.socialmediacontent@gmail.com.
5. The Council has issued guidelines for developing such articles that are informative, non-controversial and pertain to general health/public health that could be intriguing and beneficial for the public.
6. A review board comprised of senior officials have also been constituted at the Council to complement the efforts of the already established screening committee of CCRAS officers/subject experts at the Hqrs. office for screening, editing and vetting of popular articles and writings on Ayurveda and related issues for social media, blogs, websites etc.
7. Further, to commemorate Ayurveda Day – 2018, the Council has successfully made an impact using social media platforms to spread awareness regarding health related issues for the welfare of general public. During the event a total of 2017 public lectures were organised across the country through CCRAS peripheral institutes and as many as 82721 participants were benefitted. Moreover, 622 exhibitions of medicinal plants were organized which benefitted as many as 36245 visitors. Also, plant saplings were distributed during the event through 498 distribution events where 15271



saplings were distributed among the visitors. In addition to above activities, presentations were made by CCRAS officers at 82 AYUSH institutions on various topics ranging from AYUSH and public health and use of social media for scientific and information sharing purposes and benefitted as many as 6587 participants. Furthermore, as many as 213 special camps, live demonstrations on various issues of public interest were also organized where 12694 beneficiaries participated. Taking another initiative, the Council organized *Run for Ayurveda* event where 15167 participants took part.

8. To compliment above efforts under the vision and guidance of the Ministry of AYUSH, a writers' panel of experienced journalists has been constituted by the council with an objective to develop effective content for the benefit and welfare of public.
9. The council has also organised *Writathon* competition with an objective to complement the writing skills of budding journalism/creative writing professionals and also to create and develop a quality content pool for the purpose of dissemination of relevant information on research and development activities in Ayurvedic Sciences.
10. The social media platform set by the Council is utilized further for dissemination of objectives of *Swaccha Bharat Abhiyan* and *Poshan Maha Abhiyan*.

9.4. Musk Deer Research Project

The Council is maintaining a Musk Deer Research Centre at Mehroori, Distt.-Bageshwer under Regional Research Institute of Himalayan Flora Tarikhet. The main objective of the centre is to observe the pattern of breeding, feeding habit and behavior of musk Deer.

During the reporting period, data related to life cycle of musk deer in captivity, including their feeding habits, behavioral pattern, diseases and their control were gathered. In the beginning of reporting year 10 musk deer (07 males + 03 females) were in the farm. With the birth of 2 female fawns the total present population of the musk deer is 12 (7 males and 5 females). During the reporting period 5.71 gm musk was obtained from live animal and 46.61gm musk was obtained from the pod of dead animal.

It is reported that the musk deer thrash on fodder in the form of soft leaves, which changes according to season i.e. round the year they don't rely on one type of fodder & changes according to change in season and availability. Fodder in the form of soft leaves in adequate amount like soft leaves of *Holboellia latifolia* (Ghophal), *Cotoneaster affinis* (Reevish), *Persicaria nepalensis* (Ratgiali), *Prunus domestica* (plum), *Bergenia ligulata* (Pashan bhade), *Rumex nepalensis* (Kluhia), *Phaseolus vulgaris* (Phras been) *Strobilanthes dalhousianus* (Ayyari) and *Jasminum officinale* (Lamed) etc and flower of *Rhododendron sps.* was provided.

During rainy season all the deer showed the symptoms of alopecia i.e. falling of hair, possible reason may be deficiency of mineral. During heavy rainfall loss of micro-minerals from fodder leaves observed, though it was compensated with mineral mixture, provided with concentrate feed but still same symptoms exist.



9.5. Information about different Cells of CCRAS Hqrs.

9.5.1. Intra Mural clinical Research and Protocol Development Cell

Background of the scheme/cell: The Council has framed Intra Mural clinical Research and Protocol Development Cell to execute the clinical research and for time bound formulation, co-ordination, development and promotion of clinical Research on Scientific lines.

Details of scheme and objectives: The Co-ordinator, members and secretarial staff were involved as per requirement for formulation implementation and monitoring of the project as per the objectives of this cell and all nodal officers related to clinical research projects were concerned as per assignment from time to time..

Objectives

- Submission of updated status of Intra Mural Clinical Research Projects for monthly quarterly and annual report and also parliament question related to the issue,
- Maintenance of details of all the files related to Intra Mural Clinical Research Projects being dealt by technical officer and admin section for ready appraisal.
- Examination and processing the Intra Mural Clinical Research Projects submitted by the external organization from time to time,
- Processing of the collaborative project for appraisal of ISC, PEMC, SAB, SAG as appropriate in association with concerned Nodal Officer and Programme Officer
- Coordination of collaborative projects concerned Nodal Officer and Programme Officer

Activities and achievements during 2018-19

Scrutinized various concept notes of research proposals, intra mural clinical projects through Internal Scrutiny committee (ISC) and IMR Cell has also drafted the protocol on following disease conditions during this financial year (2018-19)

List of projects under Collaborative projects:

1. Evaluation of Ayush-GMH in the subjects of mild to moderate Non-alcoholic fatty liver disease (NAFLD) -A double blind randomized control clinical study.
2. A Randomized Double Blind Placebo Controlled Clinical Study to evaluate the efficacy and safety of Ayush 56 as add on therapy in Epilepsy.
3. Prospective Double blind Randomized control phase-II clinical study on Ayurvedic intervention (SarpghandhaMishran) as add on therapy for the management of Essential Hypertension.
4. An investigation to evaluate the efficacy of Cannabis leaf preparation along with the Cancer Chemotherapy in patients with locally advanced solid tumours in improving the quality of life and minimizing side effects of the chemotherapy.



5. Randomized control study to evaluate the efficacy of Ayush Card tea and Rajyoga meditation versus conventional treatment on clinical recovery and post-operative outcomes following Mitral Valve Open Heart Surgery.

Intra Mural Clinical Research Projects

1. Clinical Evaluation of Lavanabhaskara Churna and Vajra Kshara in the management of Ajirna
2. Clinical evaluation of Vajra Kshara in the management of Ajirna
3. Clinical Evaluation of Kutjarist in the management of Grahni

Further, IMR Cell has also screened the concept notes on various research topics and finalized few of them.

9.5.2. Activities and achievements of “CCRAS -Drug and New Drug Development Cell”

Background: The Ayurvedic medicines are broadly classified into 2 categories i) **classical Ayurvedic medicines** which are manufactured in accordance with the formulae described in authoritative books of Ayurveda as specified in the First Schedule of Drugs & Cosmetics Act 1940, Rule 1945 and ii) **Patent or proprietary Ayurvedic medicines** which are manufactured containing ingredients mentioned in authoritative books of Ayurveda as specified in the First Schedule but not administered by parenteral route and also formulation not included in the authoritative books.

The Council undertakes conducts research for validation of Classical Ayurvedic formulations and scientific validation of newformulations/drugs. Under validation of classical Ayurveda formulations, the Council has identified classical Ayurveda formulations for identified disease conditions referring from Ayurvedic pharmacopeia /Ayurvedic Formulary of India, Essential Drug list of ASU medicines (2013), Ministry of AYUSH and other Ayurveda classical texts. These quality assured classical formulations are being validated through Council's institutes engaged in clinical research in a phased mannerto generate evidence of their clinical efficacy and safety. Some of the formulations are clinically validated for different disease conditions and some are used in different combinations for the same or different disease conditions.

Under drug development, new formulations/drugs are developed taking leads from Ayurvedic literature or Local Health Traditions through a systematic process of drug development. viz. standardization, preclinical safety/toxicity studies and /or biological activity and clinical study as per requirement.

Details of the Scheme and Objectives

The CCRAS-DRUG and NEW DRUG DEVELOPMENT Cell was set up during the year 2017-18 with following terms of references:

1. Submission of updated status and preparation of drug supply for IMR and collaborative research projects.
2. Liasoning with the CCRAS institutes and other organizations/industries regarding formulation, standardization, preclinical (as applicable), preparation and supply.



ACTIVITIES & ACHIEVEMENTS

- ❖ Supply orders along with SoP, quality control parameters etc. for 19 classical Ayurveda medicines viz. *Panchatikta Ghrita, Nalpamaradi Taila, Gandhakadya Malahara, Agastya Haritaki Rasayana, Apamarga Kshara, Pathyadi Kvatha Churna, Anu Taila, Shadbindu Taila, Chitraka Haritaki, Lavangadi Vati, Balachaturbhadraka Churna, Aravindasava, Jirakadyarishta, Mustakarishtha, Chitrakadi Gutika, Jatiphaladya Churna, Varunadi kvatha Churna, Yava Kshara, Triphala Ghrita* for 13 clinical research projects under Annual Action Plan 2017-18 and IMR-PEMC were placed for preparation at CCRAS institutes viz. CARIDD Kolkata/ NARIP Cheruthuruthy, CARIRD Patiala or M/s IMPCL and most of the medicines have been supplied to CCRAS participating centres and remaining work is under progress.
- ❖ Under drug development, three quality assured coded Ayurvedic drugs viz. Ayush VPR, Ayush SL, Carctol Swere supplied to concerned collaborating /CCRAS institutes for IMR/collaborative clinical research projects. Further, the Cell has undertaken work pertaining to preparation and supply of other 06 coded drugs viz. Lajjalu Keramgel, Nimbatiktam, Ayush PVK gel, Ayush A, Ayush Manas, Ayush SR which is under progress.
- ❖ In the first phase of the project entitled “Feasibility of introducing Ayurveda intervention in Reproductive and Child Health (RCH) in PHCs of selected district (Gadchiroli) of Maharashtra”, procurement related task for 3 drugs viz. Ayush ADE candy, Ayush GG tablet and Ayush AG tablets was undertaken. Ayush ADE candy was procured in bulk from M/s IMPCL and the medicine has been supplied to RARIMCH Nagpur. The dossier of Ayush GG tablet was prepared and the supply order was placed to M/s IMPCL. The finalization of dossier of Ayush AG tablet is in progress.
- ❖ Quality assured *Jatyadi Taila* and *Jatyadi Ghrita* were prepared at CARIDD Kolkata and supplied to INMAS for the experimental study on radiation induced dermatitis.
- ❖ Further, some Churna, KvathChurna were allotted for preparation at RARI Jhansi for OPD/IPD of CCRAS institutes.

9.5.3. CCRAS-Journal Secretariat Cell

The CCRAS-Journal Secretariat was set up by 15th May, 2017 with following terms of references:

1. The Secretariat will refer issues related to Journal of Drug Research in Ayurvedic Sciences (JDRAS) and Journal of Research in Ayurvedic Sciences (JRAS) through respective editors/ managing secretariats of the Journal from time to time.
2. The secretariat will liason / coordinate with concerned stakeholders for expedition of related work and sustainable publication of the CCRAS Journal.
3. The Secretariat will also put the progress of the Journal from time to time for Monthly/Quarterly/ Annual Report through respective Editor / Managing Secretariat.



Activities of CCRAS-Journal Secretariat

1. Promotion of both JDRAS and JRAS has been carried out at different academic institutions of AYUSH. Further, for wider promotion of these both periodicals correspondence had been made with Ministry of External Affairs (MEA). This further corresponded with all the Institutions under MEA around the Globe.
2. Process of E-ISSN of JDRAS has been completed and received E-ISSN number i.e. 2581-8295. Also, Council applied for E-ISSN of JRAS.
3. JDRAS got indexed with Scientific Journal Impact Factor (SJIF), Scientific Indexing Services (SIS), COSMOS, AYUSH Research Portal and Eurasian Scientific Journal Index (ESJI). While JRAS is indexed in Scientific Indexing Services (SIS), COSMOS, AYUSH Research Portal and Eurasian Scientific Journal Index (ESJI).
4. During the reporting period Council published
 - a. Journal of Drug Research in Ayurvedic Sciences - Volume 2_Issue 4 (October-December 2017), Volume 3_Issue 1 (January-March 2018) and Volume 3_Issue 1 (April-June 2018).
 - b. Journal of Research in Ayurvedic Sciences - Volume 1_Issue 4 (October-December 2017), Volume 2_Issue 1 (January-March 2018), Volume 2_Issue 2 (April-June 2018) and Volume 2_Issue 3 (July-August 2018).
5. For wider dissemination of scientific works in AYUSH systems among the research community, the journals were distributed among the stakeholders including Scientific Advisory Board, Scientific Advisory Group, AYUSH Institutions and made accessible through the wide network of peripheral Institutes of the Council.
6. Copies of CCRAS research journals were provided to International Institutions under collaboration with Ministry of AYUSH.
7. Complimentary copies are being provided for eminent delegates visiting the Council.
8. Timely meetings were organized with the publishing vendor Ms. Jay Pee Brothers Medical Publisher, New Delhi, for due deliberations over issues related to editorial processing, publication, printing, pricing and distribution of the journals.

9.5.4. Intellectual Property Rights (IPR) and Commercialization

CCRAS, through its drug development program is undertaking development of new formulations/ drugs taking leads from Ayurvedic literature through a systematic process of drug development. *viz.* standardization, preclinical safety & clinical study as per requirement. Based on this, CCRAS has set up “The Intellectual Property Rights & Business Development (IPR&BD) Cell” during the year 2017-18 with following terms of references:

1. Co-ordination of all issues related to Intellectual Property Rights (IPR) & Patenting of Technologies developed by CCRAS through Intra Mural Research (IMR) & Extra Mural Research (EMR).



2. Dissemination of Intellectual Property Rights (IPR) potential & promotion of commercialization of the products & technologies developed by CCRAS.
3. Periodical training on Intellectual Property Rights & Business Development (IPR&BD) issues.

Till date, 11 technologies have been developed and commercialized through National Research Development Corporation (NRDC) for wider public utility.

During the last five years CCRAS has developed and commercialized the following three drugs which are readily available in the market:

1. AYUSH 64 AnAnti Malarial Formulation has been commercialised to 3 Firms.
2. AYUSH 82 AnAnti Diabetic Ayurvedic Formulation has been commercialised to 11 Firms.
3. AYUSH SG An Anti-Rheumatoid Arthritis preparation has been commercialised to Six Firms.

Achievements during the current year:

- Preparation of dossier for Commercialization of Ayush-CCT (Ayush Cardiac Care Tea) a Product developed by CCRAS by adopting to standard regulatory norms.
- Benchmarks for undertaking research/ research consultation for already commercialize / marketed Ayurveda Products has been successfully incorporated at SI.4. of existing CCRAS Research Policy duly approved by Hon'ble MoS (IC) in the capacity as the President of Governing Body of CCRAS and successfully uploaded in the website of CCRAS.
- "CCRAS Policy for Commercialisation of Technologies" duly approved in the Governing Body vide its 23rd Meeting held on 12th December, 2018 by Hon'ble MoS (IC), AYUSH in the capacity as the President of Governing Body of CCRAS and successfully uploaded in the website of CCRAS.
- The Council has successfully displayed the eight Innovative Products: Technology Developed by Central Council for Research in Ayurvedic Sciences (CCRAS) during one-day interactive meet of technology showcase by AYUSH held on 12th March, 2019, New Delhi sponsored by Invest India.

9.5.5. International Cooperation

The popularity of Ayurveda is increasing day by day resulting created a demand worldwide. There is a growing interest for authentic information of Ayurveda, therefore, the Ministry of AYUSH through CCRAS has signed Memorandum of Understanding with various institutions in foreign countries for deputation of Ayurveda experts to take up teaching, clinical work and for research activities as per institutional requirement to promote and propagate Ayurveda in that country. In addition, the Council is promoting evidence based research of Ayurvedic Medicines in cooperation with foreign institutions under MoUs. Experts from the Council are also participating in international conferences, workshops, exhibitions, trade fairs etc. India for promotion of Ayurveda as a Systems of Medicine.



International Tours:

1. Dr. Ravindra Singh, AD (Chemistry), CCRAS was deputed as a member of delegation led by Joint Secretary, MoHFW for the “Bilateral 3rd Joint Working Group Meeting between India and Philippines on cooperation in Health and Medicine” held on 19th & 20th April, 2018 at Manila, Philippines.
2. Dr. Anupam K. Mangal, AD (Pharmacognosy), CCRAS was deputed as a representative of Ministry of AYUSH for including delegation from Ministry of Commerce & Industry led by Joint Secretary FT(SA) to attend Inter-Governmental Sub-Committee (IGSC), Pokhara, Nepal from 24th & 25th April, 2018.
3. Dr. Ramavtar Sharma, RO (Ay.), CCRAS, was deputed as a member of delegation from Ministry of AYUSH to participate in International Day of Yoga (IDY) from 15th to 18th June, 2018 at China.
4. Dr. Narayanam Srikanth, Deputy Director General, CCRAS was deputed as a member of delegation from Ministry of AYUSH, led by Additional Secretary, Ministry of AYUSH, Govt. of India, for participating in 20th International Ayurveda Symposium 2018, Birstein- Germany from 14th to 16th September, 2018, organized by European Academy of Ayurveda, supported by the Consulate General of India in Frankfurt, Germany.
5. Dr. Anupam K. Mangal, AD (Pharmacognosy), CCRAS was deputed by Ministry of AYUSH to participate in the BRICS International Medical Forum “Healthcare BRICS-2018” as a Speaker, organized by I.M. Sechenov First Moscow State Medical University held from 20th & 21st November, 2018 in the Congress Center of the Sechenov University, Moscow, Russia.
6. Prof. (Vd.) K.S. Dhiman, Director General, CCRAS, as AYUSH delegation, attended 1st JWG (Joint Working Group) Meeting under the aegis of JDI, signed between India and Germany regarding cooperation in Alternative Medicine at German Ministry of Health, Berlin, Germany, during 3rd Dec to 8th Dec, 2018.
7. Prof. (Vd.) K.S. Dhiman, Director General, CCRAS, was deputed as a member of delegation from Ministry of AYUSH, Govt. of India, to attend the second meeting of the BIMSTEC Task Force on Traditional Medicine from 24th & 25th January, 2019 in Nay Pyi Taw, Myanmar.

MoU's SIGNED BY CCRAS WITH INDIAN INSTITUTES/ ORGANIZATIONS

1. Memorandum of Understanding (MoU) between Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi and All India Indian Institute of Medical Sciences (AIIMS), New Delhi signed on 18th May, 2018 to carry out the Multi-Center Research project entitled, “A Randomized Placebo Controlled Phase-II Clinical Study of an Ayurvedic Coded Drug ‘AYUSH D’ in the Management of Type-2 Diabetes Mellitus as add-on therapy to Metformin” with duration of Two and half years.
2. An MoU was signed between Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi and Jaypee Brothers Medical Publishers (P) Ltd.,



New Delhi on 15th June, 2018 for publication of Journal of Drug Research in Ayurvedic Sciences (JDRAS).

3. An MoU was signed between Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi and Jaypee Brothers Medical Publishers (P) Ltd., New Delhi on 15th June, 2018 for publication of Journal of Research in Ayurvedic Sciences (JRAS).
4. Memorandum of Understanding (MoU) between Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi and Tata Memorial Hospital (TMH), Mumbai and Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Navi-Mumbai signed on 25th July, 2018 to carry out the collaborative research entitled, “A phase-II trial to study efficacy, toxicity and immunomodulatory effect of Carctol-S in high grade serous epithelial ovarian cancer at first serological relapse” with duration of Two years.
5. Memorandum of Understanding (MoU) between Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi and Uttarakhand Ayurved University (UAU), Dehradun, Uttarakhand and Patanjali Research Foundation Trust (PRFT), Haridwar, Uttarakhand signed on 28th January, 2019 to undertake Fundamental Research, Collaborative Research and Clinical Studies for establishing evidence based system in Ayurveda and also to Revival, Retrieval of Medical Manuscripts/Rare Books.

9.5.6. Extra Mural Research (EMR) Cell

As per the guidelines of Extra Mural Research (EMR) Scheme of Ministry of AYUSH, the Council receives research proposals from the Scientists across the country. The proposals received are subjected to preliminary scrutiny by the Council’s experts for its technical merit and forwarded the report of the council to the Ministry of AYUSH time to time. Further, the progress report of the funded projects received from the M/o AYUSH are also subjected to evaluation and forwarded the observations of the council/subject experts to Ministry time to time.

IV. INFORMATION, EDUCATION AND COMMUNICATION

Background of the IEC Cell- The cell has enabled to enhance the propagation, promotion, popularity, knowledge & awareness of Ayurveda for achieving and maintaining good health among the people in India and worldwide by conducting various Arogya Fairs/ Exhibitions etc.

Details of Scheme & Objectives-

- ❖ Processing and Co-ordination for the successful conduction for the IEC activities such as National Arogya Mela/ State Arogya Mela, Exhibitions, Workshops/ Seminars/ Brain Storming Sessions in the India arranged by Ministry of AYUSH and other esteemed Government and private organizations.
- ❖ Coordination with Ministry of AYUSH for IEC Activities by sending the detailed reports of IEC activities of the Council.
- ❖ Cell maintains the updated status of IEC activities of the Council throughout the year.

Details of IEC Activities of CCRAS are as under:-

1. Seminar/Workshop/Conference

- (1) Regional Ayurveda Research Institute, Thapla, Ranikhet has organized a two days National Seminar on 'Significance of Medicinal Plants in National Health Care, environment and lively hood security' held on 18th and 19th April, 2018 sponsored by NMPB. Around 60 Officers/ academicians were participated in this seminar. New building of RARI, Thapla, Ranikhet was inaugurated by Shri. Shripad Yesso Naik, Hon'ble Minister of State (IC), Ministry of AYUSH, Govt. of INDIA during the Seminar. Other respected dignitaries like Sh. Ajay Tamta, Hon. MoS, Ministry of Textiles; Sh. Karan Singh Mehra, MLA, Ranikhet, Smt. Shomita Biswas, Chief Executive Officer, NMPB, New Delhi and Prof. Vd. K.S. Dhiman, Director General, CCRAS were also present in this occasion.
- (2) National consultative Meet on Intra AYUSH collaboration was organized by CCRAS from 28th to 29th April, 2018 at A.P. Shinde Symposium Hall, NASC Complex, New Delhi. This event was inaugurated by Shri. Shripad Yesso Naik, Hon'ble MoS (IC), Ministry of AYUSH, Govt. of India. Dr. Rajesh Kotecha, Secretary AYUSH and Prof. Vd. K.S. Dhiman, Director General, CCRAS were also present in this occasion. Besides this, DGs of different Councils and Former DGs/Directors were also attended in this event. About 250 participants from CCRAS, CCRUM, CCRH, CCRYN & CCRS were participated in this event.



Inaugural Function of 'National consultative Meet on Intra AYUSH collaboration'

- (3) A two day training program to Master Trainers on documentation of information into National AYUSH Morbidity and Standardized Terminology Portal (NAMSTP) was organised on 10th & 11th September, 2018 by CCRAS at AYUSH Auditorium, Janakpuri, New Delhi. The program was inaugurated by Padmashree Vaidya Rajesh Kotecha, Secretary, Ministry of AYUSH, Govt. of India. Dr. D.C. Katoch, Advisor (Ay.), Ministry of AYUSH,



A view of Inaugural session of training programme

Prof. Vaidya K.S. Dhiman, Director General, CCRAS, Prof. Asim Ali Khan, Director General, CCRUM, Dr. N. J. Muthukumar, Director General, CCRS, Dr. Ishwar N. Acharya, Director, CCRYN, Dr. N. Srikanth, DDG, CCRAS were also present in this event. A total 59 trainees participated in this training programme. During the training programme, 2 CCRAS Journals viz. Journal of Drug research in Ayurvedic Sciences (JDRAS) Vol. 3, No.1 January to March 2018, Journal of research in Ayurvedic Sciences (JRAS) Vol. 2, No.1 January to March 2018 and Comprehensive Technical Dossier (CTD) of Medicinal plants used in Ayurveda namely Lasuna (*Allium sativum* L.) were launched by Secretary, Ministry of AYUSH.

- (4) Central Council for Research in Ayurvedic Sciences has conducted a Brainstorming session on AYUSH in Public Health: Strategy & Framework on behalf of Ministry of AYUSH, Government of India on 25th September 2018 at Sapna Clarks Inn, Lucknow, U.P. The event was coordinated by Regional Ayurveda Research Institute of Eye Diseases, Lucknow. The core objective of the brainstorming session was to crystallise a framework for mainstreaming of AYUSH through



Release of book "Research Oriented Health Care Services of CCRAS" during the event.

a sustainable delivery of AYUSH services in Public Health Care System, across the nation through a consultative process of stake holders in this sector. The session was inaugurated by the Padmashree Vaidya Rajesh Kotecha, Secretary, Ministry of AYUSH, Govt of India. Prof. Vaidya K.S. Dhiman, Director General, Dr. N Srikanth, Deputy Director General, CCRAS and eminent experts in AYUSH systems of medicine from all over India were also present in this event. During the event, 'Background Note on AYUSH in public health: Strategy and Framework' and 'Research Oriented Health Care Services of CCRAS' were released by Secretary, Ministry of AYUSH, Govt. of India

(5) **Seminar and Celebration of**

3rd Ayurveda Day:

3rd Ayurveda day celebrated on the occasion of Dhanwantari Jayanti. Council actively participated in this event organized by Ministry of AYUSH at Dr. Ambedkar International Centre, New Delhi on 5th November 2018, with the theme “Ayurveda for Public Health”. As part of celebration, a National Seminar on Entrepreneurship and business development in Ayurveda on 4th November 2018 was organized to promote and propagate Ayurveda



Dr. Harsh Vardhan Hon'ble Minister, Ministry of Science & Technology, Ministry of Environment, Forest and Climate Change and Ministry of Earth Sciences; Sh. Shripad Yesso Naik, MoS(IC), Minister of AYUSH; Secretary (AYUSH) and other dignitaries during Celebration of 3rd Ayurveda Day on 5th November, 2018

among mass public and to create general awareness about importance of Ayurveda. The programme was celebrated for 50 days continuously starting from 16th September 2018 to 5th November 2018 by the Council and its peripheral Institutes/Centres. The events such as Public lectures on Ayurveda, Medicinal plants exhibition, Distribution of Saplings of medicinal plants, Lectures about Social Media and Ayurveda Day, Swasthya Daud/Run for Ayurveda and other activities viz. Free Outreach Medical camps, Essay competition, etc. were conducted during countdown period.

(6) The Council has organized the 1st

Training Programme of 1st Batch for Master Trainers on ‘Standardized Prakriti Assessment Scale and AYUR Prakriti Assessment Software’ on 19th & 20th January, 2019 at AYUSH Auditorium, CCRAS hqrs., New Delhi. The objective of the training programme was to train the Council’s Scientists on the usage of Manual of Standard Operative Procedures (SoPs) for



A view of inaugural session of Prakriti Training programme

Prakriti Assessment and AYUR *Prakriti* Assessment software. Total 39 Research Officers from various CCRAS’s institute across India participated in the training programme. These Master trainers will impart training to all the other technical officers of Ayurveda at their respective institutes.

- (7) The Council has organized the Training Programme of 2nd Batch for Master Trainers on ‘Standardized Prakriti Assessment Scale and AYUR Prakriti Assessment Software’ on 2nd & 3rd February, 2019 at AYUSH Auditorium, CCRAS hqrs., New Delhi. The objective of the training programme was to train the Council’s Scientists on the usage of Manual of Standard Operative Procedures (SoPs) for *Prakriti* Assessment and AYUR *Prakriti* Assessment software. Total 48 Officers as Master trainers from various CCRAS’s institute across India and 4 Senior Research Fellows posted at CCRAS Hqrs. New Delhi participated in the training programme. These Master trainers will impart training to all the other technical officers of Ayurveda at their respective institutes.



A view of Technical Session



Participating of the training programme

- (8) **Panchakarma Assistant Training Course:** CCRAS has started a One-year self financed training program for Panchakarma Assistant in its two institutions namely Central Ayurveda Research Institute for Cardiovascular Diseases (CARICD), New Delhi and National Ayurveda Research Institute for Panchakarma (NARIP), Cheruthuruthy, where the facilities of Panchakarma in the OPD / IPD of the hospitals are properly available from July, 2018 to June, 2019. Considering the available infrastructure and viability of the training course in terms of expenditure on advertisement, training and examination, the number of seats have been taken initially 10 seats at CARICD, New Delhi and 30 seats at NARIP, Cheruthuruthy. Total 22 candidates are pursuing the course at National Ayurveda Research Institute for Panchakarma (NARIP), Cheruthuruthy and 09 candidates at Central Ayurveda Research Institute for Cardiovascular Diseases (CARICD), New Delhi.
- (9) **Training Workshop on “Proposal writing for grant submission and Report/Paper writing” at IIPH-D, Gurgaon:** The Training Programme for newly recruited 120 Research Officers of CCRAS in proposal writing for grant submission and Report/Paper writing at IIPH-D, Gurgaon was successfully completed in four batches (First batch 12th – 16th November 2018, Second batch 3rd – 7th December 2018, Third batch 14th – 18th January, 2019 and Fourth batch from 28th January, 2019 to 1st February, 2019).



2. Participation

Table 78: Details of participation in Seminars/Conferences/Symposia

S. No.	Name of the Participant	Title of paper Presented	Name of conference/ seminar/workshop/ symposia	Name of Organizer And Venue	Period
1.	Nariyal V.	A combined efficacy of Kaishore Guggulu and Punarnavadi Guggulu in the management of Vatarakta (Gout): Case series	Seminar on Musculoskeletal Disorders	Punjab University, Chandigarh	19 th Aug., 2018
2.	Wanjari M.	Alzheimer's disease: Pathophysiologic basis and treatment	Seminar on World Alzheimer's Day	BVM College of Pharmacy, Gwalior	21 st Sept., 2018
3.	Sumedhan V.	Analytical evaluation of a herbo mineral drug- <i>Mahagandhakam</i>	International seminar on Current trends in herbal drugs and pharma industry	College of Pharmaceutical sciences, Govt. Medical college, Trivandrum.	29 th - 30 th March 2019
4.	Arunadevi R.	Animal identification procedures, sexing of laboratory animals and Handling & restraining of laboratory animals	Workshop on Laboratory Animal Care and Basic Research Techniques	National Institute of Siddha, Chennai.	12 th Feb., 2019
5.	Jamadagni P.S.	Application of Ayurveda for Enhancing Animal/ Poultry Health and Reproduction and Role of Biotechnology	Recent Advances in Veterinary and Animal Sciences	Krantisinh Nana Patil College of Veterianry Scieence, Shirval, Satara	9 th May, 2018
6.	Layeeq S.	Applied aspects of Snehan	10 th training programme for AYUSH doctors from Dept.of AYUSH, Govt. of Haryana	Chaudhary Brahm Prakash Ayurved CharakSansthan, Khera Dabar, New Delhi	23 rd Feb., 2019
7.	Layeeq S.	Applied aspects of Vaman	11 th training programme for AYUSH doctors from Dept.of AYUSH, Govt. of Haryana	Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi	05 th Mar. 2019
8.	Das B.	Astasthan Pariksha in Yogaratnakar and its clinical importance	All India Yoga- Ayurveda Seminar-2018 on Yagaratnakar: A study	Academy of Yoga and Oriental Studies, Bhubaneswar	21 st Oct., 2018
9.	Panda A.K.	Ayurveda management of Madyaja yakrit Suska (Alcoholic liver cirrhosis)	Health Medicon-2018	Ouat Campus, Bhubaneswar	22 nd Jan., 2019



10.	Akashlal	Ayurvedic Management of Acute Onset of LMN facial palsy (Bell's palsy) – A case report	Jignasa 2018	Tarunya Shikshana Seva trust	05 th -9 th Dec., 2018
11.	Mangal A.	Challenges and recent advancements in ASU medicines-A present scenario	National Conference on Recent advances in herbal/Ayurvedic medicine - from source to manufacture	Deen dayal Research Institute, Chitrakoot.	25 th -26 th Feb., 2019
12.	Arunadevi , Monika N., Vikram E.N.T., Murugammal S., Susila R., Gaidhani S.N. & Ilavarasan R.	Comparative Hepatoprotective potential of Wedelia chinensis and Wedelia trilobata with special reference to in silico screening of marker wedelolactone with acetaminophen targets (Poster presentation)	National Symposium on Natural Products for Human Health	Entomology Research Institute Loyola College, Chennai	7 th -8 th Feb 2019
13.	Sinimol T.P. & Sumedhan V.	Comparative phytochemical and pharmacognostical study of the genuine and market samples of the stem bark of CIRABILWA (<i>Holoptelea integrifolia</i> Planch.) - (Poster presentation)	International seminar on Current trends in herbal drugs and pharma industry	College of Pharmaceutical sciences, Govt. Medical college, Trivandrum.	29 th - 30 th March, 2019
14.	Ratha K.K.	Contribution of Yoga Ratnakara in the field of Ekala Dravya Prayoga	All India Yoga-Ayurveda seminar-2018 on Yagaratnakar: A study	Academy of Yoga and Oriental Studies, Bhubaneswar	21 st Oct., 2018
15.	Chitra S.	Drug Discovery and Development	2 Days National Symposium Biozone 19	Dr. M.G.R. Educational & Research Institute, Chennai.	28 th & 29 th March, 2019
16.	Wanjari M.	Ethno medicine based Approach of Drug Discovery: Perspective of Reverse Pharmacology	National Conference on Role of Ethno-medicine in Health Science	ITM University, Gwalior	28 th -29 th March, 2019
17.	Hetalben A.	Ethnomedicinal uses of Brahmi on national Symposium	Promotion and development of Indian Medicinal Plants Special reference to Brahmi (<i>Bacopa monnieri</i>)	Jadavpur University Kolkata.	7 th -8 th Sept.,2019



18.	Kishore Kumar R	Glimpses of Clinical research achievements of CCRAS & potential areas of research collaboration in Diabetes Mellitus	National Seminar on Integrative Diabetology Samanvaya-2018	Sri Devaraj Urs Academy of Higher Education and Research, Kolar, Karnataka	29 th June, 2018
19.	Jamadagni S.B.	Histopathology in Preclinical/Animal Experimentation	Animal handling and experimentation for Research, Poona College of Pharmacy, Pune	Bharati Vidyapeeth Deemed University, Pune	12 th May, 2018
20.	Pawar S.D.	In vitro Pharmacological and Toxicological Techniques used in Ayurvedic Research.	Refresher training on Recent advances in Veterinary and Animal Sciences	Krantisinh Nana Patil College of Veterinary Science, Shirwal, Satara, Maharashtra.	9 th May, 2018
21.	Wanjari M.	Laboratory Animals Use and CPCSEA Guidelines	Workshop on Bio-methodology of Laboratory Animals	Shriram College of Pharmacy, Banmore, Morena, M.P.	25 th Oct., 2018
22.	Bhuyan G.C.	Management of medical emergencies in Ayurveda	3 rd National Conference on Scope of employment, research and development in Ayurveda	All India Ayurvedic Congress at Gopabandhu Ayurveda Mahavidyalaya, Puri	26 th Nov., 2018
23.	Sudha Kumari K.G.	Manas Charya- Cardinal Role of Life Style Practices in Enriching Satwabala	National Conference on Dinacharya and Ritucharya for Public Health Promotion	All India Institute of Ayurveda New Delhi	10 th - 11 th Dec., 2018
24.	Ilavarasan R.	Need for the Quality Control of ASU and Herbal Drugs	Exhibition on Herbal Biodiversity and Health Management- New Strategies and Approaches	Department of Plant Biology and Plant Biotechnology, Ethiraj College for Women, Chennai.	7 th Feb., 2019
25.	Sharma N.	Neutraceuticals in Ayurvedic perspective	Seminar on "Health through Ayurveda in current Scenario	Bundelkhand Govt. Ayurvedic College Jhansi	1 st Dec., 2018
26.	Patil R.	OPD Basis Panchakarma Practices	11 th training programme for AYUSH doctors from Dept. of AYUSH, Govt. of Haryana	Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delh	16 th Mar., 2019
27.	Pawar S.D.	Pharmacological and safety profile of Siddha herbomineral drugs and use of molecular techniques for future screening.	National Conference on Global Acceptance for Siddha System of Medicine: Scope and Challenges	CCRS, Ministry of AYUSH, Govt. of India.	28 th Sep., 2018



28.	Antony C.	Prakara Yoga: An effective tool for disease prevention in children'	Paprola Con 2018, National Conference on Current Status of Ayurvedic Education with Annual Scientific Seminar-2018	Rajiv Gandhi Govt. P.G. Ayurvedic College and Hospital, Paprola Distt. Kangra, HP	16 th Nov., 2018
29.	Ilavarasan R.	Preparation and Standardization of Herbal Formulations	Industrial orientation training programme	Tamilnadu Pharmaceutical Sciences Welfare Trust, Chennai.	21 st Sept., 2018
30	Gayakwad S., Shirokar A., Chougule S., Wanjari M., Gaidhani S.N. & Pawar S.	Proteomic approach to decipher immune response of an Ayurvedic formulation (AYUSH PJ7) by delayed type hypersensitivity (DTH) in Albino Wistar rats	10 th Annual meeting of Proteomics Society, India (PSI) & International Conference on "Proteomics Cell Biology and Molecular Medicine	National Centre for Cell Science (NCCS), Pune	12 th Dec., 2018 to 14 th Dec., 2018
31.	Meena A.K.	Quality Control and Standardisation of Ayurvedic Formulations and their Ingredients	Recent Advances at Interfaces of Physical and Life Sciences	Department of Chemistry, University of Rajasthan, Jaipur.	28 th - 30 th Jan., 2019
32.	Venkata Narasimhaji Ch.	Quality control and Standardization of Drugs in Herbal Perspective	Novel Analytical Techniques and Concepts of Emerging Modalities	JKK Nataraja College of Pharmacy, Kumarapalayam.	21 st April, 2018
33.	Ilavarasan R.	Regulatory requirements and Quality control of ASU Drugs	International Conference on Phytomedicine	Bharathiar University, Coimbatore.	30 th Aug., 2018
34.	Patil R.	Role of Panchakarma in the management of Sports Medicines	Ayurveda in Sports Medicine	Organized by RAV, Delhi	2 nd March, 2019
35.	Patil R.	Role of Shirodhara for general practices	11 th training programme for AYUSH doctors from Dept.of AYUSH, Govt. of Haryana	Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khara Dabar, New Delhi	6 th March, 2019
36.	Ratha K.K.	Scientific writings and Journals in Ayurveda	3rd National Conference on Scope of employment, research and development in Ayurveda	All India Ayurvedic Congress at Gopabandhu Ayurveda Mahavidyalaya, Puri	26 th Nov., 2018
37.	Ilavarasan R.	Shelf Life studies and Toxicity/Safety Evaluation of ASU & H Drugs	Modern Scientific Approach for Standardization of Medicinal Plants Used in ASU & H Drugs	CSMRADDI, Chennai	25 th - 26 th March, 2019



38.	Ratha K.K.	Some highly valued medicinal plants from Odisha of Cultivation and Conservation concern	Training programme Doubling farmers income through cultivation of MAP QPM with forward market linkage	State medicinal Plant board, Odisha Rotary Club auditorium, Bhubaneswar	18 th March, 2019
39.	Poorna V., Rekha P., Swathi K. N., Meena A. K. Ilavarasan R.	Standardization and HPTLC finger print profile of Poly herbal Ayurvedic formulation – A Churna (Poster presentation)	International Conference on Recent Advances at Interfaces of Physical and Life Sciences	Department of Chemistry, University of Rajasthan, Jaipur	28 th -30 th Jan., 2019
40.	Selvam N.T.	Sustainable use of medicinal plants – need of the hour	Molecules and Materials- for Sustainable Development (NCMM-2018)	Division of Chemistry, Karunya Institute of Technology and Sciences, Coimbatore, Tamil Nadu.	6 th April, 2018
41.	Selvam N.T.	Toxicity study of <i>Cardiospermum helicacabum</i> as per OECD Guidelines	International AYUSH Conclave Kerala 2019	Govt. of Kerala, Thiruvananthapuram, Kerala	16 th - 18 th Feb., 2019
42.	Sharma S.	Treatment of Mental Disorders	7 th Body, Mind and Life Conference	Body, Mind and Life Department and The Foundation for Universal responsibility of His Holiness the Dalai Lama at Indian Habitat Centre, New Delhi.	2 nd April 2018
43.	Jadhav N.	<i>Treatment Protocol in Proliferative Diabetic Retinopathy</i>	Sunetra Conclave 2018	Shreedhareeyam Hospital Kerala and TAS at Kothatu-kulum, Kochi, Kerala	19 th to 22 nd Jul., 2018
44.	Panda P.	Yoga Ratnakara: A Study	All India Yoga-Ayurveda seminar-2018 on Yagaratnakar: A study	Academy of Yoga and Oriental Studies, Bhubaneswar	21 st Oct., 2018
45.	Bhuyan G.C.	Yogaratnakar – an important text of Indian Medicine	All India Yoga-Ayurveda seminar-2018 on Yagaratnakar: A study	Academy of Yoga and Oriental Studies, Bhubaneswar	21 st Oct., 2018



46.	Ilavarasan R., Arunadevi R., Gaidhani S.N., Thomas S. & Chitra S.	90 Days Repeated Dose Oral Toxicity Study of Makardhwaja bhasma: An Ayurvedic Metal Mineral Drug (Poster presentation)	8 th Asian Federation of Laboratory Animal Science Congress 2018	AFLAS Congress, Bangalore	Nov 28 th – Dec 1 st 2018
47.	Narayanan K., Nartunai G., Susikumar S. & Ilavarasan R.	Macro-microscopical Identification of Dried Flowers of <i>Hibiscus rosa-sinensis</i> Linn. and its Differentiation from Adulterant <i>Rhododendron arboretum</i> Sm. (Poster presentation)	National Conference on “Global Acceptance for Siddha System of Medicine: Scope and Challenges	Central Council for Research in Siddha, Chennai at Amma Arangam, Community Hall, Shenoy Nagar, Chennai	28 th -29 th Sep., 2018
48.	Deep V.C,	Etiology of Hypo- thyroidism based on daily regimen – a survey study ⁷	8 th World Ayurveda congress	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th -17 th Dec., 2018
49.	Prasad G.P.	Historical Evidence on Glory of Ayurveda through Inscription.	8 th World Ayurveda congress	Hall -7 Rasiklal Parikh Hall	14 th - 17 th Dec., 2018
50.	Rohit K.S.	In Vitro analysis and pharmaceutico analytical study of kwatha and taila prepared from Krimigna mahakashaya	8 th World Ayurveda congress	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th - 17 th Dec., 2018
51.	Pratap Shankar K.M.	Management of injuries to the ligaments of the knee with Ayurvedic treatment protocols – A case series	8 th World Ayurveda congress	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th - 17 th Dec., 2018
52.	Giri S.K.	Management of Jalodara vis-à-vis Ascites with special reference to Virechana Yoga by Jalodarari Rasa	8 th World Ayurveda congress	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th -17 th Dec., 2018
53.	Ghuse R.D.	Clinical study on Cerebral Palsy and its management with Shastika Shali Pinda Sweda & Yoga basti	8 th World Ayurved Congress & Expo	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th -17 th Dec., 2018



54.	Shinde P.	Role of Erandmuladi Yapan Basti and prajasthapan Ghanvati in management of Vandhyatva (Female Infertility) w.s.t Anovulatory cycle	8 th World Ayurveda Congress & Arogya 2018	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th - 17 th Dec., 2018
55.	Gavali K.	Role of Management of shwetra w.s.r. vitiligo in children	8 th World Ayurveda Congress & Arogya 2018	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th - 17 th Dec., 2018
56.	Balakrishnan P.	Standardization of assessment criteria of Ayurveda description of senile cataract	8 th World Ayurveda congress, 2018	World Ayurveda Foundation, Vd. Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th -17 th December 2018
57.	Nandini	Clinical efficacy of Drakshadi Ghritpana, Vasanjana and Anu taila Nasya in Dry eye syndrome (Shushkakshipaka)	8 th World Ayurveda congress, 2018	World Ayurveda Foundation, Rasiklal Parikh Hall, Ahmedabad, Gujarat	14 th - 17 th Dec., 2018

3. Participation in Arogya Fairs/Exhibitions

Major events:

- 1) CARICD, Punjabi Bagh participated on the behalf of Council in India-International Health & Wellness Exhibition- The Yoga Shala Expo 2018, organized by Namogange Trust held at Pragati Maidan, New Delhi, during 4th -6th May, 2018. Display of Council's publications and free distribution of brochures for health awareness were the activities of the Council during event. The



Visitors at the Stall of CCRAS

event was inaugurated by HH Shri Jagdish Ji Maharaj and HH Sadhvi Bhagawati Saraswatiji on May 04, 2018, Pragati Maidan, New Delhi, India. Shri Sandeep Marwah (Founder of Noida Film City), Shri Vijay Sharma (Chairman of Namogange Trust), Smt. Krishna Raj (Minister of State, Ministry of Agriculture and Farmer's Welfare) and Shri Anant Biradar (National President of International Naturopathy Organization) along with many political leaders and renowned personalities have attended the inaugural ceremony.

- 2) RRAP CARIC, Mumbai participated on the behalf of Council in 4th edition of Global Exhibition on Services (GES) held at Bombay Exhibition Centre, Mumbai from 15th-18th May 2018 , organized by The Department of Commerce, Ministry of Commerce and Industry, Services Export Promotion Council (SEPC), India Trade Promotion Organization (ITPO) and the Confederation of Indian Industry (CII). The objective of the Global Exhibition was to enhance trade services between India and the rest of the world and create more awareness and greater reach to the general public. The 4th edition of the Global Exhibition on Services (GES) was inaugurated by Shri Ram Nath Kovind Hon'ble President of India. Shri C. Vidyasagar Rao, Hon'ble Governor of Maharashtra, Shri Suresh Prabhu, Hon'ble Minister of Commerce & Industry and Civil Aviation, Govt. of India and Shri Devendra Fadnavis, Hon'ble Chief Minister of Maharashtra were grace the occasion. Display of Council's publications and free distribution of brochures for health awareness were the activities of the Council during event.



Hon'ble President of India Shri Ram Nath Kovind during his inaugural speech at 4th Edition of Global exhibitions on Services



Secretary, Ministry of AYUSH Vaidya Rajesh Kotecha at CCRAS stall during the 4th Edition of Global Exhibitions on Services

- 3) CARICD, Punjabi Bagh participated on the behalf of Council in International Book of Record-Largest class of Charak Samhita held at Dilli Haat, Janakpuri, New Delhi on 26th May 2018. Display & Sale of Council's publications and free distribution of brochures for health awareness were the activities of the Council during event.

- 4) Central Ayurveda Research Institute for Cardiovascular Disorders, Punjabi Bagh, New Delhi, participated in the event on the behalf of the Council. in the 4th National Symposium on Nutraceuticals: Functional Foods, Dietary Supplements and natural Medicines scheduled on 25th July 2018 at Hotel Royal Plaza, Ashoka Road, New Delhi, organized by Associated Chambers of Commerce and



Shri Ashwini Kumar Choubey Hon'ble Minister of State for Health and Family Welfare, Govt. of India at stall of CCRAS during the event

Industry of India (ASSOCHAM). The 4th Conference of National Symposium on Nutraceuticals was inaugurated by Shri. Ashwini Kumar Choubey Hon'ble Minister of State for Health and Family Welfare, Govt. of India. Welcome remarks were given by Shri Rakesh Chitkara, and Special Addressed by Dr. Girish Sahni Director General, CSIR. The symposium has witnessed enormously with enthusiastic visitors, health seekers, high profile companies, institutes and organizations have extended their support and cooperation to this Indian Nutraceutical market. Display and distribution of brochures for health awareness (IEC materials) were the activities of the Council during the event.

- 5) Central Ayurveda Research Institute for Cancer, Worli, Mumbai, participated on the behalf of Council in "6th Annual AYUSH Natural World Expo-18" from 02nd-04th August, 2018 at Dr. Shyama prasad Mukherji AC Stadium, Panaji, Goa. During the event display stall was arranged for the visitors in which Council's publications and Council's activities were displayed.
- 6) Regional Ayurveda Institute for Fundamental Research, Pune participated on the behalf of Council in "Vision Maharashtra Pune" from 3rd - 5th August, 2018 at Auto Cluster Exhibition Centre, Pimpri - Chinchwad, Pune, Maharashtra. The event was inaugurated by Hon'ble Shri Amar Sable, Member of Parliament, Rajyasabha. Display of Council's publications and free distribution of brochures for health awareness were the activities of the Council during the event.
- 7) Central Ayurveda Research Institute for Cardiovascular Disorders, Punjabi Bagh, New Delhi on the behalf of Council in "2nd Wellness India 2018 and Krishi India Expo 2018" from 20th - 22nd August 2018 at Pragati Maidan, New Delhi. The Expo was inaugurated by Shri. Alphons Kannanthanam Hon'ble Minister of State (Independent Charge) for Tourism, Govt. of India. Welcome remarks were given by Shri Prem Bhel Chairman, Exhibitions India Group. Display of



Council's publications and free distribution of brochures for health awareness were the activities of the Council during the event.



Shri. Alphons Kannanthanam Hon'ble Minister of State (Independent Charge) for Tourism, Govt. of India, addressing the gathering during the event

- 8) Dr. Achanta Lakshmi pathi Research Centre for Ayurveda, Chennai participated on the behalf of Council in "AAHAR Chennai" from 23rd to 25th August, 2018 at Chennai Trade Centre, Nandambakkam, Chennai. The event was organized by Indian Trade Promotion Organization (ITPO) and Tamil Nadu Trade Promotion Organization in association with Ministry of Food Processing Industries. Many visitors visited the stall of CCRAS. Display of Council's publications and free distribution of brochures for publicity were the activities of the Council during the event.



Glimpse of Deputed officers at CCRAS Stall during the event

- 9) Regional Ayurveda Institute for Fundamental Research, Kothrud, Pune, participated on the behalf of the Council in the "Shining Maharashtra-2018" organized by SANS Foundation, New Delhi from 26th September -28th September, 2018 at Heritage Hotel, Gnadhi Chowk, Solapur, Maharashtra. The event was inaugurated by Hon'ble Shri Amar Sable, Member of Parliament, Rajyasabha. A stall was arranged for the visitors in which Council's publications and Council's activities were displayed along with free distribution of brochures to the visitors for publicity were the activities of the Council during event.
- 10) Regional Ayurveda Research Institute for Drug Development, Gwalior, participated on the behalf of the Council in "State Level Arogya Fair" organized by National Ayurveda Students & Youth Association (NASYA) from 27th to 29th September, 2018 at TT Nagar, Bhopal. Inauguration of the Arogya Fair was in the gracious presence of Shri. Vishwas Sarangal, Hon'ble Minister of Madhya Pradesh Government and Prof. (Vd.) K.S. Dhiman, Director General, CCRAS. Approximately 3000 students of Ayurveda were gathered in the event from all over India. Display of Council's publications and free distribution of brochures for publicity were the activities of the



Council during event. Besides this, a clinics were also arranged for the visitors in which visitors were given consultation by the Doctors of the institute, for their health issues and medicines were distributed free of cost to the needy patients.

- 11) Regional Ayurveda Research Institute for Eye Disorders, Lucknow, participated in “India International Science Festival -2018, a Mega Science, Technology and Industry Expo 2018” from 05th to 08th October, 2018 at Lucknow , on the behalf of the Council. The programme was organized by Vigyana Bharati. The event was inaugurated by Hon’ble Shri Ramnath Kovind, President of India. A stall was arranged for the visitors in which Council’s Publications and Council’s Activities were displayed. Besides this, free distribution of brochures to the visitors.
- 12) Central Ayurveda Research Institute for Cradiovascular Disorders, Punjabi Bagh, New Delhi, participated in the “1st UDMA Day”, from 11th October -14th October, 2018 at Jamia Milia Islamia University, New Delhi, on the behalf of the Council. The programme was organized by Unani Drugs Manufacturers Association, New Delhi. The program was inaugurated by Shri. Ajit Sharan, & Former Secretary to Ministry of AYUSH, Welfare, Govt. of India. Welcome remarks were given by Prof. Asim Ali Khan, Director General, CCRUM, Ministry of AYUSH, Govt. of India, and Special Address was delivered by Dr. D.C. Katoch, Advisor (Ay.), Ministry of AYUSH, Govt. of India & Dr. Mohd. Tahir, Advisor (Unani), Ministry of AYUSH, Govt. of India who emphasized on importance of standardization of Ayurveda & Unani drugs.



Dr. D.C. Katoch, Advisor (Ay.), Ministry of AYUSH, Govt. of India and Prof. Asim Ali Khan, Director General, CCRUM, while Inaugurating AYUSH stall at 1st UDMA Day



Dr. D.C. Katoch, Advisor (Ay.), Ministry of AYUSH, Govt. of India at the Council’s Stall during the event 1st UDMA Day

A stall was arranged for the visitors in which Council’s Publications and Council’s Activities were displayed along with it, free distribution of brochures to the visitors.

- 13) Central Ayurveda Research Institute for Respiratory Disorders, Patiala, participated in “Punjab Health & Wellness Expo 2018” from 12th to 14th October, 2018 at Jalandhar, on the behalf of the Council. The programme was organized by Namoo Gange Trust, Ghaziabad. The Expo was inaugurated by Acharya Shri Jagdishji, founder of Namoo Gange Trust and Ashok Mittal,



Chancellor, Lovely Professional University. Including Ministry of AYUSH in this Expo around 80 to 100 companies also participated. The first day of the expo witnessed enormous enthusiastic visitors, health seekers, high profile companies, institutes, and organizations etc. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it, free distribution of brochures to the visitors.

- 14) Regional Ayurveda Research Institute for Skin Disorders, Ahmedabad, participated in "AYUSH INDIA EXPO -2018" from 19th to 21st October, 2018 at Ahmedabad on behalf of the Council. The programme was organized by Gujarat Board of Ayurvedic & Unani System of Medicine. The event was inaugurated by Shri Purushottam Rupala, Union Minister of State for Panchayati Raj, Agriculture and Farmers Welfare.



Dr. Hasmukh J. Soni, Chairman, Gujarat Board of Ayurvedic and Unani System of Medicine, Gujarat at the stall of CCRAS

A display stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed and free distribution of brochures to the visitors.

- 15) Central Ayurveda Research Institute for Cradiovascular Disorders, Punjabi Bagh, New Delhi, participated in the "MTNL 25th Perfect Health Mela", from 23rd -27th October, 2018 at Talkatora Indoor Stadium, New Delhi, on the behalf of the Council. The programme was organized by Heart Care Foundation of India, New Delhi. The event was inaugurated by Padma Vibhushan Dr. Sonal Man Singh, Pandit Birju Maharaj. In the event campaign was started as Say no to Self-Antibiotics, a conclave on fertility moderated by Dr. Kaberi Banerjee were the point of attraction of the event. A display stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it, free distribution of brochures to the visitors.
- 16) Central Ayurveda Research Institute for Cradiovascular Disorders, Punjabi Bagh, New Delhi, participated in the "Swadeshi Mela", from 24th-29th October, 2018 at Dwarka, New Delhi, on the behalf of the Council. The programme was organized by Swadeshi Jagaran Manch, New Delhi. Swadeshi Mela was inaugurated by Hon'ble Sabhar Chand Gahlot, Minister of State, Social Justice, Govt. of India. More than 100 retail stalls, street food, off-stage activities, Quiz and drawing competition for kids, and cultural performances were organized during the Mela. Approximately 20 thousand people per day from all age group visited Mela and relished the regional food on offer and purchased the unique Swadeshi products on display and sale.



View of CCRAS Stall with deputed Officers and Officials during the event

A display stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it, free distribution of brochures to the visitors.

- 17) Regional Ayurveda Research Institute for Infectious Disease, Patna, participated in "Bihar Scientific Literary cum Health and Wellness festival" from 29th to 31st October, 2018 at Buxar, Bihar on the behalf of the Council. The programme was organized by Centre for Studies of Popular Science. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it, free distribution of brochures to the visitors .
- 18) Regional Ayurveda Research Institute for Urinary Disorders, Jammu, participated in the Rise in Jammu & Kashmir 2018" A mega exhibition at J&K from 1st-3rd November, 2018, on the behalf of the Council. The event was organized by Tarmeh Events. Exhibition was inaugurated by Shri Shamsheer Singh Manhas (MP Rajya Sabha, J&K) Along with Shri Sat Shah Sharma , MLA , J&K.



Glimpses of CCRAS Stall

A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed and along with it, free distribution of brochures to the visitors. Besides this, visitors were briefed about the use of common Ayurvedic drugs used as home remedies like such as Narikel (*Cocos nucifera*), Ajwain (*Trachyspermum ammi*), Jeerak (*Cuminum cyminum*), Makhana (*Euryale ferox*), Amla (*Embelica officinale*), Bahera (*Terminalia belerica*), Haritaki (*Terminalia chebula*), Banafsha (*Viola odorata*), Haldi (*Curcuma longa*), Shunthi (*Zingiber*



officinale), Chandrasur (*Lepidium sativum*), Fitkari (Alum), Kulthi (*Dolicos biflorus*), long (*Syzygium cumini*), Badam (*Prunus amygdalus*) Madhu (Honey), Ghee (clarified butter), Kali mirch (*Piper nigrum*) etc. that were displayed.

- 19) Central Ayurveda Research Institute for Respiratory Disorders, Patiala, participated in the “State Level Arogya Fair at Rajinder College, Bathinda during 17th – 19th November, 2018, on the behalf of the Council. A stall was arranged for the visitors in which Council’s Publications and Council’s Activities were displayed along with it, free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 20) Central Ayurveda Research Institute for Hepatobiliary Disorders, Bhubaneswar, participated in the Ayurveda Parv during 23rd -25th November 2018 at Puri, on the behalf of the Council. The event was organized by Vinoba Sewa Pratisthan. A stall was arranged for the visitors in which Council’s Publications and Council’s Activities were displayed along with it, free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients. During the event lectures were also arranged for the visitors.

- 21) Raja Ramdeo Anandilal Podar Central Ayurveda Research Institute for Cancer, Worli, Mumabi, participated in the “INDIAHEAL@AHCI 2018” during 1st - 2nd December, 2018 at Mumbai, on the behalf of the Council. The event was organized by Service Export Promotion Council. The objective of the event was to facilitate India being a preferred healthcare destination for patients across the globe and to ensure that all major



Felicitation of Dr. Manoj Nesari, Advisor, Ministry of AYUSH, Government of India at CCRAS stall during the INDIAHEAL@AHCI 2018

healthcare destinations in India get appropriate global attention. SEPC also conducted buyer seller meets for increasing trade in healthcare services, enhancing strategic cooperation and strengthening multilateral relationships between all stakeholders. Approximately 250 foreign buyers from export markets were invited to hold B2B meetings with hospitals, dental clinics, wellness centers and AYUSH centers and visit these establishments to unleash the potential opportunities that India offers.

A stall was arranged for the visitors in which Council’s Publications and Council’s Activities were displayed along with it free distribution of brochures to the visitors.

- 22) Regional Ayurveda Research Institute for Gastro Intestinal Disorders, Guwahati, participated in the 10th East Himalayan Expo at Shillong, Meghalaya from 3rd – 10th December, 2018, on the behalf of the Council. The event was organized by Indian Trade Promotion Organization. Governor of Meghalaya, Shri Tathagata Roy inaugurated the 10th East Himalayan Expo. Addressing the gathering at the inaugural programme, the Governor said that the expo will be a platform for a long term on-spot business tie-ups for the entrepreneurs. North eastern region, being endowed with rich natural resources has a potential to bring in more opportunities in the trade and tourism sector, he said. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.
- 23) Regional Ayurveda Research Institute for Metabolic Disorders, Bangalore, participated in the "National Level Arogya Fair" at Bangalore, Karnataka during 5th-9th December, 2018, on the behalf of the Council. The event was organized by Tarunya Shikshana Sewa Trust.



**Inaugural ceremony of Arogya Fair 2018,
Inauguration by Vd. Rajesh Kotecha, Secretary,
Ministry of AYUSH**



**Dr. B. R. Ramakrishna, Vice president CCIM, New
Delhi at CCRAS stall**

The aim of this event was to Highlight and Mainstream Traditional Systems of Medicine in Bharata Varsha particularly AYUSH in the management of Public health care and showcase the strengths of Ayurveda stakeholders. The Arogya fair was inaugurated by Vd. Rajesh Kotecha, Secretary, AYUSH, Govt. of India. Ms. Meenakshi Negi, Commissioner of AYUSH, Karnataka, Dr. B R Ramakrishna, Vice president CCIM, Shri M. K. Shridhar, Member of Central Advisory board of Education graced the occasion. The key note address was by Prof. S.S. Savrikar. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinics were also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients. More than 400 patients visited the clinics arranged by CCRAS. Lectures were also arranged for the visitors at the event.

- 24) Regional Ayurveda Research Institute for Gastro Intestinal Disorders, Guwahati, participated in the State Level Arogya at Imphal East, Manipur from 6th-9th December, 2018, on the behalf of the Council. The event was organized by Manipur State Medicinal Plant Board. The event was inaugurated by Shri N. Biren Singh, Hon'ble Chief Minister, Manipur, Shri Sripad Naik,



Hon'ble Union Minister of State (Independent charge), Ministry of AYUSH, Govt. of India, Shri L. Jayantakumar Singh, Hon'ble Minister (Health & Family Welfare and AYUSH), Govt. of Manipur, Shri Karam Shyam Singh, Hon'ble Minister (CAF&PD and Revenue), Govt. of Manipur. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients. Total 619 patients took the consultation at the clinic established by Council during the event.

- 25) Central Ayurveda Research Institute for Respiratory Disorders, Patiala, participated in the "Punjab International Trade Expo (PITEX) 2018" at Amritsar during 6th –10th December, 2018, on the behalf of the Council. The event was organized by PHD Chamber of Commerce. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.
- 26) Central Ayurveda Research Institute for Drug Development, Kolkata, participated in the 12th Sundarban Tsunami Sachatan Vivekmela O Sundarban Loko Sanskriti Utsab- 2018 from 10th – 19th December, 2018 at South 24- Pagrama, West Bengal on the behalf of the Council. The event was organized by Sundarban Tsunami Sachatan Vivekmela O Sundarban Loko Sanskriti Utsab Samity. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.
- 27) Regional Ayurveda Research Institute for Skin Disorders, Ahemdabad, participated in the "International Arogya Fair" at Ahemdabad at 8th World Ayurveda Congress during 14th –17th December, 2018, on the behalf of the Council. The event was organized by organizing committee of 8th WAC. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients. Lectures were also arranged for the visitors at the event.
- 28) Regional Ayurveda Research Institute for Urinary Disorders, Jammu, participated in the Health Mela at Kishtwar (J&K) on 15th December, 2018, on the behalf of the Council. The event was organized by Directorate of AYUSH, Jammu & Kashmir. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 29) Central Ayurveda Research Institute for Respiratory Disorders, Patiala, participated in the 106th Indian Science Congress (ISCA) on 3rd - 7th January, 2019 at Jalandhar, Punjab, on the behalf of the Council. The event was organized by Indian Science Congress. The focal theme of the conference was 'Future India: Science & Technology'. One of the major attractions of 106th ISC was "Pride of India" (PoI) Expo. The PoI Expo was emerged as a profound platform for showcasing cutting-edge technologies, scientific products and services, achievements, innovations,

initiatives research & development across various streams of science and its allied industries and vision for future by leading R&D institutions, states of India, PSUs, ministries, Government departments, Boards, MNCs, Corporate & industry. The event gained magnanimity due to the gracious presence of Prime Minister of India, 4 Union Cabinet Ministers, Governor of Punjab, State Minister, 3 Nobel Laureates viz. Prof Thomas Sudoph, Prof Avram Hershko, Prof Duncan Haldane and persona of nobility from diverse sectors all across India and the globe.



Hon'ble Prime Minister of India, Shri Narendra Modi, addressing the 106th Indian Science Congress 2019 at LPU, Jalandhar, Punjab

A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.

- 30) Regional Ayurveda Research Institute, Gangtok, participated in the State Level Arogya Mela at Garib Uttan Bhawan, Jorethang, South Sikkim from 14th -16th January, 2019, on the behalf of the Council. The event was organized by NAM Department of Health Care, Human Services & Family Welfare Department, Govt. of Sikkim. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 31) Regional Ayurveda Research Institute for Eye Diseases, Lucknow, participated in the 'Ayurveda Parva' at Kanpur during 19th -20th January, 2019, on the behalf of the Council. The event was organized by All India Ayurveda Congress. The event was inaugurated by Hon'ble Chief Minister of Uttar Pradesh, Yogi Aditya Nath. In inaugural ceremony Hon'ble State Minister, Ministry of AYUSH, Shri Sripad Naik and Vd. Rajesh Kotecha, Secretary, Ministry of AYUSH, were also present. All these dignitaries also visited the stall of the council. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients. 272 patients took the consultation at the clinic. Lectures were also arranged for the local visitors during the event.
- 32) Regional Ayurveda Research Institute for Eye Diseases, Lucknow, participated in the 15th PBD Convention 2019 during 21st – 23rd January, 2019 at Varanasi, on the behalf of the Council. The event was organized by Ministry of External Affairs. The day one programme on 21st January 2019 was inaugurated by Cabinet External Affairs Minister, Smt. Sushama Swaraj and Shri Rajywarhan Singh Rathod, Minister of State, Youth Affairs and Sports. On day 2nd , the programme was inaugurated by Shri Narendra Modi, Hon'ble Prime Minister of India with the gracious presence of Prime Minister of Mauritius and on 3rd day the valedictory address



to fathering was delivered by Shri Ramnath Kovind, Hon'ble President of India. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.

- 33) Regional Ayurveda Institute for Fundamental Research, Pune, participated in the Global Agriculture Festival-2019 to be held on 25th-29th January, 2019 at Nashik, (Maharashtra), on the behalf of the Council. The event was organized by Shri Swami Samarth Krishi Vikas V Sanshodhan Charitable Trsut, Nashik. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed.
- 34) Regional Ayurveda Research Institute, Ranikhet participated in the "State Level Arogya Fair at Haridwar, Uttarakhand from 8th -10th February, 2019, on the behalf of the Council. Sh. Harak Singh Rawat, Hon'ble Minister AYUSH & AYUSH Education, Govt. of Uttarakhand inaugurated the "State level Arogya Fair" on 8th February 2019. Sh. Ramanand Meena, Deputy Secretary, Ministry of AYUSH, Govt. of India also graced the occasion.



Dignitaries at the inaugural Session of State Level Arogya Fair at Haridwar

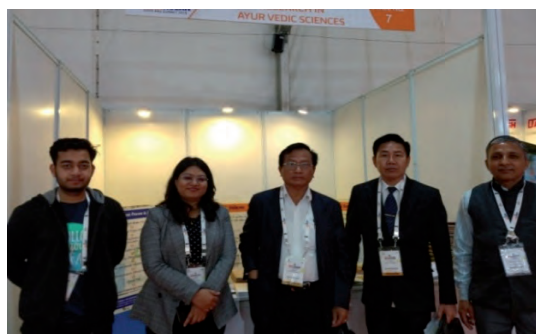


View of Council's stall during State Level Arogya Fair at Haridwar

A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.

- 35) National Institute of Indian Medical Heritage, Hyderabad, participated in the State Level Arogya Fair at Hyderabad during 15th – 17th February, 2019, on the behalf of the Council. The event was organized by PHD Chamber of Commerce. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 36) Regional Ayurveda Research Institute for Life Style Disorders, Trivandrum, participated in the State Level Arogya Fair at Trivandrum during 15th – 18th February, 2019, on the behalf of the Council. The event was organized by PHD Chamber of Commerce. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.

- 37) Central Ayurveda Research Institute for Cardiovascular Disorders, New Delhi, participated in the 4th India- ASEAN Expo and summit to be held from 21st to 23rd February, 2019 at Jawahar Lal Nehru Stadium, New Delhi, on the behalf of the Council. The event was inaugurated by Sh. Suresh Prabhu, Honorable Minister of Commerce & Industry and Civil Aviation, Govt. of India. Visitors showed their keen interest in brochures of Council for free distribution and display, specially regarding Sadavratta (life style modification), diabetes, joint disorders etc. Visitors took a number of brochures with them in order to gain more information about Ayurveda. Many visitors inquired about the new drugs formulated by CCRAS. Some of them were curious about the latest research works of CCRAS and a few number of them also found inquiring about the procedure for patency of herbal drugs and licensing of ayurveda drug production.



Deputed officers of Council with guests at CCRAS stall

A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.

- 38) Regional Ayurveda Research Institute for Infectious Diseases, Patna, participated in the State Level Arogya Fair at Agamkuna, Patna, during 22nd -24th February, 2019, on the behalf of the Council. The event was organized by FICCI. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 39) Central Ayurveda Research Institute for Drug Development, Kolkata, participated in the State Level Arogya Fair at Kolkata during 01st -3rd March, 2019 on the behalf of the Council. The event was organized by Associated Chambers of Commerce and Industry of India (ASSOCHAM). A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors. Clinic was also arranged for the visitors in which consultation was given to visitors and there was distribution of medicines in the clinic to the needy patients.
- 40) Regional Ayurveda Research Institute, Ranikhet, participated in the Ujjwal Uttarakhand at Gadarpur, during 02nd-04th March, 2019, on the behalf of the Council. The event was organized by Aavishkar Exhibition & Promotion Pvt. Ltd., New Delhi. A stall was arranged for the visitors in which Council's Publications and Council's Activities were displayed along with it free distribution of brochures to the visitors.



- 41) Central Ayurveda Research Institute for Cardiovascular Disorder, Punjabi Bagh, New Delhi, participated in the Udynaotsav 2019 at Rashtrapati Bhawan Udyan (Mughal Garden) for Public viewing, Rashtrapati Bhawan, New Delhi on 11th March, 2019, on the behalf of the Council. The event was organized by Superintendent of Rashtrapati Bhawan Garden. During the event, medicines developed by CCRAS viz. AYUSH-82, AYUSH-64 etc. medicinal plant and Council's publications were displayed.

Ayurveda Youth Festival- Special activity of Council

- 42) Council organized Ayurveda Youth Festival on behalf of Ministry of AYUSH at Auditorium of National Institute of Oceanography, Goa during 3rd & 4th March, 2019. The event was organized specially for the youth of Goa . Officers from the council's headquarters, RRAPCARIC, Mumbai, RAIFR, Pune, were actively involved in the event. Minister of State, Ministry of AYUSH, Hon'ble Shri Sripad Naik inaugurated the event. During the event various activities were organized such as Poster presentation, Elocution competition, Quiz during the event. Guest lecturers were also arranged. Council's publications, IEC materials and Kitchen garden were also displayed in the event.



VI. Sowa - Rigpa

National Research Institute for Sowa-Rigpa has been working with dedication for research and development of Sowa-Rigpa system of medicine. Major activities undertaken by the Institute are Clinical Research, Tribal Health Care Research Programme, Project on Trans-Himalayan Medicinal Plants Garden, Health Care Services through OPD etc. The brief summary of activities and achievements of the Institute during the reporting period 2018-19 is as under.

Tribal Health Care Research Project

Survey cum medical camp was conducted in Leh and Khalsi Blocks of Leh District under the project entitled “Tribal Health Care Research Programme” (THCRP). 30 villages were selected in Annual Action Plan. The target for the said project was to cover 7000 populations and to collect 15 folk claims. Information regarding living conditions, dietary regimen, educational status and prevalence of disease in the region has been collected and documented. It is observed that the physical environment and socio-economic conditions play an important role in prevalence of diseases. In the year 2018-19, 35 villages were covered and 78 visits have been made. A total of 13,203 populations are surveyed and 3,443 patients attended during the medical camp organized by the team. Out of which, 1,190 were male and 2,253 were female. 6 folk claims has been collected and documented. The present data shows that the most common prevalent diseases in the region are Arthritis, Gastrointestinal, Bronchitis, Asthma, Neuritis and hypertension etc.

Project on cultivation of Trans Himalayas Medical Plants and production of quality germplasm” under NMPB scheme

During the reporting year, the Institute had initiated a new project “Cultivation studies of some endangered and commercially viable medicinal plants of Trans Himalayas and production of quality of germplasm” funded by NMPB, New Delhi. Total nine plants species are selected for the study i.e. Hippophae rhamnoides, Inula racemosa, Dactylorhiza hatagirea, Rheum webbianum, Carum carvi, Hysocymus niger, Ephedra gerardiana, Saussurea lappa, Commiphora wightii. During the reporting period leveling of land, constructions of green house and trench were completed. Collection of seeds and cultivation of selected medicinal plants were done.

IMR Project on Development of Agro-Techniques of high altitude endangered medicinal plants of trans-Himalayas

The project was sanctioned under IMR project scheme of CCRAS. The aim of the project is to study the cultivation techniques of high altitude medicinal plants and their multiplication, to develop nursery of some commercially viable medicinal plants and freely distribute to the link farmers for cultivation on agriculture field. The plants selected for study under the project are Aconitum heterophyllum, Artemisia annua, Bunium persicum, Origanum vulgare, Verbascum thapsus, Podophyllum hexandrum, Aconitum violaceum, Valeriana jatamansi, Malva sylvestris, Rubia cordifolia. During first year of the project after ground leveling, one green house has been constructed and some trenches for controlled



cultivation. Collection of seed/germplasm were done from Research Institutions and Zanskar, Suru and Indus vallies. Further standardization of suitable agro-techniques of targeted medicinal plants and documentation of cultivation techniques of himalayan medicinal plants is initiated.

Project for Promotion of Sowa-Rigpa in Leh District of Jammu and Kashmir State for Public Health Under “Public Health Initiative” Scheme

This project is in collaboration between National Research Institute for Sowa-Rigpa, Leh, Health Department, Ladakh Autonomous Hill Development Council, Leh and Ladakh Amchi Sabha, Leh. The main objective of the project is to improve public health security in the remote area of Ladakh by strengthening the local health practices and promotion of Sowa-Rigpa. Under the project 97 Sowa-Rigpa clinic and practitioners in 76 different villages are supported with medicine, raw drugs, furniture, record register and training etc. Medical camps were also organised in different villages for free distribution of medicines and health awareness. A workshop for traditional Sowa-Rigpa practitioners organised under this project at National Research Institute for Sowa-Rigpa on 28 July 2018 was also attended by Shri Vaidya Rajesh Kotecha, Secretary, Shri P.N. Ranjit Kumar, Joint Secretary, Ministry of AYUSH and Prof. Vaidya K. S. Dhiman, Director General, C.C.R.A.S, New Delhi.

Sowa-Rigpa Health Care Clinic (Tribal) at Zanskar Kargil, Jammu and Kashmir

Sowa-Rigpa Health Care Clinic at Zanskar has been setup in June 2017 by National Research Institute for Sowa-Rigpa Leh funded by CCRAS New Delhi. This project is functioning to provide health care in far flung areas of tribal population deprived from medical facilities. This year total 6511 patients had attended out of which 2569 were male and 3942 were female patients. Most prevalent diseases are Gastro-intestinal disorders, skin diseases, stomach ailments, arthritis, hypertension, anemia, lung problem, neuritis, joint-pains, and lower back pain. Irritable Bowel Syndrome (IBS) is another problem seen in patients. The main causative agent is found due to poor hygiene and sanitation and wrong dietary habits. Despite all the odds, there is almost negligible number of people who suffer from Diabetes (all types). Zanskar Health Care Unit has been smoothly running throughout the year and providing health service in one of the most remote Zanskar valley of Kargil District of Jammu and Kashmir.

Out Patient Department

The National Research Institute for Sowa-Rigpa is running a Sowa-Rigpa OPD for the public. During the reporting period, a total 9040 patients had visited and undergone Sowa-Rigpa treatment in the OPD.

Inscription of Sowa-Rigpa as Intangible Cultural Heritage in UNESCO:

During the reporting year, the Institute has prepared the dossier for filing nomination of Sowa-Rigpa as intangible Cultural Heritage of India in UNESCO. The dossier is listed in ICH National Inventory of India and it is submitted to UNESCO.



Participation in major events

During the reporting year, the Institute has participated in Arogya Mela on State Level at Rajinder College Bathinda Punjab from 17th to 19th November 2018, National Arogya Meal at Central University ground Bangalore from 5th to 9th December 2018, 8th World Ayurved Congress & Arogya Meal at National Level at Gujarat University Convention Centre Ahmedabad from 14th to 17th December 2018, Arogya Fair at State Level at Haridwar Uttarakhand on 8th to 10th February 2019, Arogya on State Level at Triangular Park Gournnd Kolkata from 1st to 3rd March, 2019 and Ladakh Kisan Jawan Vigyan Mela at DRDO Leh from 11th & 12th August 2018. During the reporting year this Institute also conducted medical camp at Hussani Park, Kargil on 22nd June 2018 during Mega Legal Serves Camp.

National Workshop on Preservation and Promotion of Sowa-Rigpa in India

A National Workshop on Preservation and Promotion of Sowa-Rigpa in India was orgnized by the Institute on 11th & 12th December 2018 at Constitution Club, New Delhi. The workshop was inaugurated by Shri Vaidya Rajesh Kotecha, Hon'ble Secretary Ministry of AYUSH and Valedictory function was chaired by Shri Choekyong Wangchuk, Health Minister, Central Tibetan Administration, Dharamsala, HP. The workshop was attended by 71 participants and 20 speakers from all over India attended the workshop.



VII. Acknowledgement

The Director General of the Council places on record its deep appreciation for the services rendered by the members of the Governing Body (GB), Standing Finance Committee (SFC), Scientific Advisory Board (SAB) and Scientific Advisory Group (SAG). The valuable assistance, guidance and continued support extended by them to the Council in carrying forward various activities are acknowledged with gratitude.

The Council places on record the efforts put in by **Dr. N. Srikanth** Deputy Director General, for his able guidance and mentorship in successful execution of Research programme.

The Director General of the Council also places on record his gratitude and deep sense of appreciation to scientists of various disciplines from collaborating Universities and Government agencies who are directly or indirectly associated with this Councils and officials of the councils head quarters and peripheral institutes for extending their co-operation in implementing the various programmes undertaken during the period under report.

The Council avails this opportunity to place on record its profound thanks to Ministry of AYUSH, Government of India for their continuous support and co-operation which enabled the Council in carrying out its activities in the field of research.

The efforts put in by Sh. R.K. Ahluwalia, Deputy Director (Admn.), Dr.S.N.Gaidhani, Dr. A. K.Mangal, Dr. Ravinder Singh, Dr Adarsh kumar, Dr B.C.S Rao, Dr. Arjun Singh - Programme Officers, Account Officer, Hindi Section and all other Scientists, Research Officers and Staff members in bringing out the Annual Report in the present form are appreciated.

The untiring efforts of Dr. V.K.Shahi, Assistant Director (Ay.); Dr. Sobaran Singh, Consultant (Ay.); Dr. Renu Singh, Research Officer (Ayurveda) in documenting the report are highly appreciated and deeply acknowledged. Further the contribution made by Dr. M.M. Sharma RO (Ay.) is also appreciated.

