

Central Ayurveda Research Institute, Bengaluru

(Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH, Govt. of India)

12, Uttarahalli Manavarthe Kaval, Uttarahalli (Hobli), Bangalore South (Tq.)

Kanakapura Main Road, Talaghattapura post, Bengaluru-560109

E-mail:nadri-bengaluru@gov.in, nadri.bengaluru1@gmail.com

Website: www.cari.gov.in

Annual Report

April 2025- March 2026

Centre of Excellence for Research and Clinical services in Madhumeha (Diabetes mellitus) awarded by the Ministry of AYUSH, Govt. of India

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CARI Bengaluru

Activities and Achievements 2025-26

“Centre of Excellence in Research and Clinical Services for Madhumeha (Diabetes Mellitus)”

1. Background

Central Ayurveda Research Institute was awarded “Centre of Excellence in Research and Clinical services for Madhumeha (Diabetes mellitus)” by the Ministry of AYUSH, Govt of India in March 2021. The total fund sanctioned is Rs.7,24,80,400/- for a duration of four years (3+1year extension upto March 2023 due to Covid pandemic). The scheme got initiated in April 2021.

With one year extension during Covid 19 i.e. 2022-23, the project will be technically getting completed during March 2025. The Ministry has been requested for the extension of the project on no additional cost basis to complete 2 clinical trials that are initiated during last year and sanction letter for the extension received on 12-03-2025 for a period of one year. Extension has been sought for another one year on no additional cost basis and sanction letter for the extension received on 23-01-2026.

Fund release details since inception:

Instalments released	Total amount released	Date of Sanction
1 st Instalment	Rs.2,88,00,000/- *	05-03-2021
1 st part of 2 nd Instalment	Rs. 20,00,000/-	20-01-2023
2 nd part of 2 nd Instalment	Rs. 50,00,000/-	03-07-2023
3 rd part of 2 nd Instalment	Rs. 1,04,86,200/-	08-11-2023
4 th part of 2 nd Instalment	Rs. 1,01,60,000	16-07-2024
3 rd Instalment	Rs. 1, 58,34,200/-	19-06-2025

* Rs. 1,92,160/- was returned to the Ministry on 16-06-2021 as per the Ministry’s directions dated 15-06-2021.

2. Summary of achievements against deliverables (April 2025 to March 2026)

The Centre of Excellence scheme was sanctioned to CARI, Bengaluru with the following deliverables and targets for the fourth year. Achievements against deliverables are tabulated below:

Sl. No.	Deliverables	Achievements under the CoE scheme
1.	Validation of Ayurveda approaches for Diabetes mellitus and documentation of outcome of approaches – 200 patients	Treatment approaches 672 OPD patients have been documented and validation of outcome of 200 patients completed during the reporting period.
2.	Prevention and management of Diabetes with multi-	A total of 1310 patients were under Multi specialty care during the reporting period:

	speciality approach of 500 pre-diabetics and diabetics	<ul style="list-style-type: none"> • Yoga training to patients with special reference to diabetes management - 128 patients got benefited • Number of patients of Diabetes managed with combination of Modern medicine and Ayurveda is 1182 • Patients are also managed by different specialists of Ayurveda such as Shalya tantra (Diabetic foot, Diabetic ulcer, Venous insufficiency, anorectal disorders, Diabetic carbuncles etc.)- more than 314 patients got benefited • Shalakyta tantra (Diabetic retinopathy, cataract, hearing loss, tinnitus, periodontitis, gingivitis etc.)- more than 292 patients got benefited • Panchakarma- more than 125 patients got benefited
3.	Clinical trials for 2 selected anti-diabetic formulation	<ul style="list-style-type: none"> • During the reporting period, clinical trial by including advanced outcome parameters such as gut microbiome has completed on 2 shortlisted formulations, finalised based on results of animal studies and pilot clinical trials (120 sample size). Statistical analysis and gut microbiome analysis are under progress. • Collaboration is with IISc and Samatvam, Bengaluru.
4.	Training on diabetes and diet to public and patients– 10 camps	<ul style="list-style-type: none"> • 10 special training programmes were conducted for patients of Diabetes at CARI Hospital focussing on understanding Diabetes, Diet in Diabetes and Lifestyle modifications in Diabetes with total beneficiaries –397 during the reporting period.
5.	Training for UG/PG students of Ayurveda- 10 programme	<p>10 training programmes on Research methodology, Biostatistics, Chromatographic techniques and comprehensive management of Diabetes were conducted for Final year UG/First year PG students from different colleges of Karnataka with total number of trainees – 547.</p>
6.	e-healthcare initiatives- development of portal for interaction with patients or community through SMS alerts, tele-consultation, maintenance of online medical record of 500 patients with	<p>E- health coverage is extended to more than 5,00,000 population</p> <ul style="list-style-type: none"> • Institute website www.cari.gov.in is fully functional with total impressions of 1,39,820 during the reporting period. • Lab and pharmacy data management software coverage is more than 27818. • Teleconsultation portal is operating over the website since the month of January 2023 and 116 patients were registered under the teleconsultation portal during the reporting period. • Patient data of 672 OPD patients is being maintained digitally during the reporting period. • COE you tube channel is functional for reaching out to wider population.

population coverage of 10000	https://www.youtube.com/channel/UC3TBI39pJCDvKRqUQculpSg . <ul style="list-style-type: none"> Risk assessment portal is developed and made available in the institute website for the viewers to assess the risk of diabetes.
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3. Comprehensive report

The report is broadly put under the heads of Clinical Services, Trainings and Research Activities, Upgradation of the Institute, Scientific Publications, IEC materials and Expenditure details.

3.1 Clinical services

3.1.1 Special OPD for Diabetes: Under the scheme, a specialized OPD for patients of Madhumeha is made functional since 22nd July 2021. The patients are provided with free consultation, medicines, laboratory investigations and food & lifestyle counselling. The specialized OPD has catered to 1749 diabetic patients and 10477 follow-up visits offering Ayurveda treatment totalling up to 12226 visits during the reporting period. 4670 patients have had free laboratory investigations under the scheme. An extensive and detailed data was collected from all the patients attending the special diabetes OPD under CoE, which was digitally managed using e-formats.

Department	Male	Female	Total
OPD New patients	1034	715	1749
OPD Follow-up patients	6238	4239	10477
Total	7272	4954	12226

3.1.2 Yoga advocacy: Free yoga classes were conducted at CARI Hospital and 634 (for both OPD and IPD) patients have been benefitted during the reporting period. Classes are conducted under the guidance of professional Yoga teachers. A specialized Yoga module for Diabetes has been developed and is being instructed to patients of Diabetes on a regular basis. Translation of Common Yoga Protocol into Kannada has been done and in circulation.

3.1.3 e-Healthcare initiatives: Under the Centre of excellence scheme a static website www.cari.gov.in has been functional for the promotion and introducing e-healthcare initiatives, compliant with Digital India, to reach out to wider population. Total population coverage under e-healthcare initiatives is 172113 during the reporting period.

Sl. No	Initiative	Population coverage
1	e-Medical records (OPD)	672
2	Website impressions	139820
3	Teleconsultation	116
5	Social media reach	3687
6	AYUSLAB-Clinical lab	9356
7	AYUSLAB-Pharmacy	18462
	Total beneficiaries	172113

3.2 Training programmes

Training programmes were conducted in two categories viz. 1. For patients 2. For Ayurveda UG/ PG students.

3.2.1 Ten training programmes for patients at CARI Hospital about Diabetes, its diagnosis, prevention and management through diet and lifestyle followed by special training on food recipes and diet in Diabetes with total beneficiaries -397

Camp	Date	Place	Resource Person	Total
1.	22/04/2025	CARI, Bengaluru	Dr. Chandini	40
2.	29/04/2025	CARI, Bengaluru	Dr. Vinushree	40
3.	27/05/2025	CARI, Bengaluru	Dr. Chaithra Rao	42
4.	24/06/2025	CARI, Bengaluru	Dr. Sharada	40
5.	29/07/2025	CARI, Bengaluru	Dr. Poorvi	40
6.	12/08/2025	CARI, Bengaluru	Dr. Chandini	40
7.	02/09/2025	CARI, Bengaluru	Dr. Sarada M K	35
8.	28/10/2025	CARI, Bengaluru	Dr. Sarada M K	40
9.	05/12/2025	CARI, Bengaluru	Dr. Vinushree	40
10.	16/12/2025	CARI, Bengaluru	Dr. Poorvi	40
Total				397

3.2.2 Ten training programmes have been conducted for the students from different Ayurveda colleges of Karnataka regarding research methodology, biostatistics, chromatography techniques and comprehensive management of Diabetes mellitus which was attended by a total of 547 students under the mentorship of Dr. Sulochana Bhat.

Sl.No	Date	Name of the College	Topic	Resource person	Total number attended
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1.	28-05-2025	SDMIAH, Bengaluru (batch-1)	1. Research methodology 2. Comprehensive management of Diabetes.	1. Dr Chaithra 2. Dr Poorvi	45
2.	29-05-2025	SDMIAH, Bengaluru (batch-2)	1. Research methodology 2. Comprehensive management of Diabetes.	1. Dr Chaithra 2. Dr Chandini	38
3.	17-06-2025	Athreya Ayurvedic medical college (batch-1), Bengaluru	1. Research methodology 2. Comprehensive management of Diabetes. 3. Biostatistics	1. Dr Chandini 2. Dr Poorvi 3. Miss. Anjana	39
4.	18-06-2025	Athreya Ayurvedic medical college (batch-2), Bengaluru	1. Research methodology 2. Comprehensive management of Diabetes. 3. Biostatistics	1. Dr Chaithra 2. Dr Sharada 3. Miss. Anjana	33
5.	22-07-2025	Ramakrishna Ayurvedic medical college, Bengaluru	1. Research methodology 2. Comprehensive management of Diabetes. 3. Biostatistics	3. Dr Chandini 4. Dr Poorvi Miss. Anjana	53
6.	26-09-2025	Adichunchanagiri Ayurveda Medical college, Bengaluru	1. Research methodology 2. Comprehensive management of Diabetes. 3. Biostatistics	1. Dr Chandini 2. Dr Vinushree 3. Dr Sarada M K	68
7.	14-11-2025	1. Sri Sri Ayurveda medical college, Bengaluru (batch-1) 2. Hillside Ayurveda Medical	1. Fundamentals of Research methodology and Hypothesis testing 2. Holistic management of Madhumeha	1. Dr. Nagesh L., Retd. Professor Emeritus, Research and Development, Dayananda Sagar College of Dental	51

		college, Bengaluru		Sciences, Bengaluru 2. Prof. Dr G.G. Gangadharan, Former Director, Ramiah Indic Speciality Ayurveda restoration Hospital (RISA), Bengal uru	
8.	23-01- 2026	Sri Sri College of Ayurvedic Science and Research, Bengaluru (batch-2)	1. Diabetes Management: From Basics to Practice Holistic management of Madhumeha 2. Purpose and Process of medical research	1. Dr S Srikanta, Consultant- Endocrinology Diabetes and Physician Scientist, Samatvam Dia betes Endocrinology and Medical Centre, Bengaluru 2. Dr. Kavitha Muniraj, Endocrinologis t, Translational Medicine, Samatvam, Bengaluru 3. Dr. M. A. Shekar,	56

				<p>Founder Director, Apoorva Diabetes Foundation, Mysuru and Former Director, Karnataka Institute of Endocrinology and Research</p>	
9.	26-02-2026	<p>1. JSS Ayurveda college, Mysuru, 2. GAMC, Bengaluru 3. HKEDT's Rajarajeshwari Ayurveda Medical College, Humnabad</p>	<p>1. Fundamentals of Research Methodology 2. Medication Safety for Ethical Clinical Practice 3. From Classical Wisdom to Contemporary Science: New Research Thinking in Ayurveda 4. Advanced Instrumentation for the Characterization of Complex Natural Products 5. Nanotechnology-Based Solutions for Metabolic Health Management 6. Molecular Basis of Metabolic Disorders and Modern Analytical & Therapeutic</p>	<p>1. Dr. Praveen Kulkarni, Professor, Department of Community Medicine, JSS University, Mysuru 2. Dr. Pratibha Nadig, Founder-Director, Akshaisarathi Health care solutions Pvt Ltd, Bengaluru. 3. Dr. S. Swaminathan, Inaugural Chair & Prof. TATA IISc Medical School, Bengaluru.</p>	113

			Technique of Mass Spectrometry	4. Dr. K. S. Nagabhushana, Director – Research, Prayoga Institute of Education Research, Bengaluru. 5. Dr. Archini Paruthi, IISc Bengaluru 6. Dr. Madhumati S Vaishnav, IISc Bengaluru	
10.	23-03-2026	Susrutha Ayurvedic college and hospital, Bengaluru	1. Research methodology 2. Comprehensive management of Diabetes. 3. Biostatistics	1. Dr Chandini 2. Dr Poorvi 3. Dr Vinushree	49
Total					547

3.3 Research activities

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

3.3.1 Drug development: The Centre of Excellence was mandated to complete clinical trials on the shortlisted formulations during the reporting period.

During the previous years, 567 formulations pertaining to *Prameha* were compiled from 16 Ayurveda treatises. 150 single plants indicated in *Prameha* from 16 Nighantus were also compiled. Out of this search, four formulations having ingredients with known antidiabetic activity were short listed for pre-clinical studies. The literature search including Ayurveda texts and published research article of individual ingredients of selected 4 formulations were done.

Based on the leads collected from the literature, outcome of animal study conducted at Nagpur Veterinary College and pilot studies conducted at CARI, two formulations (*Varadi kwatha* and *Mustadi kwatha*) with the following details were finalised for further clinical trial by using advanced Outcome parameters such as gut microbiome.

These two formulations have been manufactured at Central Ayurveda Research Institute, Jhansi, in the form of *Ghanavati*. Standards and SoP for preparation are developed by CCRAS-CARI Jhansi. Clinical trial for both these formulations is completed during the reporting period and gut microbiome analysis of the samples are under progress.

Sl. No.	Formulation	Reference	Ingredients	Botanical source	Part used
1.	<i>Varadi Kvatha</i> (<i>Kashaya kalpana</i>)	<ul style="list-style-type: none"> • <i>Sharangadhara Samhita-Madhyama Khanda</i> - 2/108, • <i>Gada Nigraha Kayachikitsakha nda - Pramehadhikara</i> - 30 – 57 • <i>Bhaishajya Ratnavali-Pramehadhikara</i> 	<i>Hareetaki</i>	<i>Terminalia chebula</i> Retz	Fruit
			<i>Vibhitaki</i>	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Fruit
			<i>Amalaki</i>	<i>Phyllanthus emblica</i> L.	Fruit
			<i>Daru haridra</i>	<i>Berberis aristata</i> DC.	Heartwood/ Bark
			<i>Musta</i>	<i>Cyperus rotundus</i> L.	Rhizome
			<i>Devadaru</i>	<i>Cedrus deodara</i> (Roxb. ex D.Don) G.Don	Heartwood
2.	<i>Mustadi Kvatha</i> (<i>Kashaya kalpana</i>)	<ul style="list-style-type: none"> • <i>Gada nigraha-Kayachikitsakha nda - Pramehadhikara</i> - 30 – 90 	<i>Musta</i>	<i>Cyperus rotundus</i> L.	Rhizome
			<i>Indrayava</i>	<i>Holarrhena antidysenterica</i> (Roth) Wall. ex A.DC.	Seeds
			<i>Devadaru</i>	<i>Cedrus deodara</i> (Roxb. ex D.Don) G.Don	Heartwood
			<i>Hareetaki</i>	<i>Terminalia chebula</i> Retz	Fruit
			<i>Vibhitaki</i>	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Fruit
			<i>Amalaki</i>	<i>Phyllanthus emblica</i> L.	Fruit

3.3.2. Clinical Research project: 03 research projects were undergoing during the reporting period as detailed below

3.3.2.1 Study title: Evaluation of two ready-to-cook dietary supplements for its anti-diabetic property in patients of type-2 diabetes mellitus -A Randomized control trial

- Principal investigator – Dr. Sulochana Bhat
- Co-investigator – Dr. Shubhashree MN, Dr. Vrinda
- IEC Obtained – F.No. 6-60/2022-23/CARI/Bng/COE/2726 dt 22.02.2024
- CTRI registration – CTRI/2024/03/064207 on 15-03-24
- Date of initiation: 30-03-2024

A randomized control clinical trial to evaluate the efficacy of two ready-to-cook dietary supplement namely *Yavadi soopa* and *Khadiradi yoga* on blood glucose levels and *Agni*. The sample size is 78 with three groups (26 in each group). Each group will be asked to retain their treatment and diet as it is. Group-1 is the control group, group 2 and group 3 will receive *Yavadi soopa* and *Khadiradi yoga* respectively as an adjuvant diet supplement. Fasting blood glucose in the range 150-200 mg/dL and/or post prandial glucose of 180-300 mg/dL will be included in the study. Study period is of 42 days with 21day interval of follow up. FBS, PPBS, Plasma Insulin, HOMA IR and other safety parameters along with DSQ (Diabetes Symptom Questionnaire) and SNAQ (Simplified nutritional appetite questionnaire) will be evaluated in this study. Its effect on *Agni* and acceptability of the new form will also be assessed.

Status – Completed, article under publication

Total no of subjects screened	Total no of subjects enrolled	Total no of subjects completed	Total no of subjects dropped out
121	78	69	9

3.3.2.2 Study title: Safety and efficacy of *Mustadi ghana vati* and *Varadi ghana vati* in *Madhumeha*/ type-2 diabetes mellitus: An open labelled randomized controlled active comparator (Metformin) Phase-II study.

- Principal investigator –Dr. Sulochana Bhat
- Co-investigator – Dr. S.H. Doddamani, Dr. Poorvi
- IEC Obtained – F.No. 6-60/2022-23/CARI/Bng/COE/2727 dt 22.02.2024
- CTRI registration – CTRI/2024/03/064184 on 15-03-24
- Date of initiation: 27-03-2024

The study is envisaged to assess the safety and anti-diabetic efficacy of two classical Ayurveda poly-herbal formulations, *Mustadi ghana vati* and *Varadi ghana vati* in 120 drug naive patients of type-2 diabetes mellitus in comparison with Metformin (active comparator). The assessment parameters include glycaemic parameters, drug safety and gut microbiome studies.

Status –Completed, gut microbiome analysis of the samples is under progress.

Total no of subjects screened	Total no of subjects enrolled	Total no of subjects completed	Total no of subjects dropped out
147	120	104	16

3.3.2.3 Psychological assessment of type-2 diabetes mellitus through *Manasikabhava Pareeksha* and Diabetes Distress Scale: An observational study

- Principal investigator – Dr. Sulochana Bhat
- Co-investigator – Dr. Sharada M K
- IEC Obtained – F. No. 6-5/CARI/BNG/IEC Meet/2025-26/ dt 30.10.2025
- Date of initiation: 11-11-2025

This cross-sectional study aimed to analyse the prevalence of diabetes distress, assess alterations in *Mānasika Bhāvas*, and explore their association with glycaemic status and clinical variables. A total of 200 patients attending the Diabetes Outpatient Department of Central Ayurveda Research Institute, Bengaluru, will be enrolled after informed consent. Sociodemographic and clinical details, including HbA1c levels will be recorded using a structured case record form. Diabetes-related psychological distress will be assessed using the validated Diabetes Distress Scale, while mental and emotional attributes described in Ayurveda will be evaluated through *Mānasika Bhāva Pareeksha* using the *Manasika Bhava* Assessment Scale developed at IPGT & RA, Jamnagar. Total study period is 3 months.

Status – Completed, article preparation is under progress.

3.3.3 Food development for diabetes

The Centre of Excellence is mandated to develop 2 ready to cook/eat food recipes for clinical trials. Collaboration with Centre for Incubation, Innovation, Research and consultancy (CIIRC), Bengaluru has been done through MoU. Discussions were held with scientists of NIN- Hyderabad, Ayurveda experts for development of ready to eat / cook anti-diabetic food preparations, based on the extensive literature search and Ayurveda principles of *Pathyaahara*. Among them, 2 preparations were finalised which include *Yavadi soopa* (soup powder) and *Khadiradi yoga* (developed in the form of ready to dissolve pellets), their quality has also been ensured. Extraction of ingredients of *Khadiradi yoga* and its manufacturing (pellets) was done by Himalaya Wellness Company and *Yavadi soopa* (soup powder) was manufactured at CIIRC for free of cost and have been taken up for clinical trial in the previous year. The study is completed during the reporting period and an article in this regard is submitted for publication.

a. Food formulation-1 - *Khadiradi yoga*- dispersible pallets

Formulation	Reference	Ingredients	Botanical source	Part used	Ratio
<i>Khadiradi yoga</i>	<i>Chakradatta-Prameha chikitsa</i> - 35 - 18 / pg 216	<i>Kadara</i>	<i>Acacia polyantha Will.</i>	Bark	1 part
		<i>Khadira</i>	<i>Acacia catechu (L.f.) Willd.</i>	Heartwood	1 part

		<i>Puga</i>	<i>Areca catechu L.</i>	Nut	1 part
Indication: <i>Kshoudra meha</i>					

b. Food formulation-2-*Yavadi soopa* (ready to mix soup powder)

Formulation	Reference	Ingredients	Botanical source	Part used	Ratio
<i>Yavadi soopa</i>	<i>Anubhoota yoga</i>	<i>Yava</i>	<i>Hordeum vulgare L.</i>	Seeds	1 part
		<i>Kulatha</i>	<i>Macrotyloma uniflorum (Lam.) Verdc</i>	Seeds	1 part
		<i>Mudga</i>	<i>Vigna radiate (L.) Wilczek</i>	Seeds	1 part

3.3.4 Technical collaborations – continued from previous years

- MoU signed with Government Ayurveda Research Centre, Mysore (for collaboration on academic programmes, research partnerships, and training).
- MoU signed with IISc Bengaluru.
- MoU signed with CSIR-Central Food Technology Research Institute Mysore.
- MoU signed with Centre for Incubation Innovation Research and Consultancy (CIIRC).
- MoU signed with Samatvam Endocrinology Diabetes Center Bengaluru.
- Our advisory panel has the experts from NIMHANS, Bengaluru, Bangalore Medical College, Karnataka Institute of Diabetology, ICMR- NIN Hyderabad, National Centre for Cell Science (NCCS) Pune and Interactive Research School for Health Affairs (IRSHA) Pune.
- We also work closely with the Panchayat, Anganwadi, near by Community Health Centre, Primary Health Centre - for outreach activities, referrals etc.
- CCRAS-CARI Jhansi is our partner in preparation of standardised medicines. Himalaya Wellness Company has prepared the extracts and manufactured one of the food formulations.

3.3.5 IEC materials

The following IEC materials and the videos of interviews with experts related to different aspects of diabetes and diabetic diet (prepared during previous years) are available on website as well as in CARI social media platforms.

- Diabetic eye care charts for patients
- Diabetic foot care charts for patients
- Diabetic skin care charts for patients
- IEC material on FAQs (Essentials of *Madhumeha* and its management)
- Flyer on Gestational Diabetes Mellitus in Kannada
- Mustadi ghanavati* and *Varadi ghanavati* in diabetes
- Easy Yoga capsule in diabetes

- viii. Risk factors of Type 11 diabetes
- ix. Alarming signals of *Madhumeha* (diabetes)
- x. Chemistry behind familiar antidiabetic drugs

3.3.6 Upgradation of the Institute

- a. Botany section- Upgradation of herbal garden including construction of tank room.
- b. Maintenance of website and e health services is ongoing.

3.3.7 Expenditure details

The total expenditure by the end of financial year 2025-26 is as below under different heads.

Sub-heads	Total sanctioned in Rs.	Total expenditure in Rs.	Balance in Rs.
Salary	₹1,72,99,811.00	₹ 93,94,693.00	₹ 34,29,439.00
Non-recurring		₹1,17,600.00	
Recurring		₹ 43,58,079.00	
Total	₹1,72,99,811.00	₹1,38,70,372.00	₹ 34,29,439.00

3.3.8 Scientific Publications during reporting period

Sl.No.	Name of the study	Title of published research article	Name of journals	Stage of publication	Name of the Authors
1.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Knowledge, attitude and practice related to diabetes with reference to Ayurveda and yoga: An Institutional Survey	International Research Journal of Ayurveda & Yoga (IRJAY)	Published	1. Dr. Vrinda 2. Dr. Sulochana Bhat 3. Ms. Anagha Jenu 4. Dr. Kavya 5. Dr. Monica K P
2.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Comparative analytical study of <i>Musthadi kwatha</i> and <i>Musthadi ghana</i> , two dosage forms of a classical ayurvedic formulation.	World journal of pharmaceutical science and research	Published	1. Dr Sharada Anand 2. Mrs. Supriya H.S. 3. Dr. Sulochana Bhat

3.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Effect of four ayurvedic formulations on Streptozotocin-Induced diabetic Wistar rats	AYUHHOM	Accepted	<ol style="list-style-type: none"> 1. Dr. Sharada Anand 2. Dr. Sulochana Bhat 3. Ms. Anjana K S
4.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Evaluation of bioavailability of Varadi and Mustadi ghana vati in healthy volunteers- A cross -Over Randomized Clinical Trial	Journal of Ayurveda	Accepted	<ol style="list-style-type: none"> 1. Dr. Chaitra Rao 2. Dr. Sulochana Bhat 3. Sharada Anand
5.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Occurrence of diabetic peripheral neuropathy (DPN) and its relationship with <i>Prakriti</i> among type 2 diabetic patients in Bengaluru - A cross-sectional study	Journal of Research in Ayurvedic Science	Peer review	<ol style="list-style-type: none"> 1. Dr. Chandini 2. Dr. Sulochana Bhat 3. Dr. Vidyashree 4. Miss. Anjana
6.	Centre of excellence in research and clinical services for Madhumeha (Diabetes Mellitus)	Evaluation of antidiabetic properties of two ready-to-cook dietary supplements in patients with type 2 diabetes mellitus: A randomized controlled trial	Indian journal of traditional knowledge	Submitted	<ol style="list-style-type: none"> 1. Dr. Sulochana Bhat 2. Dr. Vrinda Bhat 3. Dr. Chaitra Rao 4. Dr. Thejaswini C

Knowledge, Attitude, and Practice Related to Diabetes with Reference to Ayurveda and Yoga: An Institutional Survey

Vrinda

Senior Research Fellow (Ayurveda), Centre of Excellence for Research and Clinical Services in Madhumeha, Central Ayurveda Research Institute, Bengaluru, Karnataka, India.

Author

Bhat Sulochana

Assistant Director In-Charge, Central Ayurveda Research Institute, Bengaluru, Karnataka, India.

Author

Jenu Anagha

Senior Research Fellow (Bio-Statistics), Centre of Excellence for Research and Clinical Services in Madhumeha, Central Ayurveda Research Institute, Bengaluru, Karnataka, India.

Author

N Kavya

Ayurveda Consultant, Centre of Excellence for Research and Clinical Services in Madhumeha, Central Ayurveda Research Institute, Bengaluru, Karnataka, India.

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SECTION

Survey Study

ABSTRACT

Background: Diabetes mellitus has become a common disease among Indian population, with the rate of incidence of pre-diabetes increasing gradually. Their conversion to diabetes is rapid among Indians. This scenario is mainly due to unawareness of the condition. Hence, this study aims to evaluate the knowledge, attitude, and practice (KAP) related to diabetes in conjunction with the use of Ayurveda and Yoga for the same among visitors of Central Ayurveda Research Institute, Bengaluru.

Materials and Methods: An institutional-based, cross-sectional survey study was conducted with a sample size of 350 from October 2022 to January 2023. The data collected were analyzed statistically with a confidence interval of 95% and 5% error. Multivariate analysis with three separate ordinal logistic regressions was performed for KAP, keeping the background characteristics of the individual as independent variables.

Results: About 67.14%, 42.29%, and 74.57% had excellent knowledge, positive attitude, and good practice, respectively. Increase in age, female respondents, and mental stress had a significant association with knowledge. Rural residents and diabetic patients carried a positive attitude towards diabetes. Higher age was the only determinant of practice.

Conclusion: This study infers a satisfactory prevalence of knowledge and practice related to diabetes. However, there is a lack of a positive attitude. Proper education to refute the myths and strategies to provide appropriate guidance to make use of Ayurveda and Yoga for



**“COMPARATIVE ANALYTICAL STUDY OF *MUSTADI KWATHA* AND
MUSTADI GHANA, TWO DOSAGE FORMS OF A CLASSICAL AYURVEDIC
FORMULATION”**

Dr. Sharada Ramesh^{*1}, Supriya H. S.², Sulochana Bhat³

¹Senior Research Fellow (Ayurveda), CARI, Bengaluru.

²SRF (Chemistry) CARI, Bengaluru.

³Assistant Director in-Charge, CARI, Bengaluru.

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***Corresponding Author: Dr. Sharada Ramesh**

Senior Research Fellow (Ayurveda), CARI, Bengaluru.

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ABSTRACT

Background: *Kwatha Kalpana* (Decoction), despite of its uniqueness and potency in ayurvedic pharmacopaeia, beholds certain drawbacks related to preparation, palatability, transportation etc. Practice of refrigerating the *Kwatha* is adopted considering the difficulty in fresh preparation. *Ghana* is one such dosage form wherein the intactness of the constituents can be expected with a longer shelf life. **Methods:** *Mustadi Kwatha* (MK) and

4. Glimpses of activities (2025-26)

4.1. Patient training program





4.2 Student training program





4.3 Website, risk assessment and e-consultation facilities

The screenshot displays the official website of the Central Ayurveda Research Institute (CARI) Bengaluru. The top navigation bar includes links for Home, About us, Departments, Hospital, COE, Pharmacovigilance, Gallery, E-Consultation, Risk Assessment, E-Office, Incubation, CCRAS-Publications, and Contact. The main header features the logos of the Government of India, Ministry of Ayush, and the Central Ayurveda Research Institute, along with the text: "ಕೇಂದ್ರೀಯ ಆಯುರ್ವೇದ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ ಕೇಂದ್ರೀಯ ಆಯುರ್ವೇದ ಅನುಸಂಧಾನ ಸಂಸ್ಥಾನ CENTRAL AYURVEDA RESEARCH INSTITUTE Centre of Excellence in Madhumeha Central Council for Research in Ayurvedic Sciences (CCRAS) Ministry of Ayush, Govt. of India".

A central image shows the CARI building, with a text box to its right stating: "Central Ayurveda Research Institute (CARI) Bengaluru established as Regional Research Centre in 1971 was subsequently known as Regional Research Institute, National Dietetics Research Institute and Regional Ayurveda Research Institute for Metabolic Disorders before its upgradation as CARI in 2020. CARI houses a multidisciplinary team engaged in diverse research and integrative healthcare activities. Clinical services are provided through its NABL and NABH accredited hospital wing. The institute focuses its research efforts primarily on metabolic disorders and Ayurveda dietetics, with additional domains covering outreach healthcare research, drug standardization, and medicinal plants research. Currently, CARI is conducting over 25 research projects jointly with prestigious institutions such as IISc Bengaluru, NIMHANS Bengaluru, ICMR-NITM Belagavi, CSIR-CFTRI Mysuru, ICAR-IIHR Bengaluru, University of Agricultural Sciences Bengaluru, Jawaharlal Nehru Medical College Belagavi, and University of Trans Disciplinary Health Sciences and Technology Bengaluru, among others. This collaborative approach underscores CARI's commitment to advancing Ayurvedic research and integrative healthcare practices, aiming to enhance understanding, treatment, and management of health issues through traditional knowledge and modern scientific methods."


Below this, a banner for the "Integrated Risk Assessment for Madhumeha (Diabetes)" is shown. It includes the text: "New! Click on RISK ASSESSMENT PORTAL to know your Madhumeha (Diabetes) Risk Level". The banner features the same institutional logos and text as above, and a prominent "Login" button. Below the banner, the "PURPOSE" section states: "Further validation of a predictive model developed for the risk assessment of Diabetes based on the modern and Ayurveda principles using machine learning techniques by CCRAS-CARI Bengaluru in association with CIIRC - Centre For Incubation, Innovation, Research and Consultancy, Bengaluru."


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