

GOVERNMENT OF INDIA
MINISTRY OF AYUSH

RAJYA SABHA
UNSTARRED QUESTION NO. 2724
TO BE ANSWERED ON 25 MARCH, 2025

“RESEARCH AND DEVELOPMENT IN AYUSH IN ODISHA”

†2724 Shri Manas Ranjan Mangaraj:

Will the Minister of Ayush be pleased to state:

- (a) the Research and Development initiatives undertaken by the Ministry in the field of AYUSH in Odisha;
- (b) the details of collaborative projects with State institutions or universities;
- (c) whether there are specific studies on the efficacy of traditional medicines from Odisha; and
- (d) the funds allocated for research & development in AYUSH in Odisha over the last five years?

ANSWER

**THE MINISTER OF STATE (IC) OF THE MINISTRY OF AYUSH
(SHRI PRATAPRAO JADHAV)**

(a) The following Research and Development initiatives in Odisha have been undertaken by the Research Councils under Ministry of Ayush :

(1) **CCRAS** : Central Council for Research in Ayurvedic Sciences (CCRAS) an autonomous organization for undertaking, coordinating, formulating, developing, and promoting research on scientific lines in Ayurvedic sciences, carries out its research activities through 30 peripheral Institutes in 25 States of the Country.

The Central Ayurveda Research Institute, Bhubaneswar is a major research institute under the CCRAS and the activities undertaken at this institute in the field of Ayurveda are as follows:

- (i) Clinical research focusing on Hepatobiliary Disorders
- (ii) Other Activities :
 - NABH standard health care services viz. OutPatient Department (OPD) and In-Patient Departments (IPDs)
 - Special Clinics for Geriatric Healthcare, Marma Chikitsa.
 - Special facility for Ksharasutra OT, Agnikarma etc.
 - Special facility for Panchakarma
 - Research oriented public health care services (outreach activities) such as → Tribal Health Care Research Programme under Tribal Sub-Plan (TSP) → Ayurveda Mobile Health Care Project & Women and Child Health (WCH) Project under Scheduled Caste Sub Plan (SCSP).

- Any other assignment of National importance related to Research & development in Ayurveda, viz, Programme under Mission Utkarsh and health screening of the students of EMR Schools.

(2) **CCRH** : Central Council for Research in Homoeopathy (CCRH) an autonomous organization for scientific research in homoeopathy under the Ministry of Ayush undertakes research activities such as Clinical Research, Drug Proving, Drug Verification, Drug validation, Drug Standardization and Public Health Research, Fundamental Research and Epidemic research either in intramural mode or in collaboration with different Universities/ institutes of repute.

CCRH has 27 institutes/Units and 07 homoeopathy treatment centres across the country which undertake research in the aforementioned fields.

Two such Institutes / Units are located in the State of Odisha:-

- Regional Research Institute (Homoeopathy) and extension centre CCRH Building, Marchi Kote Lane, Labanikhia Chaak, Puri 752001.
- Drug Proving Unit, Dr. A.C. Homoeopathy M.C.& Hos. Unit-III Bhubaneswar-751001, Odisha.

The Research and Development initiatives undertaken by CCRH in the various fields are placed at **Annexure- I**.

The details of studies undertaken by CCRH in Odisha are placed at **Annexure – II**.

(3) **CCRUM** : Central Council for Research in Unani Medicine (CCRUM) The Regional Research Institute of Unani Medicine, Bhadrak under CCRUM is functioning in the State of Odisha. The Institute is providing healthcare facilities through General OPD, Geriatric OPD, Reproductive and Child Health OPD (RCH), Research OPD, Ilaj bit Tadbeer OPD, etc.

(b) Central Council for Research in Ayurvedic Sciences (CCRAS) is in active collaboration with research institutes and universities of national repute. The list of collaboration with universities and research institutions situated in Odisha is annexed at **Annexure – III**. Further, the details of collaborations of CCRH with State Institutions / Universities of Odisha are placed at **Annexure - IV**.

(c) **CCRAS** conducts extensive research on Ayurvedic medicines, including those derived from medicinal plants, minerals, and animal sources, as part of its mandate to scientifically validate traditional knowledge. The council undertakes preclinical, clinical, and pharmacological studies to assess the efficacy, safety, and therapeutic potential of Ayurveda-based interventions. CCRAS has been engaged in **medico-ethnobotanical surveys** to document and explore the therapeutic potential of **local health traditions (LHTs)**, including those practiced in Odisha. Further, **CCRUM** has conducted specific studies on various diseases (Palpitation, Scabies, Pityriasis alba / Nigra, Rheumatoid arthritis, Mixed Anxiety Depressive Disorder).

(d) The funds allocated to CCRAS, for Central Ayurveda Research Institute, Bhubaneswar, funds allocated to CCRUM for Research & Development for Regional Research Institute of Unani Medicine (RRIUM), Bhadrak and the expenditure made by the peripheral Institute/Unit located in the state of Odisha during the last five years are placed at **Annexure - V.**

Clinical Research: Research studies on Acute encephalitis syndrome, Covid-19, side effects of chemotherapy in cancer, Post covid-19 illness, Chronic kidney disease, trigeminal neuralgia, haemophilia, dengue, hypothyroidism, pre-diabetes, Menstrual irregularities, cholelithiasis, anaemia, bronchial asthma, psoriasis, renal calculi, progressive myopia, osteoarthritis, rheumatoid arthritis, gout, primary dysmenorrhea, irritable bowel syndrome, Acute Ischemic stroke, Otitis externa, Non-Alcoholic Fatty Liver Disease (NAFLD), primary chronic anal fissures, Stable Ischemic Heart Diseases, Allergic Rhinitis, Myopia, Chronic Suppurative otitis media, Prehypertension, Female infertility due to anovulatory polycystic ovarian syndrome, Chronic urticaria, Chronic Migraine, Early Hemorrhoidal Disease, adhesive capsulitis of the shoulder/Frozen shoulder, Plantar Fasciitis etc.

Drug validations studies have been undertaken on dyspepsia, migraine, asthma, acne, hemorrhoids etc.

Drug Development: Pharmacognostic and physico-chemical standards of drugs have been developed; revision and up-gradation of existing monographs are being conducted.

Drug proving and Clinical verification studies.

Fundamental and Basic Research: Fundamental research to explore the possible action of homeopathic medicine is being carried out on cancer Malaria, Leishmaniasis, JE & Dengue, Covid related studies. New studies have been initiated on conditions like Diabetes, Renal stones, Cancer, malaria, JE, kala azar. In diabetes molecular mechanism of action of *Syzygium jambolanum* and *Cephalandra indica*, in another molecular level study anti-lithiatic potential of homeopathic preparation of *B. vulgaris* studied. Similarly of cancer cells killing property of *Thuja* & Sulphur, were studied and pathway of action were explored.

Epidemics: The council has undertaken research studies on COVID-19, dengue, Malaria etc.

Development of Laboratory Facilities

- Molecular Lab, Drug Standardization lab, Pathology lab, Virology laboratory, Animal House, at Dr. Anjali Chatterjee Regional Research Institute for Homoeopathy, Kolkata, for undertaking research in Homoeopathy.
- Drug Standardization lab, In house pharmacy, Zebrafish lab, Animal house, Biochemistry lab at Dr. D.P. Rastogi Central Research Institute (Homoeopathy), Noida.

Post Graduate Education

- Central Research Institute (H) at Kottayam for treating psychiatric diseases has been upgraded to National Homoeopathy Research Institute in Mental Health and also imparting PG education in two subjects with 13 seats practice of medicine and 12 seats in Psychiatry.

CCRH has taken initiative to link Homoeopathy along with mainstream healthcare set-up by undertaking various **Public Health programmes** which are as under:-

- Swasthya Rakshan program (SRP) was undertaken through 11 institutes adopting 55 villages under the Council. In the said program local population are being provided health care at their doorstep.
- The programme 'Homoeopathy for Healthy teething' which is a component of 'Homoeopathy for healthy child' launched in January 2015 to March 2019 at identified districts (Gautam Budh Nagar, Palghar, Gorakhpur, Kamrup, Cuttack, Delhi, Jaipur and Ranchi) resulted in benefitting 87631 Children).
- Schedule Caste Component plan (SC Component plan) Health camps were undertaken at Schedule Caste dominated villages at 21 centres under CCRH covering 40 villages.

CCRH has developed software for recording proving data on apparently healthy human beings.

List of studies undertaken, by CCRH, in Odisha

Clinical research studies:

1. Published in Clinical Research Studies Series-1, page no-53-66, Filariasis, by CCRH, New Delhi. Disease Monograph-1, Homoeopathic Approach, Lymphatic Filariasis, 2010, by CCRH, New Delhi.
2. Leprosy, Oct 2003-Sept 2005
3. Article on – a multicenter observational study to evolve the usefulness of the nine predefined homoeopathic medicines in Furunculosis published in –I.J.R.H. vol.4. No. 1, January – march, 2010, Homoeopathic Links, Spring 2010, Vol. 23: 60-63
4. Chronic Bronchitis, Oct 2005- Sept 2010
5. Article on – a multicentric observational study to evaluate the role therapy in vitiligo – published in IJRH. Vol. 9, issue 3, July-Sept 2015.
6. Role of Homoeopathic therapy in Management of Gastroenteritis; *International Journal of Bio Research*; Vol-1, Issue 2. Feb 2010. P34-42
7. Effect of individualized homoeopathic treatment in Influenza like illness: A multi-centric single blind randomized placebo-controlled study – IJRH, Vol. 7, Issue 1, Jan-Mar 2013
8. A multi-centric randomized clinical trial of homoeopathic medicines in fifty millesimal potencies vis-à-vis centesimal potencies on symptomatic uterine fibroid – IJRH, Vol. 10, Issue – 1, Jan-Mar 2016
9. Homoeopathic medicine – Sepia for the management of menopausal symptoms: A multicentric, randomized, double-blind placebo-controlled clinical trial – IJRH, 2019; 13:219-28
10. A Randomized comparative study to evaluate the efficacy of Homoeopathic treatment -vs- standard Allopathy treatment for Acute Adenolymphangitis due to lymphatic Filariasis – IJRH 2018; 12:64-74
11. A multi-center study on action of Homoeopathic medicines and potencies on Heart Rate Variability (HRV) and Blood Flow Variability (BFV) using Medical Analyzer System, August 2009 to December 2011
12. A Multi-Centric Single-Blind Randomized Placebo-Controlled Trial to Evaluate the Efficacy of the Individualized Homeopathic Intervention in Breast Fibroadenoma, by OBM Integrative and Complementary Medicine, Special issue, Volume-8, Issue-2, May 16th 2023. Pages 1-11
13. Observational study to evaluate response to Homoeopathic Treatment in Psoriasis, From Sept 2014 to Dec 2020
14. Validation of 23 Homoeopathic Drugs for Functional Dyspepsia January 2016
15. Observational study to evaluate response to Homoeopathic Treatment in Vitiligo
16. Patient Related Outcome Measures Study, July 2017
17. Mycological and clinical effects of Homoeopathic individualized medicines on Tinea corporis and Tinea cruris – An open label prospective observational study, From 23-03-21 till 31.03.2024

18. Effect of homoeopathic medicines in the management of morbidity associated with grade III and grade IV lymphoedema due to lymphatic Filariasis – A *prospective clinical trial*. May 2018 to Oct 2023
19. Management of Adjustment Disorders with homoeopathic intervention- A prospective, single arm, open label, exploratory, interventional study, Since January 2019
20. RCT on low back pain
21. RCT on Urolithiasis
22. Prognostic factor research of symptoms indicating Homoeopathic medicines for cough
23. Management of Adjustment Disorders with homoeopathic intervention – A prospective, single arm, open label, exploratory, interventional study
24. Patient Related Outcome Measures Study
25. Homoeopathy For Healthy Child Program – Phase-1
26. Retrospective study on COVID recovered patients
27. *Lycopodium clavatum* in urolithiasis – a randomized double-blind placebo controlled clinical trial

Clinical Verification studies:

1. Clinical Verification of **Formic acid** – A multi-centric Observational study. Indian Journal of Research in Homoeopathy, Volume 10, No.4, October-December 2016; page no. 249-57.
2. Prevalence and prognostic factor in patients with good therapeutic response in a cohort of 172 patients with the homoeopathic medicine **Aranea diadema**: A multicentric open-label observational study. IJRH, vol. 12, issue 1, jan-Mar 2018, p 20-25
3. Study of homoeopathic medicines through clinical verification. A new perspective , Vol. III, 2016
4. Study of homoeopathic medicines through clinical verification. A new perspective , Vol. IV, 2018
5. Monograph on Homoeopathic drug **Bellis perennis**, 2018
6. Exploring the predictive value of specific symptoms as prognostic factor; Assessment of group confined likelihood ratio for symptom ‘headache’ in **20 lesser known drugs**; IJRH Vol. 13, Issue1, p 4-8, Jan-Mar 2019
7. Retrospective estimation of prevalence and likelihood ratio of general symptoms of **29 less frequently** prescribed homoeopathic medicines by clinical verification. IJRH – Apr-Jun 2019, Vol-13, Issue-2. P 72-80
8. Study of Homoeopathic Medicines through Clinical Verification. A New Perspective, Volume-V.2021, by CCRH
9. Study of Homoeopathic Medicines through Clinical Verification. A New Perspective, Volume-VI.2023, by CCRH
10. Clinical Verification of **Glycyrrhiza glabra**-A multicentric Clinical Verification Study, Indian Journal of Research in Homoeopathy, Volume 4, No.3, July-September 2010; page no. 22

11. Clinical Verification of **Tylophora indica**-A multicentric Clinical Verification Study, Indian Journal of Research in Homoeopathy, Volume 4, issue-4, October-December 2010; page no. 12
12. Clinical Verification of **Curcuma longa**-A multicentric Clinical Verification Study. Indian Journal of Research in Homoeopathy, Volume 5, No.1, January-March 2011; page no. 19
13. Clinical Verification of **Cassia fistula**-A multicentric Clinical Verification Study. Indian Journal of Research in Homoeopathy, Volume 5, No.2, April-June 2011; page no. 20.
14. Clinical Verification of **Alfalfa**- A multicentric Clinical Verification Study. Indian Journal of Research in Homoeopathy, Volume 5, No.3, July-September 2011; page no. 36
15. Clinical Verification of **Staphylococcinum** – A multicenter Clinical Verification Study. Indian Journal of Research in Homoeopathy, Volume 6, No.1&2, January-June 2012; page no. 15
16. Clinical Verification of **Ichthyolum** – A multicentric Observational study. Indian Journal of Research in Homoeopathy, Volume 6, No.4, October-December 2012; page no. 24.
17. Clinical Verification of **Mygale lasiodora** – A multicentric Observational study. Indian Journal of Research in Homoeopathy, Volume 9, No.4, October-December 2015; page no. 249.
18. Clinical Verification of **Cynodon dactylon** – A multicentric Observational study. Indian Journal of Research in Homoeopathy, Volume 10, No.4, October-December 2016; page no. 225-37.
19. Clinical Verification of **Ocimum cannum** – A multicentric Observational study. Indian Journal of Research in Homoeopathy, Volume 10, No.4, October-December 2016; page no. 238-48.
20. Drug Monograph-13; **Acalypha indica**, CCRH, New Delhi, 2011
21. Drug Monograph-14; **Holarrhena antidysentrica**, CCRH, New Delhi, 2011
22. Disease Monograph-15; **Ocimum cannum**, CCRH, New Delhi, 2011
23. Drug Monograph- 16; **Tylophora indica**, CCRH, New Delhi, 2011
24. Drug Monograph- 17; **Thea chinensis**, CCRH, New Delhi, 2013
25. Drug Monograph- 18; **Cassia fistula**, CCRH, New Delhi, 2013
26. Drug Monograph- 19; **Alfalfa**, CCRH, New Delhi, 2014
27. Drug Monograph- 20; **Cynodon dactylon**, CCRH, New Delhi, 2014
28. Clinical verification of 16 drugs
29. Prognostic factor research of symptoms indicating Homoeopathic medicines for cough (Pre-trial Phase) From April 2017 to May 2018
30. Prognostic factor research of symptoms indicating Homoeopathic medicines for cough (Trial Phase), From June 2018 to March 2021
31. Clinical verification of 8 drugs, From Nov 2018-Nov 2022

Public health programmes/Health Camps:

1. Mother & Child Health Awareness camps
2. AYUSH Outreach Camps, December 2012 – March 2013
3. Filariasis Awareness Camps
4. Health camps in SC dominated areas, Oct 2016 to Dec 2016

5. NPCDCS at Sambalpur Dist. CHC, Jujomura, CHC, Themra, OHMC&R, Sambalpur, From 01-08- 2017 to 31-03-2020
6. Swasthya Rakshan Progamme conducted in five adopted villages, From May 2015 to March 2019
7. Swasthya Rakshan Progamme (Assessment of health seeking behavior and usefulness of Homoeopathy for Adolescents (12-18yrs.) in normal setting – An open label observational study in 9 institutes, Started from April 2019 to March 2020
8. Health camps in SC dominated areas, From May 2017
9. Distribution of Arsenicum album 30 as Homoeo-prophylaxis, From June 2020 to September 2020
10. Distribution of Arsenicum album 30 as immune booster during COVID-19 pandemic., During first phase lock down
11. Documentation of efficacy of select Ayush interventions, AYUSH -64 & Kabasura Kudineer in asymptomatic and mild to moderate COVID-19 patients in home isolation
12. Public Health initiative for identification of persons suffering from post-COVID functional disabilities and addressing them with homoeopathic interventions under Schedule Caste Sub Plan (SCSP)
13. Health care awareness and management with capacity building of general population linked with Swachh Bharat in areas predominantly identified as Scheduled Caste areas
14. The public health intervention in geriatric health care under SCSP health programme
15. Homoeopathic Prophylactic Medicine Arsenic album 30 among the population for COVID-19 during celebration of “Azadi ka Amrit Mahotsav” to commemorate 75th year of Independence.
16. Concurrent Drug utilization evaluation including medication adherence of *Arsenicum album* 30 as prophylactic medicine and immunity booster against COVID-19: a descriptive, cross sectional research study
17. Homeopathy for Menstrual Health: A Public Health Research
18. Various outreach Health camps

Drug proving:

1. Drug proving of 38 drugs

Collaborative research studies in the State of Odisha by CCRAS

S. No.	Title of Project	Collaborative Institute/University
1.	Efficacy and safety of Ayurveda Formulation Trikatu as add on to standard care in Dyslipidemia - a randomized controlled trial	AIIMS, Bhubaneswar
2.	Efficacy of Avipattikara Churna and Chitrakadi Vati versus PPI (Proton Pump Inhibitor) in Decreasing Symptom Severity in Patients with Functional Dyspepsia- A Randomized Control Trial	AIIMS Bhubaneswar
3.	Efficacy of Specific Ayurvedic Approach along with food and lifestyle modification Vs food and lifestyle modification in the managing functional constipation in Geriatric Population Real-world Approach	AIIMS, Bhubaneswar
4.	Aqueous and Hydroalcoholic Extraction of selected Anukta Dravya Plants and Evaluation of their Therapeutic efficacy for various diseases	Sambalpur University, Odisha
5.	Aqueous and ethanolic extraction of two promising extra-pharmacopoeial (Anukta Dravya) plants and evaluation of their anti-inflammatory and wound-healing activities.	SOA, Bhubaneswar
6.	Standardization of Sustainable Medicinal Leech Farming Technology and Development of SoP for its storage, transportation and therapeutic application	ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar
7.	Evaluation of the antipyretic and anti-asthmatic activity of the Ayurvedic formulations- AYUSH GBP and AYUSH CPP in experimental models.	NIPER Guwahati & Sambalpur University
8.	Elucidating Mitochondrial function by profiling of mito-nuclear gene variations towards understanding the molecular basis of Ayurvedic Prakriti: A determinant of health and longevity	ICMR-RMRC, Bhubaneswar
9.	An MoU to digitize/ donate digital copies of Manuscript(s)/ rare book(s), old magazine(s), Journal(s), periodical(s), etc. pertaining to medical sciences.	Utkal University, Bhubaneswar

Details of collaborations of CCRH with state institutions/universities in Odisha

S. No.	Date	Collaborating institute	Study Title/ Generic
1.	4 December 2024	BRICS - Institute of Life Sciences, Bhubaneswar	Generic (Projects are under consideration)
2.	4 December 2024	Utkal University, Bhubaneswar	Generic (Projects are under consideration)
3.	2 May 2023	All India Institute of Medical Sciences, Bhubaneswar	Generic (Projects are under consideration)
4.	16 December 2022	Hi-Tech Medical College and Hospital, Bhubaneswar	Generic (Projects are under consideration)
5.	1 December 2022	ICMR-Regional Medical Research Centre, Bhubaneswar	Generic (Projects are under consideration)
6.	2020	Kalinga Institute of Industrial Technology, Bhubaneswar	Study related Mechanism of anti-malarial and anti-leishmanial actions of the homoeopathic formulation of nanocurcumin in a susceptible host Study concluded
7.	2019	Utkal University, Bhubaneswar	Study related Efficacy of Homoeopathic medicines (30C) on Propylthiouracil (PTU) induced hypothyroid rat Study concluded
8.	2017	Indian Institute of Public Health (IIPH), Bhubaneswar	Study related Prophylactic effect of homeopathic anti-malaria drugs on malaria – A prevention effectiveness study in odisha
9.	2015	CSIR - Institute of Minerals and Materials Technology, Bhubaneswar	Effects of Potentized Homoeopathic medicines in Agriculture (Agro-Homoeopathy): An eco-friendly alternative solution for synthetic fertilizers and pesticides.
10.	2009	Dr. AC Homoeopathic Medical College, Bhubaneswar (Bhabha Atomic Research Centre)	A multicenter study on action of homoeopathic medicines and potencies on heart rate variability (HRV) and blood flow variability (BFV) with medical Analyzer System

Annexure –V

The funds allocated to CCRAS for Central Ayurveda Research Institute, Bhubaneswar over the last five years is as under:-

	(Rs. in lakhs)
Year	Budget allocated
2019-20	554.60
2020-21	593.74
2021-22	644.14
2022-23	734.22
2023-24	860.88

The funds allocated to CCRUM for Research & Development for Regional Research Institute of Unani Medicine (RRIUM), Bhadrak during the last five years are as under:-

	(Rs. in lakhs)
Year	Budget allocated
2019-20	0.61
2020-21	0.43
2021-22	0.56
2022-23	0.37
2023-24	0.38

CCRH is funded centrally by the Ministry of Ayush and the expenditure of the peripheral institute and Units is centrally managed. The funds are not allocated state-wise/UT-wise. However, the expenditure made by the peripheral Institute/Unit located in the state of Odisha are as under:-

Year	Expenditure		Total Expenditure (Rs. in lakhs)
	DPU, Bhubaneswar	RRI, Puri	
2019-20	-	313.13	313.13
2020-21	-	458.73	458.73
2021-22	138.65	150.86	289.51
2022-23	50.43	125.82	176.25
2023-24	37.91	187.82	225.73