

Annual Report 2015-2016



CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Annual Report

2015-2016



CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Ministry of AYUSH, Government of India
New Delhi



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CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

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CONTENTS

1.	OVERVIEW	7
1.1.	Objectives of the Council	7
1.2.	Programme-wise Achievements	7
2.	MANAGEMENT	12
2.1.	Governing Body	12
2.2.	Standing Finance Committee	13
2.3.	Institutional Ethics Committee	15
2.4.	Scientific Advisory Committee	29
2.4.1.	Research Sub-committees	30
2.5.	Organisational Set-up	32
2.6.	Budget (Actual Expenditure)	37
3.	TECHNICAL REPORT	40
3.1.	Intramural Research	40
3.1.1.	Centre-wise Activities	40
3.1.2.	Programme-wise Activities	43
3.1.2.1.	Survey and Cultivation of Medicinal Plants Programme	43
	• Ethnopharmacological Surveys	44
	• Herbarium	44
	• Digitization of Herbarium Specimens	44
	• Folk Claims	45
	• Experimental and Field-scale Cultivation of Medicinal Plants	45
	• Herbal Garden and Nursery of Medicinal Plants	45
3.1.2.2.	Drug Standardisation Research Programme	46
	• Development of Standard Operating Procedures (SOPs) for Manufacture of Compound Unani Formulations and their Pharmacopoeial Standards	46



Annual Report 2015-2016

• Development of Pharmacopoeial Standards of Single Drugs	47
• Quality Control of Research Drugs	48
• Standardisation of Unani Formulations	49
• Development of Unani Pharmacopoeia of India	49
• Shelf-life Studies of Unani Formulations	49
• Redesigning of Dosage Forms of Unani Formulations	50
3.1.2.3. Clinical Research Programme	50
• Preclinical Studies	50
• Clinical Studies	57
• Multi-centric Randomized Controlled Trials	69
• Validation of Unani Pharmacopoeial Drugs	71
• Validation of Unani Pharmacopoeial Fast-acting Drugs	79
• Validation of Regimen Therapies	82
• Validation of Fundamentals	83
• Research-oriented Healthcare	86
❖ General Out-patient Department Programme	86
❖ Mobile Clinical Research Programme	87
3.1.2.4. Literary Research Programme	87
3.2. Studies under Intramural Research (IMR) Policy	88
3.3. Collaborative Research	92
3.4. Publications	96
3.4.1. Books, Monographs, Reports, etc.	96
3.4.2. Journals	97
3.4.3. Research Papers	97
3.5. Extension of Healthcare Services	107
3.5.1. School Health Programme	107
3.5.2. Unani Medical Centres in Allopathic Hospitals	108
3.5.3. Health Camps	108



3.5.4.	Activities under Gender Component Plan for Women	109
3.5.5.	Activities in the North-Eastern Region	109
3.5.6.	Activities under Special Component Plan for Schedule Castes and Tribal Sub-Plan	109
4.	INFORMATION, EDUCATION AND COMMUNICATION	110
4.1.	Library Services	110
4.2.	Organisation of Conferences, Seminars, etc.	111
4.2.1.	National Seminar on Hakim Ajmal Khan's Multidimensional Personality and Enduring Contributions	111
4.2.2.	Technical Official Language Conference	112
4.2.3.	BSS on Revisiting of NFUM and UPI	113
4.2.4.	National Conference on Application of Social Media in Innovative Knowledge Services	114
4.2.5.	Symposium on Hakim Ajmal Khan	114
4.2.6.	Orientation Workshop on Research Methodology	115
4.2.7.	Hands-on Training on <i>Hijāma</i> (Cupping Procedure)	115
4.2.8.	Symposium on Redesigning of Dosage Forms of Unani Formulations	116
4.3.	Participation in Conferences / Workshops, etc.	117
4.3.1.	India-Us Workshop on Traditional Medicine	117
4.3.2.	National Workshop on Botanical Nomenclature	117
4.3.3.	Vigyan Saksharta Utsav-2016	118
4.3.4.	Advantage Healthcare India-2015	118
4.3.5.	Global Conference on Unani Medicine	119
4.3.6.	Seminar on Research Methodology in <i>'Ilāj bi'l-Tadbīr</i>	119
4.3.7.	Workshop to Improve Knowledge of Official Language	120
4.3.8.	Yoga Day Celebration and International Conference on Yoga for Holistic Health	120
4.3.9.	Global Exhibition on Services	121
4.4.	Training Programme	121



Annual Report 2015-2016

4.5.	Participation in Arogya Fairs/ Expos	122
4.5.1.	State Arogya Fair at Imphal (Manipur)	123
4.5.2.	National Arogya Expo-2015 at Thiruvananthapuram (Kerala)	123
4.5.3.	National Arogya Fair at Varanasi (UP)	124
4.5.4.	State Arogya Fair at Rajkot (Gujarat)	124
4.5.5.	State Arogya Fair at Jodhpur (Rajasthan)	124
4.5.6.	Arogya Expo at Kozhikode (Kerala)	124
4.5.7.	State Arogya Fair at Ambala (Haryana)	125
4.5.8.	National Arogya Fair at Pune (Maharashtra)	125
4.5.9.	National Arogya Fair at Panaji (Goa)	125
4.6.	Participation in Promotion of Official Language	125
4.7.	Appointments	126
4.8.	Promotions	127
4.9.	Retirements	128
4.10.	Deaths	129
5.	FINANCIAL STATEMENT	130
5.1	Audit Report	130
5.2.	Audited Statement of Accounts	133
•	Notes on Accounts	181
	Appendix I: Institutional Network of CCRUM	182



1. OVERVIEW

1.1. OBJECTIVES OF THE COUNCIL

The Central Council for Research in Unani Medicine (CCRUM) is an autonomous organisation under the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Government of India. The Council was established on 30 March, 1978 under Societies Registration Act, 1860; however, it started functioning from 10 January, 1979. The main objectives of the Council are as follows:

- Formulation of aims and patterns of research on scientific lines in Unani Medicine
- To undertake research or any other programmes in Unani Medicine
- Prosecution of and assistance in research and propagation of knowledge and experimental measures generally in connection with the causation, mode of spread and prevention of diseases
- To initiate, aid, develop and coordinate scientific research on different aspects, fundamental and applied, of Unani Medicine, and to promote and assist institutions of research for the study of diseases, their prevention, causation and remedy
- To finance enquiries and researches for the furtherance of the objectives of the Council
- To exchange information with other institutions, associations and societies interested in the objectives similar to those of the Council, especially in the observation and study of diseases in the East in general, and in India in particular
- To prepare, print, publish and exhibit any papers, posters, pamphlets, periodicals and books for furtherance of the objectives of the Council and to contribute to such literature

1.2. PROGRAMME-WISE ACHIEVEMENTS

The Council continued research activities in the areas of Survey and Cultivation of Medicinal Plants, Drug Standardisation Research, Clinical Research, and Literary Research during the reporting period. Information, Education and Communication (IEC) activities and extension of healthcare services also continued. These activities were undertaken through a network of 23 centres functioning under the Council in different parts of the country.

Under the Survey and Cultivation of Medicinal Plants Programme, ethnopharmacological surveys were conducted in different forest divisions/areas. The areas included Dehradun Forest Division, Uttarakhand; Bhadrak, Jajpur, Balasore and Kendrapara Forest Divisions, Odisha; Munnar Forest Division, Kerala; Namakkal Forest Division, Tamil Nadu; Hyderabad, Medak, Nandyal and Mahabubnagar Forest Divisions in the states of Telangana and Andhra Pradesh; and Jhelam Valley, Anantnag, Bandipora and Kargil Forest Divisions, Jammu & Kashmir. As a result of the surveys, 4,157 botanical specimens comprising 1,351 species of plants were collected and identified. Besides, 573 folk medicinal claims were also recorded from the

tribal and rural inhabitants of the survey areas. Experimental and large-scale cultivation of some important medicinal species also continued at different herbal gardens of the Council. About 150 common species of medicinal plants used in Unani Medicine were maintained in the nurseries of the Council's centres. Of the specimens collected during the surveys, 1,555 herbarium sheets were prepared, and 335 kg of raw drugs were collected. A total of 50 herbarium sheets were digitized.

Under the Drug Standardisation Research Programme, work relating to the development of standard operating procedures (SOPs) for manufacture of compound formulations and their pharmacopoeial standards continued. During the reporting period, work was completed on 47 compound Unani formulations and 10 single drugs. Also, 92 samples of single drugs and 24 compound Unani formulations prepared at the Council's pharmacy were tested for their quality control and the data were documented. The shelf-life studies on four Unani formulations were completed and redesigning of dosage forms of 10 Unani formulations was under progress. The standardisation of four Unani formulations (ointments) was done. The Council initiated revisiting of Unani Pharmacopoeia of India (UPI) and National Formulary of Unani Medicine (NFUM). On the recommendation of the Unani Pharmacopoeia Committee (UPC), six volumes of NFUM were revisited and reviewed by the subject experts.

Under the Clinical Research Programme, preclinical safety evaluation studies, clinical studies, validation of safety and efficacy of classical/ pharmacopoeial formulations/ regimen therapies/ fundamentals of Unani Medicine continued. Besides, research under intramural research (IMR) policy also continued.

Preclinical safety and pharmacological studies on 15 classical Unani drugs including modified forms of three drugs were undertaken. In clinical research, studies on nine diseases continued during the reporting period. Four randomized controlled trials (RCTs) - one each in *Zayābitus Sukkari Qism-i Sāni* (Diabetes mellitus type-II), *Zaghtuddam Qawī Lāzimī* (Essential hypertension), *Waram al-Kabid* (Infective hepatitis) and *Baraṣ* (Vitiligo) continued. Clinical validation of 34 Unani pharmacopoeial formulations in 18 diseases also continued, whereas clinical validation of 18 another Unani pharmacopoeial formulations in 15 diseases was initiated. Besides, clinical validation of seven Unani pharmacopoeial fast-acting drugs in seven diseases also continued, whereas clinical validation of three another Unani pharmacopoeial fast-acting drugs in three diseases was initiated.

Various regimen therapy procedures were also performed on a total of 2,854 patients. *Hijāma* (cupping) was performed on 2,349 patients with different chronic diseases including *Waja' al-Mafāṣil* (Rheumatoid arthritis), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *'Irq al-Nisā* (Sciatica), *Nār Fārsi* (Eczema), *Dā' al-Sa'lab* (Alopecia), etc. *Ta'liq* (Leeching) was performed in 419 patients with different diseases including *Dawālī* (Varicose veins), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *Nār Fārsi* (Eczema), *Dā' al-Ṣadaf* (Psoriasis), *Dā' al-Sa'lab* (Alopecia), *Baraṣ* (Vitiligo), etc. Other regimen therapies like *Dalk* (Massage), *Ḥammām al-Bukhār* (Steam Bath), etc. were also applied on 86 patients of different chronic diseases.

With a view to scientifically validate the concept of humours and temperaments, research on fundamentals of Unani Medicine also continued. Assessment of temperament of 5,678 patients was done and susceptibility of acquiring diseases in relation to the temperament of

the patients was studied. These included 5,108 patients of *Baraṣ* (Vitiligo), 208 patients of *Dā' al-Ṣadaḡ* (Psoriasis), 50 patients of *Kasrat-i Shahmuddam* (Hyperlipidaemia), 82 patients of *Zayābītus Sukkari* (Diabetes mellitus), seven patients of *Zu'f-i- Masāna* (Over-active bladder), two patients of *Nisyān* (Amnesia), two patients of *Waram al-Kabid* (Hepatitis), 21 cases of Hepatitis B healthy carriers, 30 patients of *Zaght al-Dam Qawi Lāzimi* (Essential hypertension), 68 patients of *Iltihāb-i Tajāwīf-i Anf* (Sinusitis), 74 patients of *Ḥasāh al-Kulya* (Nephrolithiasis), and 26 patients of Osteoarthritis. Besides, genetic studies on theory of humours on 598 healthy volunteers and patients suffering from different diseases including diabetes mellitus, essential hypertension, vitiligo, hepatitis, *Sawdāwī* and other related diseases, and pharmacogenomic studies of Unani formulations in vitiligo were conducted at Central Research Institute of Unani Medicine (CRIUM), Hyderabad. Genetic studies on theory of humours were completed in 169 patients with diabetes mellitus, 123 patients with essential hypertension, and 202 patients with vitiligo. Eight projects also continued under the IMR policy.

Five collaborative studies were also initiated during the reporting period. These included clinical study on vitiligo at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi; clinical study on obesity at Department of Medicine, Jawaharlal Nehru Medical College, AMU, Aligarh; clinical study on autism in children at FSMHP-UDAAN for the Disabled, New Delhi; preclinical study to determine PK and PD interactions of Unani anti-diabetic plants with oral hypoglycaemic drug (metformin) at Department of Pharmaceutical Chemistry, SPP SPTM-SVKM's NMIMS, Mumbai; and Redesigning of dosage form of *Majoon-e-Dabeed-ul-Ward* and *Majoon-e-Falasfa* into tablet form along with their physico-chemical and pharmacological evaluation at Department of Saidla, Ajmal Khan Tibbiya College, AMU, Aligarh. A collaborative clinical study was completed on chronic plaque psoriasis at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi. Collaboration with other scientific institutions for conducting research and allied activities also continued. The collaborating institutions included the institutes of Indian Council of Medical Research (ICMR), especially Institute of Cytology and Preventive Oncology (ICPO), Noida; National Institute for Research in Tuberculosis (NIRT), Chennai; and National Institute of Nutrition (NIN), Hyderabad.

Under the Literary Research Programme, Urdu and English translations of Persian book *Mujarrabāt-i Razāi*, and Urdu translation of Persian book *Muhīt-i 'Azam*, volume-IV were completed. Three projects for compilation of Unani classical information on *Saratān* (Cancer), *Dhayābītus* (Diabetes) and *Waja' al-Mafāṣil* (Rheumatoid Arthritis) were also completed. Three monographs; one each on mental health, reproductive and child health (RCH) and healthy ageing were compiled. The second volume of “*Standard Unani Treatment Guidelines for Common Diseases*” was also compiled. For distribution in Swasthya Rakshan Programme and National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), publicity material on various topics was prepared. The work on reprinting of rare books, *Intikhāb-i Jalīl* and *Tajvīz-i Jalīl* continued. The work of abstracting *Jahan-i Tib*'s articles in English also continued and 100 articles were abstracted during the reporting period.

Research-oriented healthcare services continued at General Out-patient Departments (GOPDs) and special OPDs of 21 clinical centres of the Council. At these GOPDs, the patients were treated with Unani classical/ pharmacopoeial formulations. During the reporting period,

3,48,597 patients in GOPDs; 18,106 in OPDs for post-trial access (PTA); 12,764 in reproductive and Child Health (RCH)/ Mother and Child Health (MCH) OPDs and 30,680 in Geriatric OPDs bringing the total to 4,10,147 patients were treated at different centres. Referral of research patients of certain diseases to other hospitals was also done.

Under the Mobile Clinical Research Programme, the Council covered a total population of over 20 lakh in 37 rural areas, urban slums and pockets predominantly inhabited by the scheduled caste/ scheduled tribe population. During the reporting period, a total of 25,257 patients were treated in the mobile OPDs in 615 visits. Apart from providing healthcare, health awareness was also created among the masses through group meetings and public lectures.

Under the School Health Programme, 4,550 children in 18 schools under the coverage of Mobile Clinical Research Programme were checked up for their health status, diseases, deficiencies and deformities and 2,484 children were treated for various ailments by the physicians of the Council. The children suffering from some specific diseases were also referred to the hospitals, besides being provided Unani treatment. With a view to educate the children on healthy living, 52 lectures were delivered on preventive and promotive health aspects.

The two Unani Medical Centres functioning in allopathic hospitals in Delhi established under the scheme of collocation of AYUSH centres in allopathic hospitals continued providing treatment for common and chronic ailments through Unani Medicine. During the reporting period, 29,579 patients were treated at Unani Medical Centre in Dr. Ram Manohar Lohia Hospital and 17,183 patients at Unani Speciality Centre in Deen Dayal Upadhyay Hospital, New Delhi.

Under the Gender Component Plan for Women, 2,24,258 female patients were treated in the GOPDs of the Council's centres. Unani physicians also delivered lectures to create health awareness among the females and also to make them aware of the potentialities of Unani Medicine.

Under the Activities in North Eastern Region, 12,606 patients were treated for their common and chronic ailments at the two clinical centres of the Council in the region.

Under the Special Component Plan – Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan (TSP), the Council continued research-oriented medicare activities to benefit the SC/ ST population at the OPDs of its Institutes/ Units and also through mobile OPDs in the adopted pockets, besides creating health awareness among the masses. During the reporting period, over 3.85 lakh SC and 1.64 lakh ST populations were covered. A total of 28,826 SC patients were treated at the GOPDs and 7,781 patients in the mobile OPDs. Similarly, 4,613 and 4,262 ST patients were treated in the GOPDs and mobile OPDs respectively.

With a view to disseminate the research findings, 128 research papers based on the studies conducted under different research programmes were presented at national and international seminars/ conferences and/or published in scientific journals. During the reporting period, 17 publications were also brought out. Publication of the Council's bi-monthly bulletin CCRUM Newsletter, quarterly Urdu journal *Jahan-i Tib*, quarterly English journal *Hippocratic Journal of Unani Medicine*, and publicity material also continued.


Besides the organization of National Seminar on Hakim Ajmal Khan's Multidimensional Personality and Enduring Contributions, the Council organised seven events: two conferences, one each on technical official language and application of social media in innovative knowledge services; two symposia, one each on Hakim Ajmal Khan, and redesigning of dosage forms of Unani medicines; BSS on revisiting of NFUM and UPI; workshop on research methodology; and hands-on training on *Hijāma* (cupping). The researchers of the Council also participated in various national/ international seminars/ events in different disciplines for their exposure to the latest updates in their respective fields. Under the Capacity Building Programme, the Council's researchers also attended over 15 training programmes/ workshops organised by other scientific organizations.

The Council also participated in Arogya Fairs and health exhibitions organised by the Ministry of AYUSH in Thiruvananthapuram (Kerala), Imphal (Manipur), Panaji (Goa), Pune (Maharashtra), Ambala (Haryana), Kozhikode (Kerala), Jodhpur (Rajasthan), Rajkot (Gujarat), Varanasi (UP), etc. On these occasions, the Council's physicians provided free consultation to the visitors seeking Unani treatment. Apart from this, 54 health camps were organised, wherein 12,238 patients were treated.

The Council continued promotion of the official language. During the reporting period, Hindi fortnight was organised at the Council's headquarters and different centres. The Council also continued infrastructural development activities to strengthen its institutes.

Besides continuing the ongoing activities and programmes during the remaining period of the Twelfth Five Year Plan, the Council proposes to focus its research activities on the development of drugs to treat emerging diseases like dengue fever and swine flu. The emphasis would also be laid on exploiting the strengths and potentials of Unani System of Medicine as adjuvant therapy to allopathic treatment, in order to reduce the adverse effects of conventional medicines, improve their efficacy, and improve the quality of life of patients suffering from various communicable and non-communicable diseases (NCDs) including cancer and tuberculosis. Considering the fact that NCDs are a major global health problem, the Council will make efforts to employ and verify the various time-tested regimens for the safe and effective treatment of certain NCDs available in Unani Medicine and develop new drugs for the purpose. Besides, the work on the development of standard operating procedures (SOPs) for regimen therapies would also be prioritized.

New Delhi
24 October, 2016


 Prof. Rais-ur-Rahman
 Director General

2. MANAGEMENT

The management of the affairs of the Council is entrusted to a Governing Body (GB) consisting of official and non-official members.

2.1. GOVERNING BODY

The following was the constitution of the GB of the Council as on 31 March 2016.

President

Union Minister of State (Independent Charge), Ministry of AYUSH, Government of India

Vice-President

Secretary, Ministry of AYUSH, Government of India

Vice-President (Technical)

Hakim Khurshid Murad Siddique, Bareilly (U.P.)

Official Members

- Additional Secretary & Financial Advisor, Ministry of Health & Family Welfare/ AYUSH, Govt. of India
- Joint Secretary (Dealing with CCRUM), Ministry of AYUSH, Government of India

Non-Official Members

- Dr. Mohammed Abdul Waheed, Hyderabad
- Hakim Sirajuddin Ahmed, Meerut
- Prof. Hasibunnisa, Bengaluru
- Dr. Madan Singh Jakhar, Faridabad
- Dr. Tasleem Bano, Jaipur
- Dr. Rameshwar Dayal, New Delhi
- Dr. Veena Gupta, New Delhi
- Prof. Arunabha Ray, Delhi
- Dr. Govind K Makharia, New Delhi

Member Secretary

- Prof. Rais-ur-Rahman, Director General, CCRUM

During the reporting period, no meeting of the Governing Body was held.

2.2. STANDING FINANCE COMMITTEE

The composition of the Council's Standing Finance Committee (SFC) was as follows:

- Joint Secretary
Ministry of AYUSH
Government of India : Chairman
- Financial Advisor
Ministry of AYUSH/ Health & Family Welfare
Government of India
or his/her nominee not below the
rank of Section Officer : Member
- One technical member to be nominated
by the President of the Council : Technical Member
- Director General, CCRUM : Member-Secretary

During the reporting period, the SFC met twice, firstly on 12 May, 2015 and secondly on 14 July, 2015. Important recommendations made by the SFC at these meetings are as follows:

SFC meeting held on 12 May, 2015

- The committee recommended the proposal for enhancement of honorarium/TA from existing Rs. 5000/- to Rs. 7000/- per month to the Honorary Project Officers engaged in the peripheral Institutes/Units.
- The SFC recommended the proposal for standardisation and establishment of a quality system by obtaining ISO: 9001:2008 certification for working of RRIUM, Bhadrak and RRIUM, Patna at the cost of Rs. 7,66,000/- and Rs. 7,01,000/- respectively.
- The SFC recommended the proposal for purchase of instruments/ equipments for digitization of herbarium of SMP Units of CRIUM, Hyderabad, and RRIUMs, Chennai, Srinagar, Bhadrak and Aligarh at the cost of Rs. 5,19,500/- for each institute.
- The SFC recommended undertaking activities under Swasthya Rakshan Programme at twelve centres at an expenditure not exceeding Rs. 37,89,5200/- during the first year of the project.
- The SFC recommended the proposal for engagement of contractual workers (34 Nos.) in CRIUM, Hyderabad; RRIUMs, Chennai and Bhadrak; CRUs Meerut and Kurnool; and Unani Medical Centres at Dr. RML Hospital and DDU Hospital, New Delhi on approved rates.
- The SFC recommended the collaborative project to be undertaken with NPCDCS cell of Ministry of Health & Family Welfare at a cost not exceeding Rs. 5,39,60,800/- for the 1st year through 17 CHCs in Lakhimpur Kheri District of Uttar Pradesh.
- The SFC considered the proposal for enhancement of rent at the rate of 10% on the existing rent in accordance with the existing agreement w.e.f. 1 April, 2015. The Council

also directed that a fresh Deed of Lease Agreement is executed between the Council/ Unit and the landlord in respect of accommodation of OPD Extension Counter of CRU, Meerut at Bhumiaka Pulia, Meerut.

- The SFC recommended the proposal for construction of Regimen Therapy Unit at RRIUM, Chennai through CPWD, Chennai at an estimated cost not exceeding Rs. 1,71,62,000/- including 3% contingency.
- The SFC recommended the proposal for annual electrical maintenance of CRIUM, Hyderabad for the year 2015-16.
- The SFC recommended the proposal for annual maintenance contract amounting to Rs. 28,99,695/- (Rupees twenty eight lakh ninety nine thousand six hundred ninety five only) for annual repairing and maintenance of Central Councils' Combined Building Complex (CCCBC), Janakpuri, New Delhi through CPWD for the year 2015-16.
- The SFC recommended the proposal for annual maintenance contract (Electrical) amounting to Rs. 61,22,976/- (Rupees sixty one lakh twenty two thousand nine hundred seventy six only) in CCCBC, Janakpuri, New Delhi for the year 2015-16.
- The SFC recommended the proposal to establish a Unani clinic at AYUSH Wellness Centre in the President's Estate at a cost of Rs. 34,44,000/- per year.
- The SFC recommended the proposal for purchase of land in Kurnool District measuring 10.26 acres at the cost of Rs. 1.5 lakh per acre for CRU/RRIUM, Kurnool, from the pool of land of Andhra Pradesh Government.
- The SFC recommended the proposal for purchase of equipments, furniture, etc. for RRIUM, Srinagar.

SFC meeting held on 14 July, 2015

- The SFC considered and approved the annual accounts of the Council for the year 2014-2015 subject to observations of DGACE during audit.
- The SFC considered the proposal for holding international seminar on Unani Medicine during February 2016 and conveyed its 'in-principle' approval.
- The SFC considered the proposal for payment of 'Third Party'-Quality Assurance (TPQA) for the construction projects of the Council costing Rs. five crore and above, executed by CPWD through Indian Institute of Technology (IIT).
- The SFC considered the proposal for manufacture of listed kit medicines through IIIM, Jammu for use in general OPD/RCH and Geriatrics OPDs/Mobile Medicare and School Healthcare, etc. of the peripheral Institutes/Units/Centers; and directed that a joint visit of Director Generals/DDGs of CCRUM and CCRAS to IIIM, Jammu to assess the feasibility may be made.

- The Chairman also emphasized the need for publishing the research activities of the Council in electronic as well as print media to acquaint the general public about the developments in the AYUSH systems of medicine. He also advised the researchers to upload important developments in the Council on various platforms, including twitter account of the Ministry of AYUSH.

2.3. INSTITUTIONAL ETHICS COMMITTEE

It is mandatory that all proposals on biomedical research involving human participants should be approved by an appropriately constituted Institutional Ethics Committee (IEC) to protect the welfare and the rights of the participants. At present, there are 15 Institutional Ethics Committees functioning at various Institutes/Units of the CCRUM. These committees review and approve all the research proposals involving human participants. The committees also examine the compliance with regulatory requirements, applicable guidelines and laws.

Central Research Institute of Unani Medicine (CRIUM), Hyderabad

- | | |
|---|-------------|
| • Dr. Kaiser Jamil
Emeritus Research Scientist & Head
Department of Genetics
Bhagwan Mahavir Medical Research Centre
Hyderabad | Chairperson |
| • Dr. M.U.R. Naidu
Formerly Dean
Faculty of Medicine
Nizam's Institute of Medical Sciences
Hyderabad | Member |
| • Dr. Yasmeen Shamsi
Associate Professor
Department of Moalajat
Faculty of Medicine (Unani)
Jamia Hamdard
New Delhi | Member |
| • Dr. K. Nagaiah
Senior Principal Scientist
Organic and Bio-molecular Chemistry
Indian Institute of Chemical Technology
Hyderabad | Member |
| • Dr. M.A. Waheed
Formerly Deputy Director
Central Research Institute of Unani Medicine
Hyderabad | Member |

- Mrs. Sumia Fatima
Assistant Professor
Shadan College of Pharmacy
Hyderabad
Member
- Mr. Syed Taher
Advocate
Hyderabad
Member
- Mr. Shamsheer Ali
Hyderabad
Member
- In-charge
CRIUM, Hyderabad
Member Secretary

Central Research Institute of Unani Medicine (CRIUM), Lucknow

- Prof. Hifazat Husain Siddiqui
Advisor to Vice Chancellor & Honorary Dean
Faculty of Pharmacy, Integral University
Lucknow
Chairman
- Dr. Sanjeev Sahai
Associate Professor
Department of Microbiology
Integral Institute of Medical Sciences & Research
Lucknow
Member
- Dr. Roshan Alam
Associate Professor
Department of Biochemistry
Integral Institute of Medical Sciences & Research
Lucknow
Member
- Prof. S.H. Siddiqui
Director (Unani)
Government of Uttar Pradesh &
Principal, State Takmil-ut-Tib College & Hospital
Lucknow
Member
- Dr. Javed Ahmad
Specialist Physician
Vivekananda Polyclinic
Lucknow
Member
- Dr. Abdul Quddus Khan
Formerly Senior Lecturer
State Takmil-ut-Tib College & Hospital
Lucknow
Member

- Mr. I.H. Farooqui
Advocate
Assistant Solicitor General of India
Lucknow Bench of Allahabad High Court
Lucknow
Member
- Mr. Ateeq Ahmad Bastawee
Lucknow
Member
- Mr. M.M. Ansari
Lucknow
Member
- In-charge
CRIUM, Lucknow
Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Chennai

- Hakim Syed Khaleefathullah
Formerly Vice President (Technical)
Governing Body, CCRUM
New Delhi
Chairman
- Dr. R. Ilavarasan
Assistant Director
CSM Drug Research Institute of Ayurveda
Chennai
Member
- Dr. Raziuddeen
Head (Unani Section)
Arignar Anna Government Hospital of Indian Medicine
Chennai
Member
- Dr. Syed M.M. Ameen
Unani Physician
Niamath Science Academy
Chennai
Member
- Dr. Mohammad Jamal
Formerly Additional Professor
Madras Medical College
Chennai
Member
- Mr. Mohammad Muheebu-ul-Khader
Advocate
Chennai
Member
- Mr. A. Ramasamy
ARR Domestic Chemicals Pvt. Ltd.
Chennai
Member



Annual Report 2015-2016

- Mr. M. Habibullah Jamali
Assistant Professor
Department of Arabic
The New College
Chennai
Member
- Mr. P.B. Rajasekaran
Managing Director
Rajkeerth Aromatic & Biotech Pvt. Ltd.
Chennai
Member
- In-charge
RRIUM, Chennai
Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Mumbai

- Prof. V.W. Patil
Head, Department of Biochemistry
Grant Medical College & Sir J.J. Group of Hospitals
Mumbai
Chairman
- Prof. Isa Nadvi
Formerly Head, Dept. of Preventive and Social Medicine
Dr. M. Ishaq Jamkhanawala Tibbia Unani Medical College &
Haji A.R. Kalsekar Tibbia Hospital
Mumbai
Member
- Dr. Ghazala Mulla
Z.V.M. Unani Medical College & Hospital
Pune
Member
- Dr. Momin Mohd Abdul Mujeeb
Assistant Professor
Department of Pharmacology
Grant Medical College & Sir J.J. Group of Hospitals
Mumbai
Member
- Dr. S.A. Patel
Mumbai
Member
- Ms. Ghazala Munawwar Azad
Mumbai
Member
- Mr. Sharfuddin Mohd Safi Ansari
Mumbai
Member
- In-charge
RRIUM, Mumbai
Member Secretary



Regional Research Institute of Unani Medicine (RRIUM), Srinagar

- | | |
|--|------------------|
| • Prof. Akbar Masood
Department of Biochemistry
Faculty of Biological Sciences
University of Kashmir
Srinagar | Chairman |
| • Dr. Zahoor Ahmad Wafai
Department of Clinical Pharmacology
Sher-i-Kashmir Institute of Medical Sciences
Srinagar | Member |
| • Prof. Ghulam Qadir Mir
Department of Law
University of Kashmir
Srinagar | Member |
| • Dr. Shariq Masoodi
Associate Professor
Department of Endocrinology
Sher-i-Kashmir Institute of Medical Sciences
Srinagar | Member |
| • Dr. Yasmeen Shamsi
Associate Professor
Department of Moalajat
Faculty of Medicine (Unani)
Jamia Hamdard
New Delhi | Member |
| • Dr. Mohammad Iqbal
Formerly Deputy Director
Regional Research Institute of Unani Medicine
Srinagar | Member |
| • Prof. Aneesa Shafi
Department of Sociology
University of Kashmir
Srinagar | Member |
| • Mr. Mir Ghulam Mohiuddin Naqib
Chairman, Minhajul Islam
Srinagar | Member |
| • Mr. Ghulam Rasool Butt
Srinagar | Member |
| • In-charge
RRIUM, Srinagar | Member Secretary |

Regional Research Institute of Unani Medicine (RRIUM), Aligarh

- Prof. K.M.Y. Amin
Department of Ilmul Advia
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Chairman
- Prof. A.B. Khan
Formerly Dean
Faculty of Unani Medicine
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Member
- Prof. M.M.W. Amin
Chairman, Department of Ilmul Amraz
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Member
- Prof. M.M.H. Siddiqui
Chairman
Department of Ilaj bit Tadbeer
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Member
- Prof. A. Mannan
Department of Moalajat
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Member
- Prof. Mukthar H. Hakim
Department of Moalajat
Ajmal Khan Tibbiya College
Aligarh Muslim University
Aligarh
Member
- Dr. M. Laiq Ali Khan
President
Hakim Ajmal Khan Foundation
Kasganj
Member
- Mr. Zakiuddin Khairuwala
Advocate, Civil Court
Aligarh
Member

- Mufti Suhaib Ahmad Khan
Madrasa Tameer-e-Millat
Aligarh Member
- Mr. Abdul Majid Khan
Aligarh Member
- In-charge
RRIUM, Aligarh Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), New Delhi

- Dr. Prem Kapoor
Professor
Department of Medicine
Hamdard Institute of Medical Sciences & Research
New Delhi Chairman
- Dr. K.K. Sharma
Formerly Head, Department of Pharmacology
Guru Teg Bahadur Hospital
New Delhi Member
- Prof. M.A. Jafri
Head, Department of Ilmul Advia
Jamia Hamdard
New Delhi Member
- Dr. Yasmin Shamsi
Associate Professor
Department of Moalajat
Faculty of Medicine (Unani)
Jamia Hamdard
New Delhi Member
- Dr. Muzayyana Khatoon
Chief Medical Officer
North MCD Dispensary
New Delhi Member
- Mr. Farid Ahmad Khan
Advocate, Delhi High Court
New Delhi Member
- Mr. Ata-ur-Rahman
Programme Manager
Mamta Health Institute for Mother & Child
New Delhi Member



Annual Report 2015-2016

- Dr. Aslam Javed
Managing Director, Unani Herbal
New Delhi
Member
- Mr. Mohd Qasim Ansari
National Council for Promotion of Urdu Language
New Delhi
Member
- In-charge
RRIUM, New Delhi
Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Kolkata

- Dr. Tapas Bera
Associate Professor
Department of Pharmacology
NRS Medical College
Kolkata
Chairman
- Dr. Israr Ahmad Ansari
CMO (Unani), Central Government Health Services
Kolkata
Member
- Dr. Hakimuddin Akhtar
Consultant Physician
BM Birla Heart Research Centre
Kolkata
Member
- Mr. Rajive Kumar Pandey
Advocate
Kolkata
Member
- Dr. Pradeep Kumar Dubey
Representative
Protection for Democratic Human Rights of India (NGO)
Kolkata
Member
- Hakeem Abdul Jaleel
Honorary Consultant (Unani)
Regional Research Institute of Unani Medicine
Kolkata
Member
- Mr. Nadeem Ahmad
Member of Islamia Hospital
Kolkata
Member
- In-charge
RRIUM Kolkata
Member Secretary



Regional Research Institute of Unani Medicine (RRIUM), Patna

- Prof. Alauddin Ahmad
Formerly Vice-Chancellor
Jamia Hamdard
New Delhi
Chairman
- Dr. M.P. Tripathi
Formerly CMO & Deputy Superintendent
Government of Bihar
Patna
Member
- Dr. Arvind Kumar
Senior Medical Officer
Sri Guru Gobind Singh Hospital
Patna
Member
- Dr. Md. Zahid Iqbal
Reader
Government Tibbi College
Patna
Member
- Mr. Haroon Rasheed
Programme Manager for Social Development
Government of Bihar
Member
- Mr. Syed Shah Shamimuddin
Formerly Head
Department of Arabic, Oriental College
Patna
Member
- Mr. Mohd. Qasim Chand
Patna
Member
- In-charge
RRIUM, Patna
Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Bhadrak

- Dr. Trupti Rekha Swain
Associate Professor
Department of Pharmacology
S.C.B. Medical College
Cuttack
Chairman
- Dr. Sanjay Kumar
Professor
Department of Pharmacology
IMS & SUM Hospital
Bhubaneswar
Member

- Dr. Mohammad Kamal Khan
Medical Officer (Unani)
Government Unani Dispensary
Bhadrak Member
- Dr. Sayed Mozammil Ali
Medical Officer (Unani)
Balasore Member
- Mr. Shaikh Zulfiqar Ali
Advocate
Bhadrak Member
- Mr. S.M. Farooque
Bhadrak Member
- Mr. Mohammad Abdul Bari
Bhadrak Member
- Mr. Shaikh Anwar Hussain
Bhadrak Member
- In-charge
RRIUM, Bhadrak Member Secretary

Clinical Research Unit, Bhopal

- Prof. S. Nafeesa Bano
Head
Department of Obstetrics & Gynaecology
H.S.Z.H. Government Unani Medical College
Bhopal Chairperson
- Dr. S.M. Abbas Zaidi
Lecturer
Department of Moalajat
H.S.Z.H. Government Unani Medical College
Bhopal Member
- Dr. Bhavana Bhimte
Associate Professor
Department of Biochemistry
Gandhi Medical College
Bhopal Member
- Mr. Zafar Hassan
Representative, NGO
Bhopal Member

- Mr. Dileep Kumar Sharma
Advocate
Bhopal Member
- Mr. Sufiyan Hassan
Bhopal Member
- Mr. Mathew John
Bhopal Member
- In-charge
CRU Bhopal Member Secretary

Regional Research Centre (RRC), Allahabad

- Dr. Nisar Ahmad
Formerly Chief Medical Officer
Allahabad Chairman
- Dr. Tariq Mehmood
Associate Professor
Department of Pulmonary Medicine
Moti Lal Nehru Medical College
Allahabad Member
- Prof. Saad Usmani
Formerly Principal
State Unani Medical College
Allahabad Member
- Mr. Farooq Ahmad Khan
Advocate, High Court
Allahabad Member
- Dr. S. Sayeed Ahmad
Formerly Coordinator
Health Camp, Air Force Station
Allahabad Member
- Mr. Anwar Azam Islahi
Allahabad Member
- Mr. Mohammad Anees
Managing Director, Dulhan Palace
Allahabad Member
- In-charge
RRC, Allahabad Member Secretary

Clinical Research Unit (CRU), Burhanpur

- Dr. Humayun Shareef Dawood
Incharge, Blood Bank
Government Nehru District Hospital
Burhanpur
Chairman
- Prof. Khaleel Ansari
Seva Sadan Law College
Burhanpur
Member
- Prof. Saeed Siddiqui
Formerly Principal
S.H. Unani Tibbiya College
Burhanpur
Member
- Dr. B.M. Gupta
In-charge, Saeeda Hospital & Research Center
Burhanpur
Member
- Mr. Kiran Kumar Mahajan
Guest Faculty
Jija Mata Government Polytechnic College
Burhanpur
Member
- Mr. Abdul Hamid Ansari
Azad Nagar
Burhanpur
Member
- In-charge
CRU, Burhanpur
Member Secretary

Clinical Research Unit (CRU), Meerut

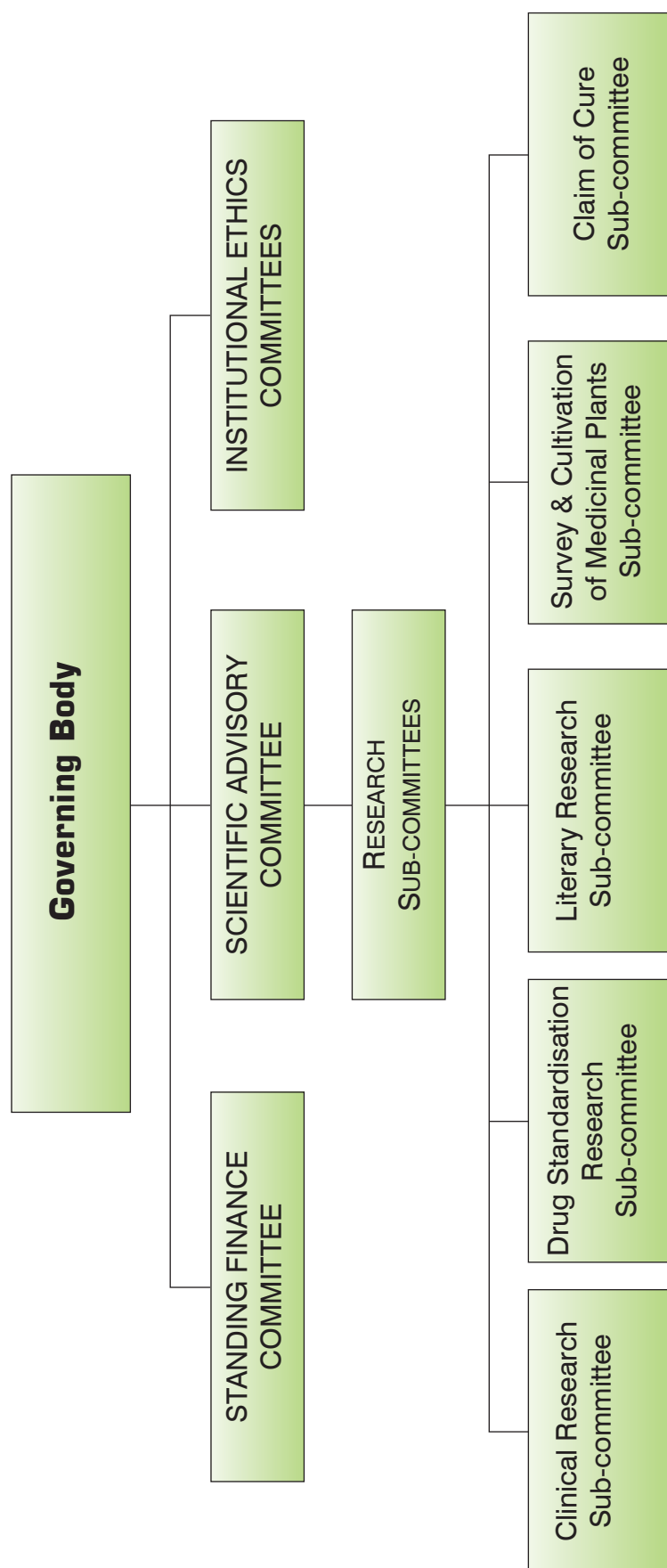
- Dr. Azhar Javed
Muzaffar Nagar
Chairman
- Dr. Pradeep Jain
Meerut
Member
- Dr. Hira Lal Bhalla
Meerut
Member
- Dr. Mehboob Ali
Meerut
Member
- Mr. Mohammad Aslam
Advocate
Meerut
Member

- Mr. Laiqur Rehman Khan
Meerut Member
- Mufti Afifullah
Meerut Member
- Mr. Sarfaraz Ahmad
Meerut Member
- In-charge
CRU, Meerut Member Secretary

Clinical Research Unit (CRU), Kurnool

- Dr. Habibullah
Formerly Principal
Dr. Abdul Haq Unani Medical College
Kurnool Chairman
- Dr. Abdul Haq
Formerly Professor
Osmania College
Kurnool Member
- Dr. Abdul Rahim Quazi
Formerly Chief Medical Officer (Unani)
Central Government Health Services
Kurnool Member
- Mr. A.S. Omair Javed
Advocate
Kurnool Member
- Mr. H. Mohammad Iqbal
Kurnool Member
- Syed Zakir Ahmed Rasheedi
Kurnool Member
- In-charge
CRU, Kurnool Member Secretary

Management of the Council



2.4. SCIENTIFIC ADVISORY COMMITTEE

The Scientific Advisory Committee (SAC) of the Council consists of the following:

- | | |
|---|------------------|
| • Prof. M.A. Jafri
Jamia Hamdard
New Delhi | Chairman |
| • Prof. Rais-ur-Rahman
Advisor (Unani), Ministry of AYUSH
New Delhi | Member |
| • Hakim B.S. Usmani
Formerly Principal
Dr. M. Ishaq Jamkhanawala Tibbia Unani Medical College &
Haji A.R. Kalsekar Tibbia Hospital
Mumbai | Member |
| • Hakim Abdul Haleem
Chairman, Rex (U & A) Remedies Pvt. Ltd.
New Delhi | Member |
| • Hakim Mohammad Yousuf
Formerly Deputy Director
Regional Research Institute of Unani Medicine
Srinagar | Member |
| • Dr. O.P. Aggarwal
Emeritus Scientist, Indian Council of Medical Research
New Delhi | Member |
| • Dr. Nandini K. Kumar
Formerly Deputy Director General
Indian Council of Medical Research
New Delhi | Member |
| • Dr. Ahmad Kamal
Project Director
National Institute of Pharmaceutical Education & Research
Hyderabad | Member |
| • Prof. Amir Azam Khan
Jamia Millia Islamia
New Delhi | Member |
| • Director General
CCRAM | Member Secretary |

During the reporting period, no meeting of the Scientific Advisory Committee was held.

2.4.1. RESEARCH SUB-COMMITTEES

The SAC is assisted by five Sub-committees, namely Clinical Research Sub-committee, Drug Standardisation Sub-committee, Literary Research Sub-committee, Survey and Cultivation of Medicinal Plants Sub-committee and Claim of Cure Sub-committee. The composition of these committees is as follows:

Clinical Research Sub-committee

- | | |
|--|------------------|
| • Hakim Syed Khaleefathullah
Chennai | Chairman |
| • Hakim Sirajuddin Ahmad
Meerut | Member |
| • Hakim Mohd. Akhtar Siddiqui
New Delhi | Member |
| • Prof. K.M.Y. Amin
Aligarh | Member |
| • Dr. O.P. Agarwal
New Delhi | Member |
| • Dr. Khalid M. Siddiqui
New Delhi | Member Secretary |

Drug Standardisation Research Sub-committee

- | | |
|------------------------------------|------------------|
| • Dr. Amir Azam
New Delhi | Chairman |
| • Dr. Y.S. Bedi
Jammu | Member |
| • Prof. M.M. Wamiq Amin
Aligarh | Member |
| • Prof. Naim A. Khan
Aligarh | Member |
| • Mr. Shamsul Arfin
New Delhi | Member Secretary |

Literary Research Sub-committee

- | | |
|---|----------|
| • Prof. Hakim Syed Zillur Rehman
Aligarh | Chairman |
| • Hakim Khalid Zaman Khan
Aligarh | Member |

- Dr. Ashhar Qadeer
New Delhi Member
- Dr. Khursheed A Shafqat Azmi
New Delhi Member
- Dr. Waseem Ahmad Azmi
Lucknow Member
- Dr. A.K. Baig
New Delhi Member
- Dr. Mohd. Fazil Khan
New Delhi Member Secretary

Survey of Medicinal Plants Sub-committee

- Prof. Wazahat Hussain
Aligarh Chairman
- Dr. Y.S. Bedi
Jammu Member
- Hakim Syed Jaleel Husain
Hyderabad Member
- Hakim Shamsul Afaq
New Delhi Member
- Mr. Aminuddin
New Delhi Member Secretary

Claim of Cure Sub-committee

- Prof. A.A. Ansari
Aligarh Chairman
- Prof. Jamil Ahmad
New Delhi Member
- Hakim Maudood Ashraf
Aligarh Member
- Hakim F. Zaman
New Delhi Member
- Dr. Khalid M. Siddiqui
New Delhi Member Secretary

2.5. ORGANISATIONAL SET-UP

The Council has its headquarters at New Delhi and a network of 23 centres functioning in different parts of the country. These centres are as follows:

Centre	Number
Central Research Institute of Unani Medicine	02
Regional Research Institute of Unani Medicine	08
Regional Research Centre	02
Clinical Research Unit	06
Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine	01
Drug Standardisation Research Institute	01
Drug Standardisation Research Unit	01
Chemical Research Unit (Grant-in-aid)	01
Clinical Research Pilot Project	01

The Council's centres are based in different States. The following is the state-wise institutional network of the Council.

Andhra Pradesh

- Clinical Research Unit (CRU), Kurnool

Assam

- Regional Research Centre (RRC), Silchar with an extension centre at Karimganj

Bihar

- Regional Research Institute of Unani Medicine (RRIUM), Patna

Delhi

- Regional Research Institute of Unani Medicine (RRIUM), New Delhi
- Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine (HAKILHRUM), New Delhi
- Unani Medical Centre (extension centre of RRIUM, New Delhi), Dr. Ram Manohar Lohia Hospital, New Delhi
- Unani Speciality Centre (extension centre of RRIUM, New Delhi), Deen Dayal Upadhyay Hospital, New Delhi

Jammu & Kashmir

- Regional Research Institute of Unani Medicine (RRIUM), Srinagar

Karnataka

- Clinical Research Unit (CRU), Bengaluru

Kerala

- Clinical Research Unit (CRU), Edathala (Alwaye) with an extension centre at Kumblanghi

Madhya Pradesh

- Clinical Research Unit (CRU), Bhopal
- Clinical Research Unit (CRU), Burhanpur

Maharashtra

- Regional Research Institute of Unani Medicine (RRIUM), Mumbai

Manipur

- Clinical Research Pilot Project, Imphal

Odisha

- Regional Research Institute of Unani Medicine (RRIUM), Bhadrak

Tamil Nadu

- Regional Research Institute of Unani Medicine (RRIUM), Chennai

Telangana

- Central Research Institute of Unani Medicine (CRIUM), Hyderabad

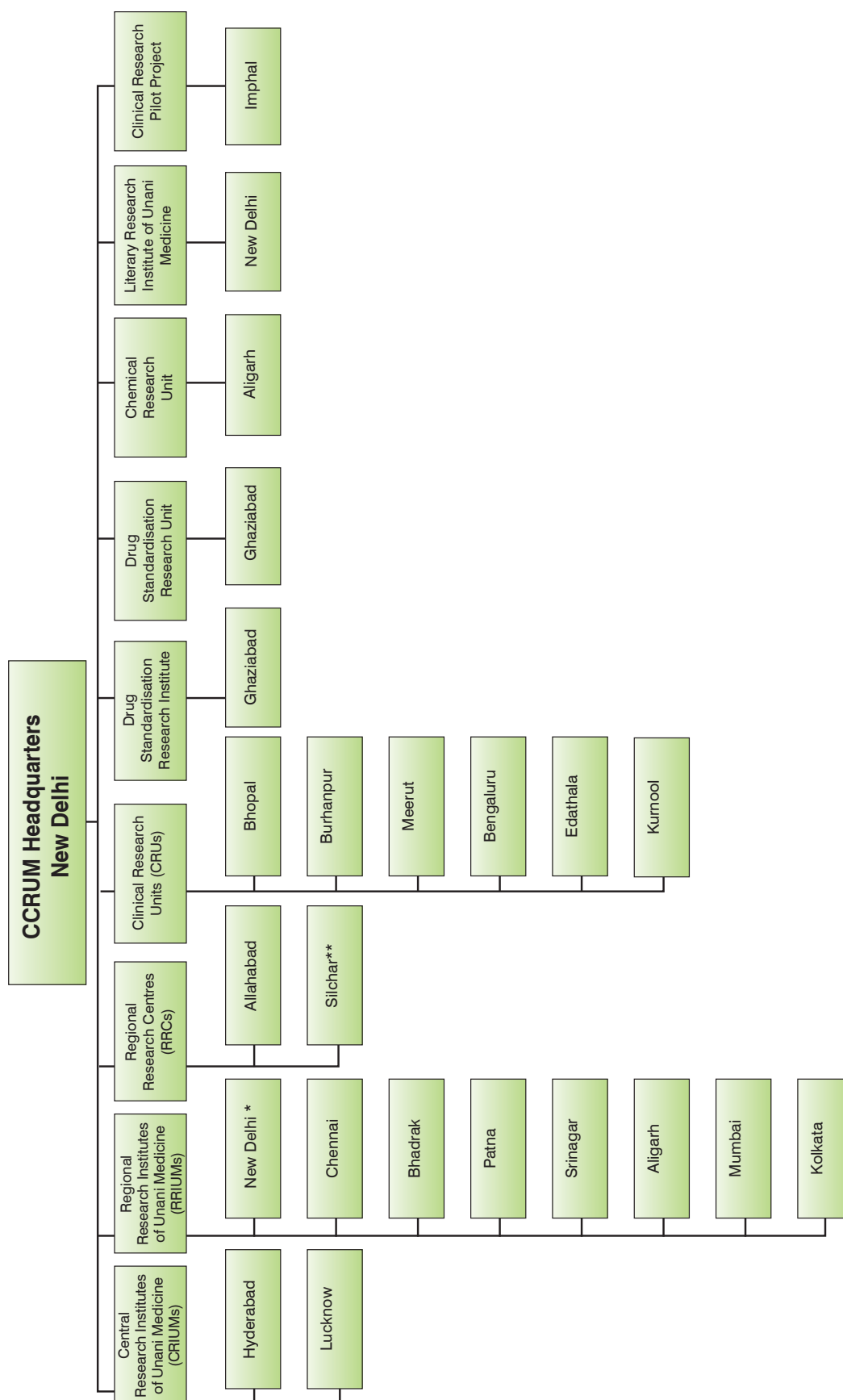
Uttar Pradesh

- Central Research Institute of Unani Medicine (CRIUM), Lucknow
- Regional Research Institute of Unani Medicine (RRIUM), Aligarh
- Drug Standardisation Research Institute (DSRI), Ghaziabad
- Drug Standardisation Research Unit (DSRU), Ghaziabad
- Regional Research Centre (RRC), Allahabad
- Clinical Research Unit (CRU), Meerut
- Chemical Research Unit (Grant-in-aid), Aligarh

West Bengal

- Regional Research Institute of Unani Medicine (RRIUM), Kolkata

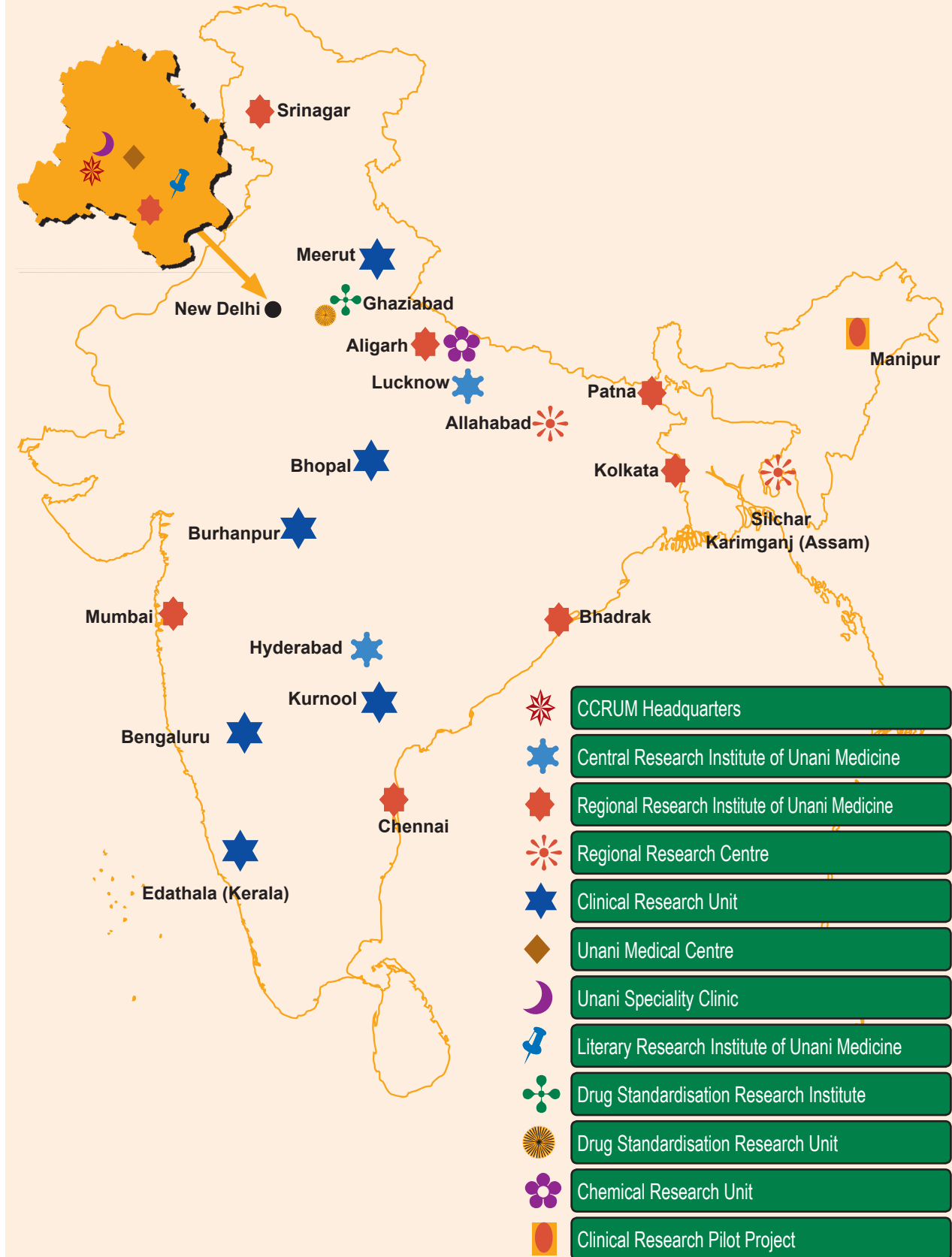
Organisational Set-up of the Council



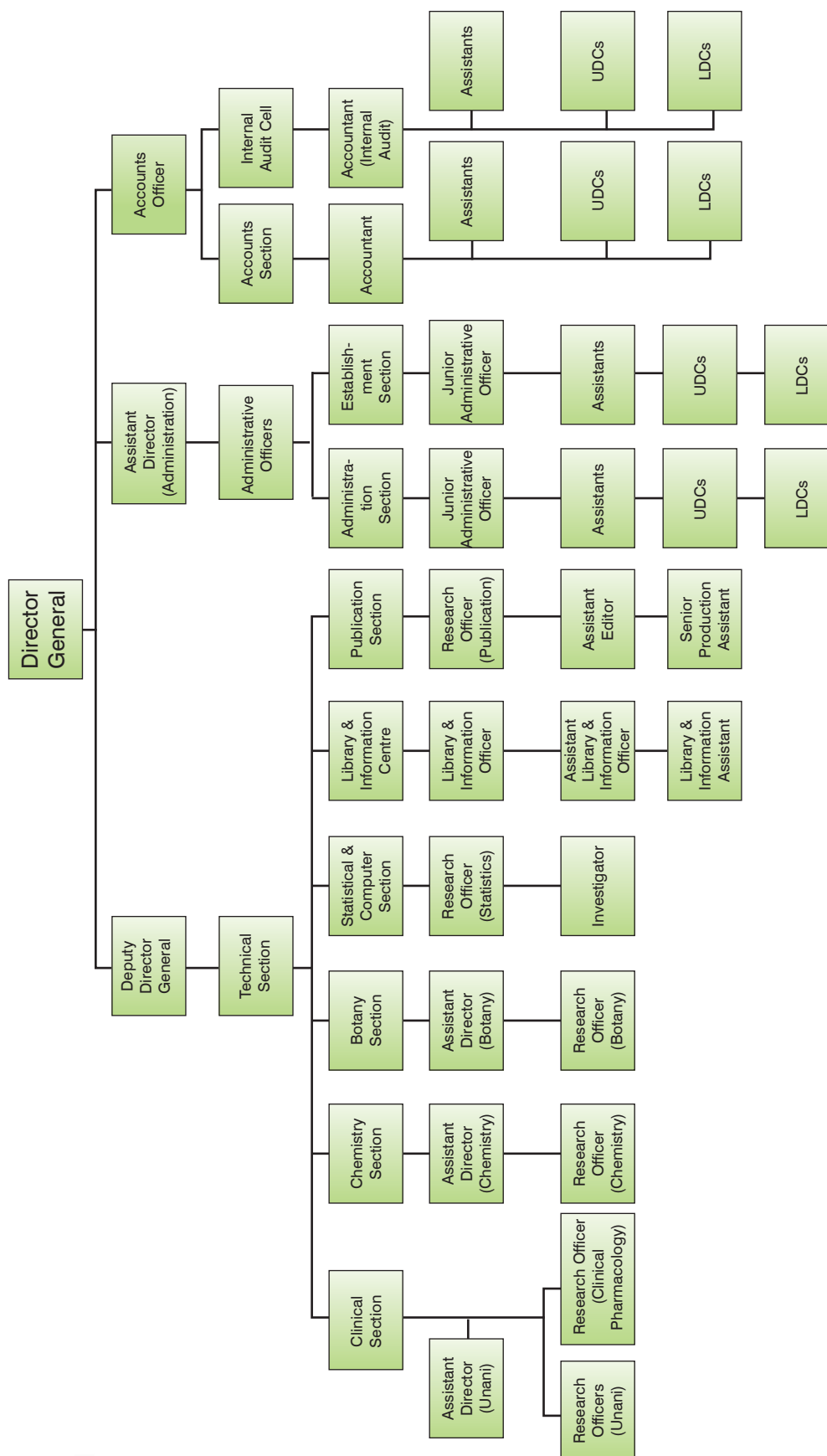
* With two extension centres in New Delhi

**With an extension centre in Karimganj

Institutional Network of CCRUM



Organisational Structure at the Headquarters



2.6. BUDGET (ACTUAL EXPENDITURE)

The centre-wise actual expenditure of the Council during 2015-16 was as follows:

(₹ in thousands)

S. No.	Name of State and Centre	Non-plan	Plan	Total
1.	Andhra Pradesh			
	(i) CRU, Kurnool	2,537	275	2,812
2.	Assam			
	(i) RRC, Silchar/ Karimganj	–	11,638	11,638
3.	Bihar			
	(i) RRIUM, Patna	15,455	19,884	35,339
4.	Karnataka			
	(i) CRU, Bengaluru	5,664	1,228	6,892
5.	Jammu & Kashmir			
	(i) RRIUM, Srinagar	29,884	14,202	44,086
6.	Kerala			
	(i) CRU, Alwaye	3,156	1,759	4,915
7.	Madhya Pradesh			
	(i) CRU, Burhanpur	5,427	2,701	8,128
	(ii) CRU, Bhopal	–	9,507	9,507
8.	Maharashtra			
	(i) RRIUM, Mumbai	7,367	21,204	28,571
9.	Manipur			
	(i) Clinical Research Pilot Project	–	3,571	3,571
10.	Delhi			
	(i) HAKILHRUM, New Delhi	24,148	4,965	29,113

S. No.	Name of State and Centre	Non-plan	Plan	Total
(ii)	RRIUM, New Delhi	41,402	38,401	79,803
(ii)	CCCBC, New Delhi	-	41,238	41,238
(iv)	Headquarters, New Delhi	65,269	34,283	99,552
11.	Odisha			
(i)	RRIUM, Bhadrak	29,738	8,870	38,608
12.	Tamil Nadu			
(i)	RRIUM, Chennai	50,110	11,021	61,131
13.	Telangana			
(i)	CRIUM, Hyderabad	1,02,396	50,755	1,53,151
14.	Uttar Pradesh			
(i)	DSRI, Ghaziabad	16,824	1,930	18,754
(ii)	DSRU, Ghaziabad	7,927	458	8,385
(iii)	CRIUM, Lucknow	-	77,939	77,939
(iv)	RRC, Allahabad	12,989	4,932	17,921
(v)	RRIUM, Aligarh	14,733	37,969	52,702
(vi)	CRU, Meerut	-	22,189	22,189
15.	West Bengal			
(i)	RRIUM, Kolkata	-	10,833	10,833
16.	Other Expenditure			
(i)	Pension fund transfer	1,53,800	3,500	1,57,300
(ii)	Contribution to NPS	7,910	3,169	11,079
(iii)	CGHS Contribution	-	2,218	2,218
(iv)	Seminar/Workshop	-	4,029	4,029
(v)	Health Mela	-	1,467	1,467

S. No.	Name of State and Centre	Non-plan	Plan	Total
(vi)	Training Programme	-	542	542
(vii)	Arogya	-	2,764	2,764
(viii)	EMR	-	704	704
(ix)	Short-term Research Projects	-	6,278	6,278
(x)	Swasthya Rakshan Parikshan	-	815	815
(xi)	Exhibition	-	50	50
(xii)	Contribution to DST Projects	-	5,100	5,100
(xiii)	Advance for Construction of Building	-	13,125	13,125
(xiv)	Council's Publication (Priced)	-	213	213
(xv)	Medical Advance	65	-	65
(xvi)	NPCDCS	-	2,250	2,250
(xvii)	Advance to Govt. Servants	-	-	-
(xviii)	Scooter	-	489	489
(xix)	Car	-	540	540
(xx)	mHBA	-	-	-
(xxi)	Computer	-	684	684
(xxii)	DLIS	60	60	120
(xxiii)	Leave Salary Cont.	1	-	1
(xxiv)	Ethics	-	129	129
(xxv)	Audit Fees	-	51	51
(xxvi)	GIA to CRU Aligarh	-	-	-
(xxvii)	Relief to J&K	-	102	102
Grand Total S. No. 1 to 16		5,96,862	4,80,031	10,76,893

3. TECHNICAL REPORT

3.1. INTRAMURAL RESEARCH

3.1.1. CENTRE-WISE ACTIVITIES

Centre	Activities
Central Research Institute of Unani Medicine (CRIUM), Hyderabad	<ul style="list-style-type: none"> • Survey and Cultivation of Medicinal Plants Programme • Drug Standardisation Research Programme • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Research on Fundamentals/ Basic Principles of Unani Medicine ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme
Central Research Institute of Unani Medicine (CRIUM), Lucknow	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme
Regional Research Institute of Unani Medicine (RRIUM), Chennai	<ul style="list-style-type: none"> • Survey and Cultivation of Medicinal Plants Programme • Drug Standardisation Research Programme • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme
Regional Research Institute of Unani Medicine (RRIUM), Bhadrak	<ul style="list-style-type: none"> • Survey and Cultivation of Medicinal Plants Programme • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs

Centre	Activities
Regional Research Institute of Unani Medicine (RRIUM), Patna	<ul style="list-style-type: none"> ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme • Clinical Research Programme ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme
Regional Research Institute of Unani Medicine (RRIUM), Aligarh	<ul style="list-style-type: none"> • Survey and Cultivation of Medicinal Plants Programme • Drug Standardisation Research Programme • Clinical Research Programme ❖ Validation of Unani Pharmacopoeial Drugs ❖ Pharmacological Research Programme • General Out-patient Department (GOPD) Programme
Regional Research Institute of Unani Medicine (RRIUM), Mumbai	<ul style="list-style-type: none"> • Clinical Research Programme ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme
Regional Research Institute of Unani Medicine (RRIUM), Srinagar	<ul style="list-style-type: none"> • Survey and Cultivation of Medicinal Plants Programme • Drug Standardisation Research Programme • Clinical Research Programme ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Regimen Therapies ❖ Pharmacological Research Programme ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme

Centre	Activities
Regional Research Institute of Unani Medicine (RRIUM), Kolkata	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme
Regional Research Institute of Unani Medicine (RRIUM), New Delhi	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • Unani Speciality Clinics at Allopathic Hospitals
Regional Research Centre (RRC), Allahabad	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme • School Health Programme
Regional Research Centre (RRC), Silchar with Extension Centre at Karimganj	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs • General Out-patient Department (GOPD) Programme
Clinical Research Unit (CRU), Bengaluru	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs • General Out-patient Department (GOPD) Programme
Clinical Research Unit (CRU), Meerut	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs • General Out-patient Department (GOPD) Programme
Clinical Research Unit (CRU), Bhopal	<ul style="list-style-type: none"> • Clinical Research Programme • General Out-patient Department (GOPD) Programme
Clinical Research Unit (CRU), Burhanpur	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Mobile Clinical Research Programme • General Out-patient Department (GOPD) Programme

Centre	Activities
Clinical Research Unit (CRU), Edathala	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs • General Out-patient Department (GOPD) Programme
Clinical Research Unit (CRU), Kurnool	<ul style="list-style-type: none"> • Clinical Research Programme <ul style="list-style-type: none"> ❖ Validation of Unani Pharmacopoeial Drugs ❖ Validation of Unani Pharmacopoeial Fast-acting Drugs • General Out-patient Department (GOPD) Programme
Drug Standardisation Research Unit (DSRU), Ghaziabad	<ul style="list-style-type: none"> • Drug Standardisation Research Programme
Drug Standardisation Research Institute (DSRI), Ghaziabad	<ul style="list-style-type: none"> • Drug Standardisation Research Programme
Literary Research Institute of Unani Medicine (LRIUM), New Delhi	<ul style="list-style-type: none"> • Literary Research Programme
Chemical Research Unit (CRU) (Grant-in-aid), Aligarh	<ul style="list-style-type: none"> • Chemical Investigations of Unani Medicinal Plants

3.1.2. PROGRAMME-WISE ACTIVITIES

3.1.2.1. SURVEY AND CULTIVATION OF MEDICINAL PLANTS PROGRAMME

The Council has undertaken programme of extensive surveys of medicinal plants in different parts of the country, primarily with a view to collect and identify medicinal plants and recording basic data on ethno-pharmacological uses of plants from the tribal and other rural folks of the study area. The broad objectives of the programme are:

- To survey, collect and identify medicinal plants in different forest zones of the country;
- To study distribution, availability, ethno-pharmacological uses and threats of medicinal plants;
- To carry out experimental and field-scale cultivation of medicinal plants;
- To maintain a herbarium of medicinal plants and raw drugs for demonstration purposes;
- To maintain a demonstrable herbal garden;

- To document folk knowledge on medicinal uses of plants;
- To collect samples of genuine drugs from the forests for Pharmacopoeial standardisation work;
- To develop nursery of medicinal plants for demonstration purpose with a view to popularize them among masses.

This programme is being carried out at following research centers of the Council:

- Central Research Institute of Unani Medicine, Hyderabad
- Regional Research Institute of Unani Medicine, Chennai
- Regional Research Institute of Unani Medicine, Srinagar
- Regional Research Institute of Unani Medicine, Bhadrak
- Regional Research Institute of Unani Medicine, Aligarh

Ethnopharmacological Surveys

Under this programme, the Council undertook ethno-pharmacological surveys in different forest divisions/areas during the period under report. These include Dehradun Forest Division, Uttarakhand; Bhadrak, Jajpur, Balasore and Kendrapara Forest Divisions, Odisha; Munnar Forest Division, Kerala; Namakkal Forest Division, Tamil Nadu; Hyderabad, Medak, Nandyal and Mahabubnagar Forest Divisions in the states of Telangana and Andhra Pradesh; and Jhelam Valley, Anantnag, Bandipora and Kargil Forest Divisions, Jammu & Kashmir. As a result of the surveys conducted, 4,157 botanical specimens were collected by the surveyors; and 1,351 plants species were identified.

Herbarium

Plant specimens collected from the study areas including previous collection were mounted on herbarium sheets. During the reporting period, 1,555 such herbarium sheets were prepared and information pertaining to plant's botanical name, family, local name, Unani name (wherever available), date of collection, brief morphological features, medicinal/ other uses of plant were recorded on each herbarium sheet. Besides, 665 new index cards were compiled and 729 index cards were updated.

The survey team members during field studies collected 515 saplings of important medicinal species for plantation in the nurseries attached to the institutes.

The survey teams also collected 146 kg of raw drugs and sent to the Pharmacy Section of Central Research Institute of Unani Medicine (CRIUM), Hyderabad for preparation of Unani formulations.

Digitization of Herbarium Specimens

This activity was included in the programme for the first time this year. Under this activity, 50 herbarium sheets were digitized by the Council's research centres.

Folk Claims

The surveyors enquired from the local communities about traditional uses of plants. This information was systematized taxonomically, and efforts were made to develop a database for comparative analysis of the information recorded so far. As a result, 573 folk medicinal claims were recorded from the tribal inhabitants and other rural folks of the study areas. The Council has taken up a programme to publish this information in the form of books providing details comprising botanical name and family, synonyms, local name, Unani name, habit and habitat, wild or cultivated, medicinal efficacy claimed and name of the tribe, locality, collection number, part(s) used, mode of application, and biodynamic notes.

Experimental and Field-scale Cultivation of Medicinal Plants

Under this activity, the Council took up cultivation of some important medicinal plants used in Unani Medicine. These include Atrilal (*Ammi majus* L.), Afsanteen (*Artemisia absinthium* L.), Babchi (*Psoralea corylifolia* L.), Gulnar Farsi (*Punica granatum* Linn. abortive var.), Gurmarbuti (*Gymnema sylvestre* R Br.), Khatmi (*Althaea officinalis* L.), Khulanjan (*Alpinia galanga* Willd.), Unsul (*Urgenia indica* Kunth.), Sudab (*Ruta graveolens* Linn.), etc. As a result of the field-scale cultivation, 335 kg of raw drugs were obtained and supplied to the pharmacy section of CRIUM, Hyderabad for preparation of Unani formulations.

Herbal Garden and Nursery of Medicinal Plants

With a view to popularize medicinal plants among the masses, the Council launched a programme of cultivating about 150 common species in its *Ibn al-Baytar* Herbal Garden at CRIUM, Hyderabad and nurseries developed at Aligarh, Bhadrak, Chennai, Hyderabad and Srinagar. Some of the important and interesting species grown under this activity include: Amla (*Phyllanthus emblica* L.), Anar (*Punica granatum* L.), Ashok (*Saraca asoca* (Roxb.) Willd.), Atrilal (*Ammi majus* L.), Afsanteen (*Artemisia absinthium* L.), Arusa (*Adhatoda vasica* Nees.), Aspaghol (*Plantago ovata* Forsk.), Asl-us-Soos (*Glycyrrhiza glabra* Linn.), Asrol (*Rauvolfia serpentina* (L.) Benth. ex Kurz.), Bijasar (*Pterocarpus marsupium* Roxb.), Belgiri (*Aegle marmelos* (L.) Correa.), Babchi (*Psoralea corylifolia* L.), Banafsha (*Viola odorata* L.), Bhangra (*Eclipta alba* Hussk.), Brinjasif (*Achillea millefolium* L.), Fufal (*Areca catechu* L.), Gheekwar (*Aloe barbadensis* Mill.), Gulnar Farsi (*Punica granatum* L. abortive var.), Gurmar Buti (*Gymnema sylvestre* R. Br.), Hina (*Lawsonia inermis* L.), Irsa (*Iris ensata* Thunb), Jadwar (*Delphinium denudatum* Wall. ex & T.), Keora (*Pandanus tectorious* Soland. ex Parkinson.), Kaju (*Anacardium occidentale* L.), Khulanjan (*Alpinia galanga* Willd.), Konch (*Mucuna pruriens* L.), Mako (*Solanum nigrum* L.), Marorphali (*Helicteres isora* L.), Muqil (*Commiphora mukul* (Hook ex Stocks) Engl.), Palas (*Butea monosperma* (Lam.) Taub.), Qinnab (*Cannabis sativa* L.), Qurtum (*Carthamus tinctorius* L.), Rasan (*Inula racemosa* C.B. Clarke), Sadabahar (*Vinca rosea* L.), Sandal Surkh (*Pterocarpus santalinus* Lf.), Satawar (*Asparagus racemosus* Willd.), Sudab (*Ruta graveolens* Linn.), Tulsi (*Ocimum sanctum* L.), Turbud (*Ipomoea turpethum* R. Br.), Waj (*Acorus calamus* Linn.), etc.

3.1.2.2. DRUG STANDARDISATION RESEARCH PROGRAMME

The drug standardisation research programme is mainly concerned with evolving pharmacopoeial standards for single drugs and compound formulations of Unani Medicine included in various volumes of *National Formulary of Unani Medicine* and *Essential Drugs List* for their incorporation in the *Unani Pharmacopoeia of India*. The work on compound formulations includes development of standard operating procedures (SOPs) for their manufacture followed by the development of their pharmacopoeial standards. Besides, standardisation of investigational drugs for clinical trials at the Council and estimation of heavy metals, microbial load, aflatoxin content and pesticidal residues in the drugs are also parts of this programme. Chemical investigations of Unani medicinal plants are also being carried out under this programme. The standardisation work is carried out in accordance with the format approved by Unani Pharmacopoeia Committee of the Government of India through the following research centres of the Council as well as different laboratories through UPC projects:

- Drug Standardisation Research Institute (DSRI), Ghaziabad.
- Central Research Institute of Unani Medicine (CRIUM), Hyderabad
- Regional Research Institute of Unani Medicine (RRIUM), Chennai
- Regional Research Institute of Unani Medicine (RRIUM), Srinagar
- Regional Research Institute of Unani Medicine (RRIUM), Aligarh
- Drug Standardisation Research Unit (DSRU), Ghaziabad
- Chemical Research Unit (Grant-in-Aid), AMU, Aligarh

During the reporting period, the following works were carried out:

- Development of Standard Operating Procedures (SOPs) for Manufacture of Compound Unani Formulations and their Pharmacopoeial Standards
- Development of Pharmacopoeial Standards of Single Drugs
- Quality Control of Research Drugs
 1. Quality control of single drugs
 2. Quality control of compound formulations
- Development of Unani Pharmacopoeia of India
- Shelf-life Studies of Unani Formulations
- Redesigning of Dosage Forms of Unani Formulations

Development of Standard Operating Procedures (SOPs) for Manufacture of Compound Unani Formulations and their Pharmacopoeial Standards

Under this programme, SOPs for manufacture of the following 47 compound Unani formulations were developed followed by the development of their pharmacopoeial standards at various

research centres of the Council:

- | | |
|-------------------------------|------------------------------|
| • Akleen | • Gulqand-e-Gulab |
| • Gulqand-e-Gurhal | • Habb-e-Anar |
| • Habb-e-Bawasir Badi | • Habb-e-Bawasir Khooni |
| • Habb-e-Irqun Nisa | • Habb-e-Mulayyin |
| • Habb-e-Muqawwi-e-Khas | • Habb-e-Muqil Jadeed |
| • Habb-e-Mushil | • Habb-e-Narkachoor |
| • Habb-e-Nishat Jadeed | • Habb-e-Sadar |
| • Habb-e-Sara Khas | • Habb-e-Yarqan |
| • Imsakeen | • Kundri |
| • Majoon Nishat Angaiz | • Majoon-e-Saalab |
| • Majun Punba Dana | • Marham-e-Gulabi |
| • Marham-e-Kafoori | • Marham-e-Quba |
| • Mufarreh-e-Azam | • Mufarreh-e-Yaqooti Motadil |
| • Muneish | • Murabba-e-Belgiri |
| • Murabba-e-Gajar | • Murabba-e-Halela |
| • Nawed-e-Nau | • Qairooti-e-Aarad-e-Karsana |
| • Qalbeen | • Sharbat-e-Anar Shirin |
| • Sharbat-e-Buzoori Motadil | • Sharbat-e-Gurhal |
| • Sharbat-e-Khaksi | • Sharbat-e-Nilofar |
| • Sharbat-e-Toot Siyah | • Sharbat-e-Zoofa Murakkab |
| • Sikanjabeen Buzoori Motadil | • Sikanjabeen Sada |
| • Sufoof-e-Mulaiyyin | • Sunoon-e-Mukhrij-e-Rutubat |
| • Sunoon-e-Zard | • Zimad-e-Mohallil |
| • Zimad-e-Tehal | |

Development of Pharmacopoeial Standards of Single Drugs

Under the programme, pharmacopoeial standards of the following 10 single drugs were developed at various research centres of the Council:

- Dandi Harsingar (*Nyctanthes arbortristis* Linn.)
- Gul-e-Dhawa (*Anogeissus latifolia* Bedd.)
- Gul-e-Gurhal (*Hibiscus rosa sinensis* Linn.)

- Gul-e-Sadberg (*Tagetes erecta* Linn.)
- Narkachoor (*Curcuma zeodaria* Linn.)
- Sammunder Sokh (*Argyreia speciosa* Sweet.)
- Satt-e-Pudina (*Mentha viridis* Linn.)
- Shagufa-e-Anar (*Punica granatum* Linn.)
- Shagufa-e-Babool (*Acacia nilotica* (L) Del.)
- Shubb-e-Amani (Alum)

Quality Control of Research Drugs

(A) Quality Control of Single Drugs

During the reporting period, following 92 samples of various single drugs were tested for their quality control:

- | | |
|----------------------------------|----------------------------------|
| • Afsanteen | • Alsi |
| • Asl (04 Samples) | • Babchi (50 Samples) |
| • Berg-e-Rehan | • Chiraiya |
| • Filfil Siyah (02 Samples) | • Ghariqoon |
| • Gilo | • Kasni |
| • Katan | • Khar-e-Khasak |
| • Khulanjan | • Kulthi (04 Samples) |
| • Maghz-e-Kadu | • Mayeen Kalan |
| • Neem | • Roughan-e-Kunjad (05 Samples) |
| • Roughan-e-Sharsif (05 Samples) | • Roughan-e-Zaitoon (05 Samples) |
| • Rubb-us-Soos | • Sumbul-ut-Teeb |
| • Zanjabeel | • Zeera Siyah |

(B) Quality Control of Compound Formulations

During the reporting period, following 24 compound Unani formulations prepared at the Pharmacy of CRIUM, Hyderabad were tested for quality control:

- | | |
|---------------------------------|--------------------------|
| • Arq-e-Hara Bhara (02 Samples) | • Habb-e-Asgandh |
| • Habb-e-Bawaseer Damiya | • Habb-e-Hilteet |
| • Habb-e-Surfa | • Itrifal Muqawwi Dimagh |

- | | |
|----------------------------|---|
| • Itrifal Shahatra | • Itrifal Ustukhuddus |
| • Jawarish-e-Shahi | • Khamira Sandal Sada |
| • Khamira-e-Gaozaban Sada | • Laooq-e-Katan |
| • Laooq-e-Sapistan | • Majoon-e-Chobchini |
| • Majoon-e-IQ (02 Samples) | • Majoon-e-Jograj Googal |
| • Majoon-e-Muqawwi-e-Reham | • Polyherbal formulation for Dengue Fever |
| • Qurs-e-Tabasheer | • Qurs-e-Tabasheer Sartani |
| • Sharbat-e-Sadar | • Sufoof-e-Habisuddam |

Standardisation of Unani Formulations

The standardisation of the following Unani formulations prepared in the DSRU component of CRIUM, Hyderabad was done during the reporting period:

- No. of ointments prepared: 04
- Quantity prepared: i) UNIM-044 – 12 kg; ii) UNIM-045 – 07 kg; iii) UNIM-046 – 07 kg; iv) PTV 2 – 03 kg

Development of phytochemical markers for the Unani herbal formulations was under progress. Also, the phytochemical extraction and isolation of compounds from Unani formulations were under progress.

Development of Unani Pharmacopoeia of India

The Council after being designated as Secretariat for Unani Pharmacopoeia Committee (UPC) by the Ministry of AYUSH organised meetings of UPC and its Sub-committees. During the reporting period, the Council initiated revisiting of Unani Pharmacopoeia of India (UPI) and National Formulary of Unani Medicine (NFUM). On the recommendation of UPC, six volumes of NFUM were revisited and reviewed by the subject experts; and revisiting of UPI Part-I (Single Drugs) and UPI Part-II (Formulations) was under progress.

Shelf-life Studies of Unani Formulations

The Council on the directives of Ayurvedic, Siddha and Unani Drugs Technical Advisory Board (ASUDTAB) initiated shelf-life studies of Unani formulations in order to fix their expiry. The protocol of shelf-life studies was prepared by the Council and approved by the Unani Pharmacopoeia Committee, and studies on four Unani formulations – *Itrifal-e-Ustukhuddus*, *Marham-e-Safaid Kafoori*, *Jawarish-e-Jalinoos*, and *Majoon-e-IQ* were completed at CRIUM, Hyderabad during the reporting period.

Redesigning of Dosage Forms of Unani Formulations

During the reporting period, the Council undertook the redesigning of Unani formulations in order to reduce their volume/ size and increase their bioavailability. This work was initiated in collaboration with Faculty of Pharmacy, Jamia Hamdard, New Delhi and National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad. During the reporting period, redesigning of ten Unani classical formulations was under progress.

3.1.2.3. CLINICAL RESEARCH PROGRAMME

Preclinical Studies

Preclinical safety and pharmacological studies on 15 classical Unani drugs including modified form of three drugs were undertaken at the Council's pharmacological units. Preclinical studies were also carried out in collaboration with pharmacology departments of some reputed scientific institutions. During the reporting period, the following studies were undertaken at the Council's pharmacological units:

Safety evaluation of *Jawarish Jalinoos* (classical and modified version) at CRIUM, Hyderabad

Sub-chronic oral toxicity study of *Jawarish Jalinoos* (classical and modified version) was conducted at CRIUM, Hyderabad as per the OECD Test Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study). The animals of both sexes weighing 100-150 gm were randomly divided into five groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. *Jawarish Jalinoos* was administered orally at a limit dose of 2000 mg/kg b.w./day to group II and modified version of *Jawarish Jalinoos* was administered to group III, IV and V at a limit dose of 506, 1012 and 2024 mg/kg b.w./day for 90 days. Animals were periodically observed for clinical signs of toxicity, mortality, morbidity, body weight and feed consumption throughout the experiment. Repeated oral administration of *Jawarish Jalinoos* (classical and modified version) for 90 days showed no significant differences in body weight gain, feed consumption, haematology, clinical biochemistry, and serum electrolytes levels as compared to control group. The findings of the study showed that both classical and modified forms of *Jawarish Jalinoos* were safe at the tested dose levels and can be used in human studies for long duration.

Safety evaluation of *Itrifal Ustukhuddus* (classical and modified version) at CRIUM, Hyderabad

Acute (14 days) and sub-chronic (90 days) oral toxicity studies of *Itrifal Ustukhuddus* (classical and modified version) were conducted at CRIUM, Hyderabad as per the OECD Test Guidelines 425 and 408. In both the experiments, group-I served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. For acute toxicity, animals of both sexes weighing 100-150 gm were randomly divided into two groups. *Itrifal Ustukhuddus* in a single dose of 5000 mg/kg b.w. was given orally to group-II. For sub-chronic

toxicity study, animals of both sexes weighing 100-150 gm were randomly divided into six groups. *Itrifal Ustukhuddus* was administered orally at doses of 1028 and 2000 mg/kg b.w./day and modified version of *Itrifal Ustukhuddus* in limit dose of 357, 1070 and 1783 mg/kg b.w./day for 90 days. Animals were periodically observed for clinical signs of toxicity, mortality, morbidity, body weight and feed consumption throughout the experiment. Single dose as well as repeated oral administration of *Itrifal Ustukhuddus* (classical and modified version) for 90 days showed no significant differences in body weight gain, feed consumption, haematology, clinical biochemistry, and serum electrolytes levels as compared to control group. The findings of the study showed that both classical and modified forms of *Itrifal Ustukhuddus* were safe at the tested dose levels and can be used in human studies for long duration.

Safety evaluation of *Majoon Kundur* at CRIUM, Hyderabad

Acute oral toxicity study of *Majoon Kundur* was conducted in Sprague Dawley rats at CRIUM, Hyderabad as per the OECD Test Guideline 425. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, *Majoon Kundur* was administered in a single dose of 5000 mg/kg b.w. orally. Rats were observed for lethality and clinical signs and symptoms of toxicity for 14 days post-treatment. As no lethality was observed following treatment with *Majoon Kundur* in 3 consecutive animals, dosing to further animals was stopped. All the three rats were sacrificed on day 15 and necropsy was performed. No treatment related gross pathological abnormality was observed in any group. Under the given conditions, no clinical signs and symptoms of toxicity, alteration in body weight and feed intake were observed at the dose of 5000 mg/kg b.w. of *Majoon Kundur*. Therefore, oral LD50 of *Majoon Kundur* in the Sprague Dawley rats was estimated to be greater than 5000 mg/kg body weight.

Safety evaluation of *Jawarish Shahi* at CRIUM, Hyderabad

Acute oral toxicity study of *Jawarish Shaahi* was conducted in Sprague Dawley rats at CRIUM, Hyderabad as per the OECD Test Guideline 425. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, *Jawarish Shahi* was administered in a single dose of 5000 mg/kg b.w. orally. Rats were observed for lethality and clinical signs and symptoms of toxicity for 14 days post-treatment. As no lethality was observed following treatment with *Jawarish Shaahi* in 3 consecutive animals, dosing to further animals was stopped. All the three rats were sacrificed on day 15 and necropsy was performed. No treatment related gross pathological abnormality was observed in any group. Under the given conditions, no clinical signs and symptoms of toxicity, alteration in body weight and feed intake were observed at the dose of 5000 mg/kg b.w. of *Jawarish Shaahi*. Therefore, oral LD50 of *Jawarish Shahi* in the Sprague Dawley rats was estimated to be greater than 5000 mg/kg body weight.

Safety evaluation of *Safoof-e-Chutki* (classical and modified version) at RRIUM, Srinagar

Acute, sub-acute and sub-chronic toxicity studies of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) were conducted at RRIUM, Srinagar.

Acute Toxicity Study

Acute oral toxicity studies of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) were conducted in male and female Wistar rats. For both the experiments, the animals were divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, aqueous suspension of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) was given in a dose of 5000 mg/kg b.w./day orally. Animals were weighed initially and at weekly intervals. The effect of the drug *Safoof-e-Chutki* (classical and modified version) on water consumption and feed consumption was monitored and recorded on weekly basis. Animals were observed carefully for any behavioral and neurological changes for 24 hours after the administration of the drug, thereafter twice daily and sacrificed after 14 days of the drug administration. Blood was collected for haematological and biochemical parameter analysis. The gross examination of the tissues and organs was carried out. In both the experiments, the drug *Safoof-e-Chutki* (classical and modified forms) showed no effect on the body weight gain of the treated male and female rats, and the treated rats were found to grow up in a normal fashion. There were no significant changes in body weight, feed and water consumption, gross behavior, and haematological and biochemical parameters as compared with the respective male and female controls. The results of these studies showed that both classical and modified forms of *Safoof-e-Chutki* were safe at the tested dose level.

Sub-acute Toxicity Study

Sub-acute oral toxicity studies of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) were conducted in male and female Wistar rats. For both the experiments, the animals were divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 28 days. In group-II, aqueous suspension of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) was given in a dose of 1000 mg/kg b.w./day orally for 28 days. Animals were weighed initially and at weekly intervals. The effect of the drug *Safoof-e-Chutki* (classical and modified version) on water consumption and feed consumption was monitored and recorded on weekly basis. On the next day, blood samples were collected for haematological and biochemical parameter analysis. Gross examination of the tissues and organs was carried out. The physiological parameters like body weight change, water consumption and feed consumption were also monitored on weekly basis. There were no significant changes in body weight, feed and water consumption, gross behavior, and haematological and biochemical parameters as compared with the respective male and female controls. The results of these studies showed that both classical and modified forms of *Safoof-e-Chutki* were safe at the tested dose level.

Sub-chronic Toxicity Study

Sub-chronic oral toxicity studies of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) were conducted in male and female Wistar rats. For both the experiments, the animals were divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 90 days. In group-II, aqueous suspension of *Safoof-e-Chutki* (classical form) and *Sharbat-e-Chutki* (modified form) was given in a dose of 1000 mg/kg b.w./day orally for 90 days. Animals were weighed initially and at

weekly intervals. The effect of the drug *Safoof-e-Chutki* (classical and modified forms) on water consumption and feed consumption was monitored and recorded on weekly basis. On the next day, blood samples were collected for haematological and biochemical parameter analysis. Gross examination of the tissues and organs was carried out. The physiological parameters like body weight change, water consumption and feed consumption were also monitored on weekly basis. There were no significant changes in body weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of these studies showed that both classical and modified forms of *Safoof-e-Chutki* were safe at the tested dose level, and can be used in human studies for long duration.

Safety evaluation of *Qurs Tabasheer Sartani* at RRIUM, Srinagar

Acute and sub-acute toxicity studies of *Qurs Tabasheer Sartani* were conducted at RRIUM, Srinagar.

Acute Toxicity Study

Acute oral toxicity study of *Qurs Tabasheer Sartani* was conducted in male and female Wistar rats. The rats were randomly divided into two groups of 10 rats each. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, aqueous suspension of *Qurs Tabasheer Sartani* was given in a dose of 3000mg/kg b.w. orally. Animals were weighed initially and at weekly intervals. The effect of the drug *Qurs Tabasheer Sartani* on water consumption and feed consumption was monitored and recorded on weekly basis. Animals were observed carefully for any behavioral and neurological changes for 24 hours after the administration of the drug, thereafter twice daily and sacrificed after 14 days of the drug administration. Blood was collected for haematological and biochemical parameter analysis. The gross examination of the tissues and organs was carried out. The drug *Qurs Tabasheer Sartani* showed no effect on the body weight gain of the treated male and female rats, and the treated rats were found to grow up in a normal fashion. There were no significant changes in body weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of the study showed that the drug *Qurs Tabasheer Sartani* was safe at the tested dose level.

Sub-acute Toxicity Study

Sub-acute oral toxicity study of *Qurs Tabasheer Sartani* was conducted in male and female Wistar rats. The animals were divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 28 days. In group-II, aqueous suspension of *Qurs Tabasheer Sartani* was given in a dose of 1500 mg/kg b.w./day orally for 28 days. Animals were weighed initially and at weekly intervals. The effect of the drug *Qurs Tabasheer Sartani* on water consumption and feed consumption was monitored and recorded on weekly basis. On the next day, blood samples were collected for haematological and biochemical parameter analysis. Gross examination of the tissues and organs was carried out. The physiological parameters like body weight change, water consumption and feed consumption were also monitored on weekly basis. There were no significant changes in body

weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of the study showed that the drug *Qurs Tabasheer Sartani* was safe at the tested dose level.

Safety evaluation of *Arq Harabhara* at RRIUM, Srinagar

Acute and sub-acute toxicity studies of *Arq Harabhara* were conducted at RRIUM, Srinagar.

Acute Toxicity Study

Acute oral toxicity study of *Arq Harabhara* was conducted in male and female Wistar rats. The animals were divided into two groups. First group served as control and was administered single dose of aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, *Arq Harabhara* was given 80 ml/kg b.w. orally in divided doses. All the animals were weighed initially and at weekly intervals. The effect of the drug *Arq Harabhara* on water consumption and feed consumption was monitored and recorded on weekly basis. Animals were observed carefully for any behavioral and neurological changes for 24 hours after the administration of the drug, thereafter twice daily and sacrificed after 14 days of the drug administration. The blood samples were collected for haematological and biochemical parameter analysis. The gross examination of the tissues and organs was carried out. The drug *Arq Harabhara* showed no effect on the body weight gain of the treated male and female rats, and the treated rats were found to grow up in a normal fashion. There were no significant changes in body weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of the study showed that the drug *Arq Harabhara* was safe at the tested dose level.

Sub-acute Toxicity Study

Sub-acute oral toxicity study of *Arq Harabhara* was conducted in male and female Wistar rats. The animals were divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 28 days. In group-II, aqueous suspension of *Arq Harabhara* was given 80 ml/kg b.w./day in divided doses orally for 28 days. Animals were weighed initially and at weekly intervals. The effect of the drug *Arq Harabhara* on water consumption and feed consumption was monitored and recorded on weekly basis. On the next day, blood samples were collected for haematological and biochemical parameter analysis. Gross examination of the tissues and organs was carried out. The physiological parameters like body weight change, water consumption and feed consumption were also monitored on weekly basis. There were no significant changes in body weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of the study showed that the drug *Arq Harabhara* was safe at the tested dose level.

Safety evaluation of *Majoon IQ* at RRIUM, Srinagar

Chronic oral toxicity study of *Majoon IQ* was carried out in albino Wistar rats of either sex at RRIUM, Srinagar. The rats were randomly divided into two groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for

180 days. In group-II, aqueous suspension of *Majoon IQ* was given in a dose of 1600mg/kg b.w./day for 180 days. The rats were observed carefully for any behavioral and neurological changes for next 24 hours after the administration of the drug and twice daily thereafter till the completion of experimentation. The blood samples were collected for haematological and biochemical parameter analysis. Gross examination of the tissues and organs was carried out. The physiological parameters like body weight change, water consumption and feed consumption were also monitored on weekly basis. The drug *Majoon IQ* showed no effect on the body weight gain of the treated male and female rats, and the treated rats were found to grow up in a normal fashion. There were no significant changes in body weight, feed and water consumption, gross behavior, and their haematological and biochemical parameters as compared with the respective male and female controls. The results of the study showed that the drug *Majoon IQ* was safe at the tested dose level, and can be used in human studies for long duration.

Safety evaluation of *Jawarish Zarooni Sada* at RRIUM, Aligarh

Sub-chronic oral toxicity study of *Jawarish Zarooni Sada* was conducted at RRIUM, Aligarh. The animals of both sexes weighing 100-150 gm were randomly divided into three groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 90 days. In group-II and III, *Jawarish Zarooni Sada* was given in the dose of 1000 mg/kg and 2000 mg/kg b.w. orally for 90 days. The animals were kept under observation for change in skin and fur, and mucous membrane, tremors, convulsion, salivation, etc. On the 91st day, blood of all the three groups of animals was collected and analysed for hematological and biochemical parameters. There was no significant change in hematological and biochemical parameters, and gross behavioral pattern in test group in comparison to control group. The results of the study showed that the drug *Jawarish Zarooni Sada* was safe at the dose level of 1000 mg/kg and 2000 mg/kg b.w. when administered orally, and can be used in human studies for long duration.

Safety evaluation of *Arq-e-Mako Murakkab* at RRIUM, Aligarh

Sub-chronic oral toxicity study of *Arq-e-Mako Murakkab* was conducted at RRIUM, Aligarh. The animals of both sexes weighing 100-150 gm were randomly divided into three groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 90 days. In group-II and III, *Arq-e-Mako Murakkab* was given in the dose of 05 ml/kg and 15 ml/kg b.w. orally for 90 days. The animals were kept under observation for change in skin and fur, and mucous membrane, tremors, convulsion, salivation, etc. On the 91st day, blood of all the three groups of animals was collected and analysed for haematological and biochemical parameters. There was no significant change in haematological and biochemical parameters, and gross behavioral pattern in test group in comparison to control group. The results of the study showed that the drug *Arq-e-Mako Murakkab* was safe at the tested dose levels, and can be used in human studies for long duration.

Safety evaluation of *Majoon Nisyan* at RRIUM, Aligarh

Acute and sub-chronic oral toxicity studies of *Majoon Nisyan* were carried out at RRIUM, Aligarh.

Acute Toxicity Study

Acute oral toxicity study of *Majoon Nisyan* was carried out in both sexes of albino Wistar rats. The animals were divided into two groups. First group served as control and was administered a single dose of aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, *Majoon Nisyan* was given in a single dose of 2000 mg/kg b.w. orally. The animals were kept under observation for physical and neuro-behavioural changes for 14 days. The results of the study showed that the drug *Majoon Nisyan* was safe at the tested dose level.

Sub-chronic Toxicity Study

Sub-chronic oral toxicity study of *Majoon Nisyan* was carried out in albino Wistar rats. The animals of both sexes weighing 100-150 gm were randomly divided into three groups. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 90 days. In group-II and III, *Majoon Nisyan* was given in the dose of 500 mg/kg and 2000 mg/kg b.w. orally for 90 days. The animals were kept under observation for change in skin and fur, and mucous membrane, tremors, convulsion, salivation, etc. On the 91st day, blood of all the three groups of animals was collected and analysed for hematological and biochemical parameters. There was no significant change in haematological and biochemical parameters, and gross behavioral pattern in test group in comparison to control group. The results of the study showed that the drug *Majoon Nisyan* was safe at the tested dose levels, and can be used in human studies for long duration.

Safety evaluation of *Itrifal Muqawwi-e-Dimagh* at RRIUM, Aligarh

Acute and sub-chronic oral toxicity studies of *Itrifal Muqawwi-e-Dimagh* were carried out at RRIUM, Aligarh.

Acute Toxicity Study

Acute oral toxicity study of *Itrifal Muqawwi-e-Dimagh* was carried out in female albino Wistar rats. The animals were divided into two groups of five animals each. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally. In group-II, *Itrifal Muqawwi-e-Dimagh* was given in a single dose of 2000 mg/kg b.w. orally. The animals were kept under observation for physical and neuro-behavioural changes for 14 days. The results of the study showed that the drug *Itrifal Muqawwi-e-Dimagh* was safe at the tested dose level.

Sub-chronic Toxicity Study

Sub-chronic oral toxicity study of *Itrifal Muqawwi-e-Dimagh* was carried out in both sexes of albino Wistar rats. The animals were divided into three groups of five animals each. First group served as control and was administered aqueous suspension of 0.3% carboxymethyl cellulose orally for 90 days. In group-II and III, aqueous suspension of *Itrifal Muqawwi-e-Dimagh* was given in the dose of 1000 mg/kg and 2000 mg/kg b.w. orally for 90 days. The animals were kept under observation for change in skin and fur, and mucous membrane, tremors, convulsion, salivation, etc. On the 91st day, blood of all the three groups of animals was collected and analysed for haematological and biochemical parameters. There was no

significant change in haematological and biochemical parameters, and gross behavioral pattern in test group in comparison to control group. The results of the study showed that the drug *Itrifal Muqawwi-e-Dimagh* was safe at the tested dose levels, and can be used in human studies for long duration.

Clinical Studies

The clinical research programme of the Council deals with the methods of diagnosis and treatment of diseases and aims at critical appraisal of the theory of pathogenesis, symptomatology, clinical methods of diagnosis, principles and methods of treatment, and the drug and diet therapies peculiar to Unani Medicine. Under this programme, clinical studies on different diseases were undertaken with a view to develop safe and effective Unani treatments. Besides, clinical validation of safety and efficacy of Unani pharmacopoeial formulations was also conducted. Clinical validation of Unani pharmacopoeial fast-acting drugs was also undertaken in different diseases.

This programme continued at the following centres:

- Central Research Institute of Unani Medicine (CRIUM), Hyderabad
- Central Research Institute of Unani Medicine (CRIUM), Lucknow
- Regional Research Institute of Unani Medicine (RRIUM), Chennai
- Regional Research Institute of Unani Medicine (RRIUM), Bhadrak
- Regional Research Institute of Unani Medicine (RRIUM), Patna
- Regional Research Institute of Unani Medicine (RRIUM), Aligarh
- Regional Research Institute of Unani Medicine (RRIUM), Mumbai
- Regional Research Institute of Unani Medicine (RRIUM), Srinagar
- Regional Research Institute of Unani Medicine (RRIUM), Kolkata
- Regional Research Institute of Unani Medicine (RRIUM), New Delhi
- Regional Research Centre (RRC), Allahabad
- Regional Research Centre (RRC), Silchar/ Karimganj
- Clinical Research Unit (CRU), Bengaluru
- Clinical Research Unit (CRU), Meerut
- Clinical Research Unit (CRU), Bhopal
- Clinical Research Unit (CRU), Burhanpur
- Clinical Research Unit (CRU), Edathala
- Clinical Research Unit (CRU), Kurnool

CENTRE-WISE ALLOCATION OF DISEASES FOR CLINICAL STUDIES ON SAFETY AND EFFICACY OF UNANI DRUGS

Centre	Disease
Central Research Institute of Unani Medicine (CRIUM), Hyderabad	<i>Baraṣ</i> (Vitiligo), <i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Zaghtuddam Qawī Lāzimī</i> (Essential hypertension), <i>Waram al-Kabid</i> (Hepatitis), <i>Iltihab Tajawif al-Anf</i> (Sinusitis), <i>Kasrat-i Shahmuddam</i> (Hyperlipidaemia), <i>Dā' al-Ṣadaf</i> (Psoriasis), <i>Zu'f al-Masāna</i> (Overactive bladder), <i>Nisyān</i> (Amnesia), <i>Zu'f al-Dimagh</i> (Cerebroasthenia), <i>Ḥaṣah al-Kulya</i> (Nephrolithiasis), <i>Khafaqān</i> (Palpitation), <i>Sayalān al-Rahim</i> (Leucorrhoea) and <i>Tahajjur-i Maḥāṣil</i> (Osteoarthritis)
Central Research Institute of Unani Medicine (CRIUM), Lucknow	<i>Waja' al-Maḥāṣil</i> (Rheumatoid arthritis), <i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Siman Mufriṭ</i> (Obesity), <i>Baraṣ</i> (Vitiligo), <i>Faqr al-Dam</i> (Anaemia), <i>Didān al-Am'ā'</i> (Helminthiasis), <i>Sū' al-Hazm</i> (Dyspepsia), <i>Sayalān al-Rahim</i> (Leucorrhoea), <i>Niqris</i> (Gout) and <i>Nisyān</i> (Amnesia)
Regional Research Institute of Unani Medicine (RRIUM), Chennai	<i>Iltihāb-i Kabid</i> (Infective hepatitis), <i>Tahajjur-i Maḥāṣil</i> (Osteoarthritis), <i>Nisyān</i> (Amnesia), <i>Nazla-i Hārr</i> (Common Cold), <i>Ṣudā'</i> (Headache), <i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Qulā'</i> (Stomatitis), <i>Waja' al-Asnān</i> (Toothache), <i>Niqris</i> (Gout), <i>Ḥaṣah al-Kulya</i> (Nephrolithiasis), <i>Sharā-i Muzmin</i> (Chronic Urticaria), <i>Kalaf</i> (Melasma) and <i>Waram-i Ḥalaq</i> (Pharyngitis)
Regional Research Institute of Unani Medicine (RRIUM), Bhadrak	<i>Dā' al-Fīl</i> (Lymphatic Filariasis), <i>Jarab</i> (Scabies), <i>Busūr-i Jild</i> (Macules/ pustules), <i>Su'āl Raṭb</i> (Productive Cough), <i>Waja' al-Asnān</i> (Toothache), <i>Ḥaṣah al-Kulya</i> (Nephrolithiasis), <i>Sharā-i Muzmin</i> (Chronic Urticaria), <i>Waram-i Ḥalaq</i> (Pharyngitis), <i>Bawāsīr Dāmiya</i> (Bleeding Piles), <i>Nazla-i Hārr</i> (Common Cold), <i>Ṣudā'</i> (Headache), <i>Zu'f al-Ishtihā</i> (Anorexia), <i>Didān al-Am'ā'</i> (Intestinal Worms) and <i>Qulā'</i> (Stomatitis)
Regional Research Institute of Unani Medicine (RRIUM), Patna	<i>Dā' al-Fīl</i> (Lymphatic Filariasis), <i>Waja' al-Maḥāṣil</i> (Rheumatoid arthritis), <i>Sū' al-Hazm</i> (Dyspepsia), <i>Busūr-i Jild</i> (Macules/ pustules), <i>Sayalān al-Rahim</i> (Leucorrhoea), <i>Nazla-i Hārr</i> (Common Cold),

Centre	Disease
Regional Research Institute of Unani Medicine (RRIUM), Aligarh	<i>Qulā'</i> (Stomatitis), <i>Şudā'</i> (Headache), <i>Waja' al-Asnān</i> (Toothache), <i>Waram-i Halaq</i> (Pharyngitis), <i>Sharā-i Muzmin</i> (Chronic Urticaria), <i>Jarab</i> (Scabies) and <i>Zu'f al-Ishtihā</i> (Anorexia)
Regional Research Institute of Unani Medicine (RRIUM), Mumbai	<i>Baraş</i> (Vitiligo), <i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Zaghtuddam Qawī Lāzimī</i> (Essential hypertension), <i>Sayalān al-Rahim</i> (Leucorrhoea), <i>Zu'f al-Ishtihā</i> (Anorexia), <i>Khafaqān</i> (Palpitation), <i>Faqr al-Dam</i> (Anaemia), <i>Waja' al-Mafāşil</i> (Rheumatoid arthritis) and <i>Niqris</i> (Gout)
Regional Research Institute of Unani Medicine (RRIUM), Srinagar	<i>Zaghtuddam Qawī Lāzimī</i> (Essential hypertension), <i>Waja' al-Mafāşil</i> (Rheumatoid arthritis), <i>Nisyān</i> (Amnesia), <i>Zu'f al-Dimagh</i> (Cerebro-asthenia), <i>Qulā'</i> (Stomatitis), <i>Şudā'</i> (Headache), <i>Waja' al-Asnān</i> (Toothache), <i>Surfa Yābis</i> (Dry cough), <i>Waram-i Halaq</i> (Pharyngitis), <i>Sharā-i Muzmin</i> (Chronic Urticaria) and <i>Zu'f al-Ishtihā</i> (Anorexia)
Regional Research Institute of Unani Medicine (RRIUM), Kolkata	<i>Baraş</i> (Vitiligo), <i>Zaghtuddam Qawī Lāzimī</i> (Essential hypertension), <i>Haşah al-Kulya</i> (Nephrolithiasis), <i>Surfa Yābis</i> (Dry cough), <i>Jarab</i> (Scabies) and <i>Zu'f al-Ishtihā</i> (Anorexia)
Regional Research Institute of Unani Medicine (RRIUM), New Delhi	<i>Bawāsīr Dāmiya</i> (Bleeding Piles), <i>Waram al-Kabid</i> (Hepatitis), <i>Dīdān al-Am'a'</i> (Helminthiasis), <i>Sū' al-Hazm</i> (Dyspepsia) and <i>Kalaf</i> (Melasma)
Regional Research Institute of Unani Medicine (RRIUM), New Delhi	<i>Baraş</i> (Vitiligo), <i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Zaghtuddam Qawī Lāzimī</i> (Essential hypertension), <i>Zahīr</i> (Dysentery), <i>Surfa Yābis</i> (Dry cough), <i>Faqr al-Dam</i> (Anaemia), <i>Haşah al-Kulya</i> (Nephrolithiasis), <i>Sayalān al-Rahim</i> (Leucorrhoea) and <i>Tahajjur-i Mafāşil</i> (Osteoarthritis)
Regional Research Centre (RRC), Allahabad	<i>Zayābītus Sukkari Qism-i Sāni</i> (Diabetes mellitus Type-II), <i>Haşah al-Kulya</i> (Nephrolithiasis), <i>Khafaqān</i> (Palpitation), <i>Jarab</i> (Scabies), <i>Ishāl</i> (Diarrhoea) and <i>Su'al</i> (cough)
Regional Research Centre (RRC), Silchar with Extension Centre at Karimganj	<i>Nazla-i Hārr</i> (Common Cold)

Centre	Disease
Clinical Research Unit (CRU), Bengaluru	<i>Dā' al-Ṣadaf</i> (Psoriasis), <i>Zayābītus Sukkari Qism-i Sānī</i> (Diabetes Mellitus Type-II) and <i>Waja' al-Mafāṣil</i> (Rheumatoid Arthritis)
Clinical Research Unit (CRU), Meerut	<i>Zu'f al-Ishtihā'</i> (Anorexia), <i>Surfa Yābis</i> (Dry Cough), <i>Sū' al-Hazm</i> (Dyspepsia), <i>Zahīr</i> (Dysentery) and <i>Waja' al-Mafāṣil</i> (Rheumatoid Arthritis)
Clinical Research Unit (CRU), Bhopal	<i>Nār-i Fārsi</i> (Eczema), <i>Dā' al-Ṣadaf</i> (Psoriasis), <i>Ḥaṣāh al-Kulya</i> (Nephrolithiasis) and <i>Zahīr</i> (Dysentery)
Clinical Research Unit (CRU), Burhanpur	<i>Niqris</i> (Gout), <i>Ḥaṣāh al-Kulya</i> (Nephrolithiasis) and <i>Busūr Jild</i> (Macules/ Pustules)
Clinical Research Unit (CRU), Edathala	<i>Sayalān al-Rahim</i> (Leucorrhoea) and <i>Zu'f al-Ishtihā'</i> (Anorexia)
Clinical Research Unit (CRU), Kurnool	<i>Zu'f al-Ishtihā'</i> (Anorexia), <i>Sū' al-Hazm</i> (Dyspepsia), <i>Bawāsīr</i> (Piles), <i>Nazla-i Hārr</i> (Common Cold), <i>Su'āl-i Raṭb</i> (Productive Cough), <i>Qulā'</i> (Stomatitis), <i>Sudā'</i> (Headache), <i>Waja' al-Asnān</i> (Toothache), <i>Sharā</i> (Urticaria) and <i>Waram-i Halaq</i> (Pharyngitis)

AMRAZ-E-JILD (SKIN DISORDERS)

BARAŞ (VITILIGO)

Clinical studies on *Baraş* (Vitiligo) continued at Central Research Institute of Unani Medicine (CRIUM), Hyderabad. During the reporting period, the following studies were conducted:

Evaluation of therapeutic efficacy of a combination of coded Unani drugs UNIM-001 and UNIM-003 in *Baraş* (Vitiligo) patients (CRIUM, Hyderabad)

Therapeutic efficacy of a combination of two coded Unani drugs, UNIM-001 and UNIM-003 was evaluated in 4,174 patients of *Baraş* (Vitiligo). The drug UNIM-001 was given in the dose of two tablets (500 mg each) twice daily with water one hour after meals. Besides, the paste of the drug UNIM-003 was applied locally on the affected parts early in the morning and then the affected parts were exposed to sunlight for 10-15 minutes. The paste was washed off after 30 minutes of application. Treatment was given for a period of three months initially, which was extended till the maximum re-pigmentation was achieved.

During the reporting period, 2,008 new patients were registered, whereas 2,166 patients continued from the previous year, bringing the total patients studied to 4,174. Out of them, 651 patients completed the study. Six (0.9%) patients showed 91-99% re-pigmentation, 50 (7.7%) showed 71-90% re-pigmentation, 79 (12.1%) showed 51-70% re-pigmentation, 76

(11.7%) showed 41-50% re-pigmentation, 428 (65.8%) showed $\leq 40\%$ re-pigmentation, and 12 (1.8%) patients showed no response. A total of 1,010 patients dropped out of the study and 2,513 patients were under study. So far, 2,125 patients have completed the study. The drugs showed significant therapeutic effects in arresting the exacerbation in the existing size of the patches and appearance of new patches, besides re-pigmenting the depigmented patches to a variable degree from 50 to 99% depending upon the chronicity of the disease and the part of the body affected. No drug intolerance/ adverse effects were reported.

Evaluation of therapeutic efficacy of a combination of coded Unani drugs UNIM-004 and UNIM-005 in *Baras* (Vitiligo) patients (CRIUM, Hyderabad)

Therapeutic efficacy of a combination of two coded Unani drugs, UNIM-004 and UNIM-005 was evaluated in 6,526 patients of *Baras* (Vitiligo). The drug UNIM-004 was given in the dose of two tablets (500 mg each) twice daily with water one hour after meals. Besides, the paste of the drug UNIM-005 was applied locally on the affected parts early in the morning and then the affected parts were exposed to sunlight for 10-15 minutes. The paste was washed off after 30 minutes of application. Treatment was given for a period of three months initially, which was extended till the maximum re-pigmentation was achieved.

During the reporting period, 2,942 new patients were registered, whereas 3,584 patients continued from the previous year, bringing the total patients studied to 6,526. Out of them, 670 patients completed the study. Three (0.4%) patients showed 100% re-pigmentation, 12 (1.8%) showed 71-90% re-pigmentation, 22 (3.3%) showed 51-70% re-pigmentation, 49 (7.3%) showed 41-50% re-pigmentation, 551 (82.3%) showed $\leq 40\%$ re-pigmentation, and 33 (4.9%) patients showed no response. A total of 1,522 patients dropped out of the study and 4,334 patients were under study. So far, 4,176 patients have completed the study. No drug intolerance/ adverse effects were reported. However, itching and blister formation were reported in some patients with sensitive skin. This was managed by diluting the concentration of the paste and applying coconut oil on the affected parts.

Preliminary screening of combinations of coded Unani drugs UNIM-044(O)+UNIM-044(L), UNIM-045(O)+UNIM-045(L), UNIM-046(O)+UNIM-046(L) and UNIM-047(O)+UNIM-047(L) with *Munzij* and *Mushil* therapy in *Baras* (Vitiligo) patients (CRIUM, Hyderabad)

Preliminary screening of coded Unani drugs UNIM-044(O)+UNIM-044(L), UNIM-045(O)+UNIM-045(L), UNIM-046(O)+UNIM-046(L) and UNIM-047(O)+UNIM-047(L) with *Munzij* and *Mushil* therapy was conducted in 112 patients of *Baras* (Vitiligo). The patients were divided into four treatment groups. In each group, the patients were first subjected to *Munzij-Mushil* therapy followed by treatment with the oral and local drugs. In *Munzij* and *Mushil* therapy, *Munzij-i Balgham* was given till the *Nuzj* appeared in the urine followed by *Mushil* and *Tabrid* drugs for six days alternately.

After completion of the *Munzij* and *Mushil* therapy, patients were treated with the drugs, UNIM-044(O), UNIM-045(O), UNIM-046(O), and UNIM-047(O) in the dose of two capsules (500 mg each) orally twice daily along with local application of the drugs UNIM-044(L), UNIM-045(L), UNIM-046(L) and UNIM-047(L) on the affected parts in the respective group early in the morning and then the affected parts were exposed to sunlight for 10-15 minutes. The

paste was washed off after 30 minutes of application. After *Munzij-Mushil* therapy, treatment was given for a period of three months initially, which was extended till the maximum re-pigmentation was achieved.

In group-I, 15 patients continued from the previous year were studied. Out of them, five patients completed the study, two dropped out of the study and eight patients were under treatment during the reporting period. This study has been completed on a sample size of 38 patients, of which, six (15.8%) patients showed 51-70% re-pigmentation, nine (23.7%) showed 41-50% re-pigmentation, 21 (55.3%) showed $\leq 40\%$ re-pigmentation and two (5.2%) patients showed no response. The test drugs UNIM-044(O) and UNIM-044(L) were found well-tolerated and no adverse effects were observed.

In group-II, one new patient was registered, whereas 42 patients continued from the previous year, bringing the total patients studied to 43. Out of them, nine patients completed the study, 12 patients dropped out of the study and 22 patients were under treatment. This study has been completed on a sample size of 40 patients, of which one (2.5%) patient showed 71-90% re-pigmentation, six (15.0%) showed 41-50% re-pigmentation, 32 (80.0%) showed $\leq 40\%$ re-pigmentation and one (2.5%) patient showed no response. The test drugs UNIM-045(O) and UNIM-045(L) were found well-tolerated and no adverse effects were observed.

In group-III, 12 new patients were registered, whereas 19 patients continued from the previous year, bringing the total patients studied to 31. Out of them, 14 patients completed the study, 10 patients dropped out of the study and seven patients were under treatment. This study has been completed on a sample size of 54 patients, of which seven (13.0%) patients showed 41-50% re-pigmentation, 41 (75.9%) showed $\leq 40\%$ re-pigmentation and six (11.1%) patients showed no response. The test drugs UNIM-046(O) and UNIM-046(L) were found well-tolerated and no adverse effects were observed.

In group-IV, 12 new patients were registered, whereas 11 patients continued from the previous year, bringing the total patients studied to 23. Out of them, nine patients completed the study. Seven (77.8%) patients showed $\leq 40\%$ re-pigmentation and two (22.2%) patients showed no response. Four patients dropped out of the study and 10 patients were under study. So far, 29 patients have completed the study. The test drugs UNIM-047(O) and UNIM-047(L) were found well-tolerated and no adverse effects were observed.

Evaluation of therapeutic efficacy of *Munzij* and *Mushil* drugs (UNIM-040+UNIM-041+UNIM-042) in *Baras* (Vitiligo) patients (CRIUM, Hyderabad)

Therapeutic efficacy of coded *Munzij* and *Mushil* drugs (UNIM-040+UNIM-041+UNIM-042) was evaluated in the patients of *Baras* (Vitiligo). The *Munzij* drugs were given till the appearance of *Nuzj* in the urine followed by *Mushil* and *Tabrid* drugs for six days alternately. During the reporting period, 195 new patients were registered, whereas 17 patients continued from the previous year, bringing the total patients studied to 212. Out of them, 173 patients completed the study, 11 patients dropped out of the study and 28 patients were under study. In these patients, *Nuzj* appeared in the urine in 2-3 weeks of the treatment. There was definite sign of re-pigmentation either in the form of islands of pigmentation or perilesional pigmentation

or both. No drug intolerance/ side effects were reported. After completion of the *Munzij* and *Mushil* therapy, the patients were given the oral and local drugs.

Evaluation of therapeutic efficacy of *Munzij* and *Mushil* drugs (UNIM-041+UNIM-042) in *Baraṣ* (Vitiligo) patients (CRIUM, Hyderabad)

Therapeutic efficacy of coded *Munzij* and *Mushil* drugs (UNIM-041+UNIM-042) was evaluated in the patients of *Baraṣ* (Vitiligo). The *Munzij* drugs were given till the appearance of *Nuzj* in the urine followed by *Mushil* and *Tabrīd* drugs for six days alternately. During the reporting period, 32 new patients were registered, whereas four patients continued from the previous year, bringing the total patients studied to 36. Out of them, 30 patients completed the study and six patients dropped out of the study. In these patients, *Nuzj* appeared in the urine in 2-3 weeks of the treatment. There was definite sign of re-pigmentation either in the form of islands of re-pigmentation or perilesional pigmentation or both. No drug intolerance/ side effects were reported.

NĀR-I FĀRSI (ECZEMA)

Clinical study on *Nār-i Fārsi* (Eczema) continued at CRU, Bhopal. During the reporting period, the following study was conducted:

Evaluation of therapeutic efficacy of coded Unani drugs UNIM-401(O) and UNIM-403 (L) in *Nār-i Fārsi* (Eczema) patients (CRU, Bhopal)

Therapeutic efficacy of a combination of coded Unani drugs UNIM-401(O)+UNIM-403 (L) was evaluated in 30 patients of *Nār-i Fārsi* (Eczema). The drug UNIM-401(O) was given in the dose of two capsules (500 mg each) orally twice daily before meals along with local application of the oil UNIM-403 (L) on the affected parts at bedtime. Treatment was given for a period of three months, which was extended up to six months in some patients.

During the reporting period, 11 new patients were registered, whereas 19 patients continued from the previous year, bringing the total patients studied to 30. Out of them, 23 patients completed the study. Four (17.4%) patients were relieved, 13 (56.5%) partially relieved, and six (26.1%) patients showed no response. Seven patients dropped out of the study. So far, 354 patients have completed the study.

DĀ' AL-ṢADAF (PSORIASIS)

Clinical study on *Dā' al-Ṣadaf* (Psoriasis) continued at CRIUM, Hyderabad; and CRUs, Bengaluru and Bhopal. During the reporting period, the following studies were conducted:

Trial of coded Unani drugs UNIM-401(O)+UNIM-403(L) with and without *Munzij* and *Mushil* therapy in *Dā' al-Ṣadaf* (Psoriasis) patients (CRIUM, Hyderabad)

Preliminary screening of coded Unani drugs UNIM-401(O)+UNIM-403(L) with and without *Munzij* and *Mushil* therapy was carried out in the patients of *Dā' al-Ṣadaf* (Psoriasis) in two groups. In group-I, the patients were first subjected to *Munzij* and *Mushil* therapy followed by the treatment with the coded Unani drugs UNIM-401(O) +UNIM-403(L). In group-II, the

patients were treated with the drugs UNIM-401(O) +UNIM-403(L) only. *Munziji-i Sawdā'* was given till the *Nuzj* appeared in the urine followed by *Mushil* and *Tabrid* drugs for six days alternately. After completion of the *Munziji* and *Mushil* therapy, the drug UNIM-401(O) was given in the dose of two capsules (500 mg each) orally twice daily before meals along with local application of UNIM-403(L) on the affected parts. Treatment was given for a period of three months initially, which was extended up to six months.

During the reporting period, in group-I, 97 new patients were registered, whereas 40 patients continued from the previous year, bringing the total patients studied to 137. Out of them, 50 patients completed the study. Thirty-one (62.0%) patients were relieved, 16 (32.0%) partially relieved, and three (6.0%) patients showed no response. Thirty-nine patients dropped out of the study and 48 patients were under study. So far, 204 patients have completed the study.

In group-II, 111 new patients were registered, whereas 35 patients continued from the previous year, bringing the total patients studied to 146. Out of them, 34 patients completed the study. Eighteen (52.9%) patients were relieved, 14 (41.2%) partially relieved, and two (5.9%) patients showed no response. Forty-one patients dropped out of the study and 71 patients were under study. So far, 168 patients have completed the study.

Preliminary screening of a combination of coded Unani drugs UNIM-401(O)+UNIM-403(L) and 777(Oil) in chronic plaque psoriasis patients (CRU, Bengaluru)

Preliminary screening of a combination of coded Unani drugs UNIM-401(O)+UNIM-403(L) and 777(Oil) was carried out in the patients of chronic plaque psoriasis. The drug UNIM-401(O) was given in the dose of two capsules (500 mg each) orally thrice daily before meals along with local application of UNIM-403 (L) and 777 (oil) on the affected parts. Treatment was given for a period of three months initially, which was extended up to six months.

During the reporting period, eight new patients were registered, whereas one patient continued from the previous year, bringing the total patients studied to nine. Out of them, eight patients completed the study. Five (62.5%) patients were relieved and three (37.5%) patients were partially relieved. One patient dropped out of the study. So far, 110 patients have completed the study.

Preliminary screening of a combination of coded Unani drugs UNIM-401(O) +UNIM-403(L) in *Dā' al-Ṣadaf* (Psoriasis) patients (CRU, Bhopal)

Preliminary screening of a combination of coded Unani drugs UNIM-401(O)+UNIM-403(L) was carried out in the patients of *Dā' al-Ṣadaf* (Psoriasis). The drug UNIM-401(O) was given in the dose of two capsules (500 mg each) orally twice daily before meals along with local application of UNIM-403(L) on the affected parts at bedtime. Treatment was given for a period of three months initially, which was extended up to six months.

During the reporting period, nine new patients were registered, whereas 12 patients continued from the previous year, bringing the total patients studied to 21. Out of them, 17 patients completed the study. Five (29.4%) patients were relieved, nine (52.9%) partially relieved, and three (17.7%) patients showed no response. Four patients dropped out of the study. So far, 205 patients have completed the study.

AMRĀZ-I TARSĪLĪ (COMMUNICABLE DISEASES)

Clinical studies on *Amrāz-i Tarsīlī* (communicable diseases) including *Dā' al-Fīl* (Lymphatic Filariasis) were continued at RRIUMs, Bhadrak and Patna; and *Iltihāb-i Kabid Hād* (Infective hepatitis) at RRIUM, Chennai. During the reporting period, the following studies were conducted:

DĀ' AL-FĪL (LYMPHATIC FILARIASIS)

Comparative clinical trial of two combinations of coded Unani drugs UNIM-268 +UNIM-270+UNIM-271+UNIM-272 and UNIM-269+UNIM-270+UNIM-271+UNIM-272 with and without *Munzij* and *Mushil* therapy in *Dā' al-Fīl* (Lymphatic Filariasis) patients (RRIUM, Bhadrak)

Therapeutic efficacy of two combinations of coded Unani drugs UNIM-268+UNIM-270+UNIM-271+UNIM-272 and UNIM-269+UNIM-270+UNIM-271+UNIM-272 with and without *Munzij* and *Mushil* therapy was compared in the patients of *Dā' al-Fīl* (Lymphatic Filariasis) in four treatment groups.

In Group-I, the patients were given the drug UNIM-268 in the dose of two tablets (500 mg each) orally twice daily along with 'Natūl' (irrigation) of the drug UNIM-271 followed by local application of the paste of the drugs UNIM-270 and UNIM-272 on the affected part at bedtime. Treatment was given for a period of 80 days.

In Group-II, the patients were first subjected to *Munzij-Mushil* therapy followed by the treatment with the combination of the drugs as in group-I. The *Munzij* drugs were given till the appearance of *Nuzj* in the urine followed by *Mushil* and *Tabrīd* drugs alternately for six days. Thereafter, treatment was given as in group-I.

In Group-III, the patients were given the drug UNIM-269 in the dose of two tablets (500 mg each) orally twice daily along with 'Natūl' (irrigation) of the drug UNIM-271 followed by local application of the paste of the drugs UNIM-270 and UNIM-272 on the affected parts at bedtime. Treatment was given for a period of 80 days.

In Group-IV, the patients were first subjected to *Munzij-Mushil* therapy followed by the treatment with the combination of the drugs as in group-III. The *Munzij* drugs were given till the appearance of *Nuzj* in the urine followed by *Mushil* and *Tabrīd* drugs alternately for six days. Thereafter, treatment was given as in group-III.

In Group I, 69 new patients were registered, whereas 13 patients continued from the previous year, bringing the total patients studied to 82. Out of them, 44 patients completed the study. Thirty-six (81.8%) patients were relieved, seven (15.9%) partially relieved, whereas one (2.3%) patient showed no response. Twenty-four patients dropped out of the study and 14 patients were under study.

In Group II, 25 new patients were registered, whereas two patients continued from the previous year, bringing the total patients studied to 27. Out of them, 13 patients completed the study. Eleven (84.6%) patients were relieved and two (15.4%) patients were partially relieved. Twelve patients dropped out of the study and two patients were under study.

In Group III, 68 new patients were registered, whereas 15 patients continued from the previous year, bringing the total patients studied to 83. Out of them, 33 patients completed the study. Twenty-six (78.8%) patients were relieved, six (18.2%) partially relieved, and one (3.0%) patient showed no response. Thirty-six patients dropped out of the study and 14 patients were under study.

In Group IV, 24 new patients were registered, whereas two patients continued from the previous year, bringing the total patients studied to 26. Out of them, 12 patients completed the study. Ten (83.3%) patients were relieved and two (16.7%) patients were partially relieved. Twelve patients dropped out of the study and two patients were under study.

So far, 347 patients have completed the study in different treatment groups. No drug intolerance/ side effects were reported.

Trial of a combination of coded Unani drugs UNIM-268+UNIM-270+UNIM-271+UNIM-272 with *Munzij* and *Mushil* therapy in *Dā' al-Fil* (Lymphatic Filariasis) patients (RRIUM, Patna)

Therapeutic efficacy of a combination of coded Unani drugs (UNIM-268+UNIM-270+UNIM-271+UNIM-272) with *Munzij* and *Mushil* therapy was evaluated in the patients of *Dā' al-Fil* (Lymphatic Filariasis) with less than five years chronicity. The patients were first subjected to *Munzij* and *Mushil* therapy followed by the treatment with the oral and local drugs. *Munzij-i Balgham* was given till the *Nuzj* appeared in the urine followed by *Mushil* and *Tabrīd* drugs alternately for six days. The drug UNIM-268 was given in the dose of two tablets (500 mg each) orally twice daily along with *Natūl* (irrigation) of the drug UNIM-271 followed by local application of the paste of the drugs UNIM-270 and UNIM-272 on the affected parts at bedtime. Treatment was given for a period of 80 days after completion of the *Munzij* and *Mushil* therapy.

During the reporting period, four patients continued from the previous year were studied. Out of them, two patients completed the study, and were partially relieved. Two patients dropped out of the study. So far, 163 patients have completed the study. No drug intolerance/ side effects were reported.

ILTIHĀB-I KABID HĀD (INFECTIVE HEPATITIS)

Clinical evaluation of a coded Unani drug UNIM-115 in *Iltihāb-i Kabid Hād* (Infective Hepatitis) patients (RRIUM, Chennai)

Therapeutic efficacy of a coded Unani drug UNIM-115 was evaluated in the patients of *Iltihāb-i Kabid Hād* (Infective hepatitis). The drug UNIM-115 was given in the dose of two tablets (500 mg each) orally twice daily. Treatment was given for a period of one month, which was extended up to six weeks in some patients.

During the reporting period, 12 new patients were registered, whereas one patient continued from the previous year, bringing the total patients studied to 13. Out of them, 09 patients completed the study. Eight (88.9%) patients were relieved and one (11.1%) patient was partially relieved. In the relieved patients, the clinical signs and symptoms subsided completely and

biochemical parameters including serum bilirubin, SGOT, SGPT and serum alkaline phosphatase attained the normal levels. Four patients dropped out of the study. So far, 145 patients have completed the study.

AMRĀZ-I MAFĀSIL (MUSCULOSKELETAL DISORDERS)

Clinical study on *Tahajjur-i Mafāsil* (Osteoarthritis) continued at RRIUMs, Chennai and New Delhi. During the reporting period, the following study was conducted:

TAHAJJUR-I MAFĀSIL (OSTEOARTHRITIS)

Preliminary screening of coded Unani drugs UNIM-318+UNIM-319 in *Tahajjur-i Mafāsil* (Osteoarthritis) patients (RRIUMs, Chennai and New Delhi)

Preliminary screening of coded Unani drugs UNIM-318+UNIM-319 was carried out in the patients of *Tahajjur-i Mafāsil* (Osteoarthritis). The drug UNIM-318 was given in the dose of two capsules (500 mg each) orally thrice daily along with local application of UNIM-319 on the affected joints at bedtime. Treatment was given for a period of 90 days.

During the reporting period, 57 new patients were registered, whereas 18 patients continued from the previous year, bringing the total patients studied to 75. Out of them, 21 patients completed the study. Four (19.0%) patients were relieved, 11 (52.4%) partially relieved, whereas six (28.6%) patients showed no response. Thirty-one patients dropped out of the study and 23 patients were under study. So far, 172 patients have completed the study. The drugs showed significant therapeutic response in subsiding clinical signs and symptoms including pain, swelling, tenderness and stiffness in the joints. No drug intolerance/ side effects were reported.

AMRĀZ-I TAJĀWĪF-I ANF (DISEASES OF SINUS)

ILTIHĀB-I TAJĀWĪF-I ANF (SINUSITIS)

Clinical study on *Iltihāb-i Tajāwīf-i Anf* (Sinusitis) continued at CRIUM, Hyderabad. During the reporting period, the following study was conducted:

Evaluation of therapeutic efficacy of coded Unani drugs UNIM-054(O) and UNIM-055(V) with and without *Munzij* and *Mushil* therapy in *Iltihāb-i Tajāwīf-i Anf* (Sinusitis) patients (CRIUM, Hyderabad)

Therapeutic efficacy of coded Unani drugs UNIM-054(O) and UNIM-055 (V) with and without *Munzij* and *Mushil* therapy was evaluated in 89 patients of *Iltihāb-i Tajāwīf-i Anf* (Sinusitis) in two groups. In group-I, the patients were first subjected to *Munzij* and *Mushil* therapy followed by treatment with the drugs UNIM-054(O) and UNIM-055 (V). *Munzij-i Balgham* was given till *Nuzj* appeared in the urine followed by *Mushil* and *Tabrīd* drugs for six days alternately. After completion of the *Munzij-Mushil* therapy, the drug UNIM-054 was given in the dose of two capsules (500 mg each) orally twice daily. Steam inhalation of the drug UNIM-055 was also given at bedtime. In group-II, the patients were given the drugs UNIM-054(O) and

UNIM-055 (V) as in group-I. Treatment was given for a period of 90 days in both groups, excluding *Munzij-Mushil* therapy period in group-I. The patients were also advised to follow prescribed diet schedule.

In group-I, 14 new patients were registered, whereas four patients continued from the previous year, bringing the total patients studied to 18. Out of them, seven patients completed the study. Five (71.4%) patients were relieved and two (28.6%) patients showed no response. Eight patients dropped out of the study and three patients were under study. So far, 55 patients have completed the study. No drug intolerance/ side effects were reported.

In group-II, 54 new patients were registered, whereas 17 patients continued from the previous year, bringing the total patients studied to 71. Out of them, 22 patients completed the study. Eight (36.4%) patients were relieved, six (27.2%) partially relieved, whereas eight (36.4%) patients showed no response. Thirty-three patients dropped out of the study and 16 patients were under study. So far, 133 patients have completed the study. No drug intolerance/ side effects were reported.

AMRĀZ-I GHAYR TARSĪLĪ (NON-COMMUNICABLE DISEASES)

SIMAN-I MUFRIṬ (OBESITY)

Clinical study on *Siman-i Mufriṭ* (Obesity) continued at CRIUM, Lucknow. During the reporting period, the following study was conducted:

Evaluation of therapeutic efficacy of coded Unani drugs UNIM-1201+UNIM-1202 with and without *Munzij* and *Mushil* therapy in *Siman-i Mufriṭ* (Obesity) patients (CRIUM, Lucknow)

Therapeutic efficacy of coded Unani drugs UNIM-1201+UNIM-1202 with and without *Munzij* and *Mushil* therapy was evaluated in the patients of *Siman-i Mufriṭ* (Obesity). The patients were divided into two groups. In group-I, the patients were first subjected to *Munzij-Mushil* therapy followed by treatment with the drugs UNIM-1201+UNIM-1202. *Munzij-i Balgham* was given till *Nuzj* appeared in the urine followed by *Mushil* and *Tabrīd* drugs for six days alternately. After completion of *Munzij-Mushil* therapy, the drug UNIM-1201 was given in the dose of two capsules (500 mg each) orally twice daily along with 200 ml decoction of the drug UNIM-1202. In group-II, the patients were given the drugs UNIM-1201 and UNIM-1202 as in group-I. Treatment was given for a period of six months in both groups, excluding *Munzij-Mushil* therapy period in group-I. The patients were also advised to follow prescribed diet schedule along with modification in the lifestyle.

During the reporting period, in group-I, 14 new patients were registered. Out of them, 13 patients completed the study, and were partially relieved. One patient was under study. So far, 70 patients have completed the study.

In group-II, 13 new patients were registered, whereas two patients continued from the previous year, bringing the total patients studied to 15. Out of them, six patients dropped out of the study and nine patients were under study. So far, nine patients have completed the study.

KASRAT-I SHAHMUDDAM (HYPERLIPIDAEMIA)

Clinical study on *Kasrat-i Shahmuddam* (Hyperlipidaemia) continued at CRIUM, Hyderabad. During the reporting period, the following study was conducted:

Preliminary study of a coded Unani drug UNIM-763 in *Kasrat-i Shahmuddam* (Hyperlipidaemia) patients (CRIUM, Hyderabad)

Preliminary screening of a coded Unani drug UNIM-763 was carried out in 69 patients of *Kasrat-i Shahmuddam* (Hyperlipidaemia). The drug UNIM-763 was given in the dose of two capsules (500 mg each) orally twice daily after meals. Treatment was given for a period of 90 days initially, which was extended up to six months. The patients were also advised to follow prescribed diet schedule.

During the reporting period, 50 new patients were registered, whereas 19 patients continued from the previous year bringing the total patients studied to 69. Out of them, 19 patients completed the study. Two (10.5%) patients were relieved, five (26.3%) partially relieved, whereas 12 (63.2%) patients showed no response. Twenty-seven patients dropped out of the study and 23 patients were under study. So far, 117 patients have completed the study.

Multi-centric Randomized Controlled Trials

A multi-centric, single blind, randomized, parallel group, controlled study to compare the efficacy and safety of coded Unani formulations UNIM-001+UNIM-003 with Psoralen in the treatment of *Baras* (vitiligo) (CRIUM, Hyderabad; RRIUMs, Aligarh, New Delhi and Srinagar)

A multi-centric clinical study to compare the efficacy and safety of coded Unani formulations UNIM-001+UNIM-003 with Psoralen was carried out in a total of 537 patients of *Baras* (Vitiligo) at CRIUM, Hyderabad; and RRIUMs, Aligarh, New Delhi and Srinagar. The patients were divided into two groups, one group received a coded Unani drug UNIM-001 orally in the dose of two tablets (800 mg each) twice daily one hour after meals and UNIM-003 in lotion form for local application on the affected area, whereas the second group received Psoralen orally two tablets (10 mg each) twice daily and Psoralen in lotion form for local application on the affected area. The total duration of treatment was eight months.

In group-I (test group), 232 new patients were registered, whereas 105 patients continued from the previous year, bringing the total patients studied to 337. Out of them, 85 patients completed the study. Out of the completed patients, seven (8.2%) patients were relieved, 53 (62.4%) patients were partially relieved and 25 (29.4%) patients showed no response. At the end of the reporting period, 116 patients were under study and 136 patients dropped out of the study. So far, 155 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

In group-II (control group), 133 new patients were registered, whereas 67 patients continued from the previous year, bringing the total patients studied to 200. Out of them, 53 patients completed the study. Out of the completed patients, seven (13.2%) patients were relieved, 39 (73.6%) patients were partially relieved and seven (13.2%) patients showed no response. At

the end of the reporting period, 80 patients were under study and 67 patients dropped out of the study. So far, 90 patients have completed the study.

A multi-centric, single blind, randomized, parallel group study to compare the efficacy and safety of coded Unani formulation UNIM-221 with Metformin in patients of *Zayabītus Sukkari Qism-i Sāni* (Diabetes Mellitus Type II) (CRIUMs, Hyderabad, Lucknow; RRIUMs, Aligarh and New Delhi)

A multi-centric clinical study to compare the efficacy and safety of a coded Unani formulation UNIM-221 with Metformin was carried out in a total of 231 patients of *Zayabītus Sukkari Qism-i Sāni* (Diabetes Mellitus Type II) at CRIUMs, Hyderabad and Lucknow; and RRIUMs, Aligarh and New Delhi. The patients were divided into two groups; one group received a coded Unani drug UNIM-221 in the dose of 10 gm twice daily half hour before meals, while the second group received anti-diabetic drug Metformin 500 mg twice daily. The total duration of treatment was 12 weeks.

In group-I (test group), 109 new patients were registered, whereas eight patients continued from the previous year, bringing the total patients studied to 117. Out of them, 62 patients completed the study. Out of the completed patients, eight (12.9%) patients were relieved, 31 (50.0%) patients were partially relieved and 23 (37.1%) patients showed no response. At the end of the reporting period, 31 patients were under study and 24 patients dropped out of the study. So far, 121 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

In group-II (control group), 106 new patients were registered, whereas eight patients continued from the previous year, bringing the total patients studied to 114. Out of them, 47 patients completed the study. Out of the completed patients, 10 (21.3%) patients were relieved, 27 (57.4%) patients were partially relieved and 10 (21.3%) patients showed no response. At the end of the reporting period, 28 patients were under study and 39 patients dropped out of the study. So far, 99 patients have completed the study.

A multi-centric, single blind, randomized, parallel group study to compare the efficacy and safety of coded Unani formulation UNIM-904 with Amlodipine in patients with *Zaghtuddam Qawī Lāzimī* (Essential hypertension) (CRIUM, Hyderabad; RRIUMs, Aligarh, Srinagar, Mumbai and New Delhi)

A multi-centric clinical study to compare the efficacy and safety of a coded Unani formulation UNIM-904 with Amlodipine was carried out in a total of 225 patients with *Zaghtuddam Qawī Lāzimī* (Essential hypertension) at CRIUM, Hyderabad; and RRIUMs, Aligarh, Srinagar, Mumbai and New Delhi. The patients were divided into two groups; one group received a coded Unani drug UNIM-904 in the dose of five gm twice daily half hour before meals, while the second group received standard anti-hypertensive drug Amlodipine 5 mg once daily before breakfast. The total duration of treatment was 12 weeks.

In group-I (test group), 139 new patients were registered, whereas 23 patients continued from the previous year, bringing the total patients studied to 162. Out of them, 47 patients completed the study. Out of the completed patients, 28 (59.6%) patients were relieved, 18

(38.3%) patient were partially relieved and one (2.1%) patients showed no response. At the end of the reporting period, 46 patients were under study and 69 patients dropped out of the study. So far, 103 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

In group-II (control group), 58 new patients were registered, whereas five patients continued from the previous year, bringing the total patients studied to 63. Out of them, 20 patients completed the study, and were partially relieved. At the end of the reporting period, 19 patients were under study and 24 patients dropped out of the study. So far, 37 patients have completed the study.

A multi-centric, single blind, randomized, parallel group study to compare the efficacy and safety of coded Unani formulation UNIM-118 with Silymarin in patients with *Waram al-Kabid*/ Acute Hepatitis A/B/C/E & Chronic Active Hepatitis B/C (CRIUM, Hyderabad; RRIUM, Chennai)

A multi-centric clinical study to compare the efficacy and safety of a coded Unani formulation UNIM-118 with Silymarin in patients with *Waram al-Kabid*/ Acute Hepatitis A/B/C/E & Chronic Active Hepatitis B/C was carried out at CRIUM, Hyderabad; and RRIUM, Chennai. The patients were divided into two groups. One group received a coded Unani drug UNIM-118 in the dose of two tablets (500 mg each) thrice daily after meals, while the second group received Silymarin one tablet (70 mg) thrice daily after meals. The total duration of treatment was eight weeks for Acute Hepatitis A/ B/C/E and 12 weeks for Chronic Active Hepatitis B and C.

During the reporting period, one patient in test group and one patient in control group were registered. Both of them dropped out of the study. So far, four patients in test group and three patients in control group have completed the study.

Validation of Unani Pharmacopoeial Drugs

Clinical validation of a Unani pharmacopoeial formulation *Majoon Nisyan* in *Nisyān* (Amnesia) (CRIUM, Hyderabad; RRIUMs, Chennai and Mumbai)

A study on validation of a Unani pharmacopoeial formulation *Majoon Nisyan* in the patients of *Nisyān* (Amnesia) was carried out at CRIUM, Hyderabad; RRIUMs, Chennai and Mumbai. The patients received *Majoon Nisyan* in the dose of 7 gm orally once daily for a period of 12 weeks.

During the reporting period, 35 patients were studied. Out of them, 24 patients completed the study. Out of the completed patients, 15 (62.5%) patients were relieved, five patients (20.8%) were partially relieved and four patients (16.7%) showed no response. Six patients were under study and five patients dropped out of the study. So far, 231 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Majoon Falasifa* and *Majoon Masikul Baul* in *Zu'f al-Masāna* (Overactive Bladder) (CRIUMs, Hyderabad and Lucknow)

A study on validation of Unani pharmacopoeial formulations *Majoon Falasifa* and *Majoon*

Masikul Baul in the patients of *Zu'f al-Masāna* was carried out at CRIUMs, Hyderabad and Lucknow. The patients received *Majoon Falasifa* and *Majoon Masikul Baul* in the doses of seven gram each orally once daily in the morning for a period of 12 weeks.

During the reporting period, nine patients were studied. Out of them, three patients completed the study. Out of the completed patients, two (66.7%) patients were relieved and one patient (33.3%) was partially relieved. Six patients dropped out of the study. So far, 74 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Majoon Kundur*, *Jawarish Zarooni* and *Arq-e-Badiyan* in *Zu'f al-Masāna* (Overactive Bladder) (CRIUM, Hyderabad)

A study on validation of Unani pharmacopoeial formulations *Majoon Kundur*, *Jawarish Zarooni* and *Arq-e-Badiyan* in the patients of *Zu'f al-Masāna* (Overactive Bladder) was carried out at CRIUM, Hyderabad. The patients received *Majoon Kundur*, *Jawarish Zarooni* and *Arq-e-Badiyan* in the doses of seven gram once daily, seven gram twice daily and 20 ml twice daily orally respectively for a period of 12 weeks.

During the reporting period, four patients were studied, and all of them completed the study. Three (75.0%) patients were relieved and one (25.0%) patient was partially relieved. So far, 59 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Qurs-e-Deedan* in *Didān al-Am'ā'* (Helminthiasis) (CRIUM, Lucknow; RRIUMs, Bhadrak and Kolkata)

A study on validation of a Unani pharmacopoeial formulation *Qurs-e-Deedan* in the patients of *Didān al-Am'ā'* (Helminthiasis) was carried out at CRIUM, Lucknow; and RRIUMs, Bhadrak and Kolkata. The patients received *Qurs-e-Deedan* in the dose of one tablet (250 mg) orally with water twice daily before meals for a period of two weeks.

During the reporting period, 144 patients were studied, of which 90 patients completed the study. Out of the completed patients, 51 (56.7%) patients were relieved, 37 (41.1%) patients were partially relieved and two (2.2%) patients showed no response. Three patients were under study and 51 patients dropped out of the study. So far, 165 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawarish Ood Shireen* in *Zu'f al-Ishtihā'* (Anorexia) (RRIUM, Bhadrak; CRUs, Meerut and Kurnool)

A study on validation of a Unani pharmacopoeial formulation *Jawarish Ood Shireen* in the patients of *Zu'f al-Ishtihā'* (Anorexia) was carried out at RRIUM, Bhadrak; and CRUs, Meerut and Kurnool. The patients received *Jawarish Ood Shireen* in the dose of five gram orally twice daily before meals with water for a period of two weeks.

During the reporting period, 106 patients were studied. Out of them, 76 patients completed the study. Out of the completed patients, 16 (21.1%) patients were relieved, 57 (75.0%) patients were partially relieved and three (3.9%) patients showed no response. Thirty patients

dropped out of the study. So far, 181 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Sharbat-e-Ejaz* in *Surfa Yābis* (Dry Cough) (RRIUMs, Mumbai and Srinagar; CRU, Meerut)

A study on validation of a Unani pharmacopoeial formulation *Sharbat-e-Ejaz* in the patients of *Surfa Yābis* (Dry Cough) was carried out at RRIUMs, Mumbai and Srinagar; and CRU, Meerut. The patients received *Sharbat-e-Ejaz* in the dose of 20 ml mixed with 40 ml of lukewarm water orally twice daily for a period of two weeks.

During the reporting period, 215 patients were studied. Out of them, 153 patients completed the study. Out of the completed patients, 90 (58.8%) patients were relieved, 57 (37.3%) patients were partially relieved and six (3.9 %) patients showed no response. Three patients were under study and 59 patients dropped out of the study. So far, 215 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Itrifal Shahtara* and *Marham Kharish Jadeed* in *Jarab* (Scabies) (RRIUM, Bhadrak)

A study on validation of Unani pharmacopoeial formulations *Itrifal Shahtara* and *Marham Kharish Jadeed* in the patients of *Jarab* (Scabies) was carried out at RRIUM, Bhadrak. The patients received *Itrifal Shahtara* in the dose of six gram orally twice daily with water after meals along with local application of *Marham Kharish Jadeed* for a period of two weeks. Patients were advised to wash the affected area with *Aab-i-Neem* before applying *Marham*.

During the reporting period, 145 patients were studied. Out of them, 60 patients completed the study. Out of the completed patients, 51 (85.0%) patients were relieved and nine (15.0%) patients were partially relieved. Fifteen patients were under study and 70 patients dropped out of the study. So far, 78 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Jawarish Kamooni* and *Arq-e-Badiyan* in *Sū' al-Hazm* (Dyspepsia) (CRIUM, Lucknow; RRIUMs, Kolkata, and Patna; CRUs, Meerut and Kurnool)

A study on validation of Unani pharmacopoeial formulations *Jawarish Kamooni* and *Arq-e-Badiyan* in the patients of *Sū' al-Hazm* (Dyspepsia) was carried out at CRIUM, Lucknow; RRIUMs, Kolkata, and Patna; and CRUs, Meerut and Kurnool. The patients received *Jawarish Kamooni* five gram and *Arq-e-Badiyan* 60 ml orally twice daily with water after meals for a period of two weeks.

During the reporting period, 160 patients were studied, of which 135 patients completed the study. Out of the completed patients, 68 (50.4%) patients were relieved, 60 (44.4%) patients were partially relieved and seven (5.2%) patients showed no response. Twenty-five patients dropped out of the study. So far, 303 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Qurs-e-Ziabetus Khas* in *Zayābītus Sukkari Qism-i Sānī* (Diabetes Mellitus Type-II) (CRIUM, Hyderabad; RRIUM, Chennai; RRC, Allahabad; CRU, Bengaluru)

A study on validation of a Unani pharmacopoeial formulation *Qurs-e-Ziabetus Khas* in the patients of *Zayābītus Sukkari Qism-i Sānī* (Diabetes Mellitus Type-II) was carried out at CRIUM, Hyderabad; RRIUM, Chennai; RRC, Allahabad; and CRU, Bengaluru. The patients received *Qurs-e-Ziabetus Khas* in the dose of two tablets orally twice daily with water half an hour before meals for a period of 12 weeks.

During the reporting period, 147 patients were studied, of which 70 patients completed the study. Out of the completed patients, 37 (52.9%) patients were relieved, 31 (44.3%) patients were partially relieved and two (2.8%) patients showed no response. Thirty-one patients were under study and 46 patients dropped out of the study. So far, 108 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Kushta Khabsul Hadeed* and *Habb-e-Marwareed* in *Sayalān al-Raḥīm* (Leucorrhoea) (CRIUM, Lucknow; RRIUMs, Patna, New Delhi and Aligarh; CRU, Kerala)

A study on validation of Unani pharmacopoeial formulations *Kushta Khabsul Hadeed* and *Habb-e-Marwareed* in the patients of *Sayalān al-Raḥīm* (Leucorrhoea) was carried out at CRIUM, Lucknow; RRIUMs, Patna, New Delhi and Aligarh; and CRU, Kerala. The patients received *Kushta Khabsul Hadeed* one tablet and *Habb-e-Marwareed* one pill orally twice daily with water after meals for a period of four weeks.

During the reporting period, 245 patients were studied, of which 119 patients completed the study. Out of the completed patients, 22 (18.5%) patients were relieved, 63 (52.9%) patients were partially relieved and 34 (28.6%) patients showed no response. Twenty-three patients were under study and 103 patients dropped out of the study. So far, 246 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Majoon-e-Suranjan* and *Habb-e-Azaraqī* in *Niqris* (Gout) (CRIUM, Lucknow; RRIUMs, Aligarh and Chennai; CRU, Burhanpur)

A study on validation of Unani pharmacopoeial formulations *Majoon-e-Suranjan* and *Habb-e-Azaraqī* in the patients of *Niqris* (Gout) was carried out at CRIUM, Lucknow; RRIUMs, Aligarh and Chennai; and CRU, Burhanpur. The patients received *Majoon-e-Suranjan* five gram and *Habb-e-Azaraqī* one pill orally twice daily with water after meals for a period of eight weeks.

During the reporting period, 228 patients were studied, of which 165 patients completed the study. Out of the completed patients, 105 (63.6%) patients were relieved, 45 (27.3%) patients were partially relieved and 15 (9.1%) patients showed no response. Twenty-six patients were under study and 37 patients dropped out of the study. So far, 200 patients have completed the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Dawaul Misk Motadil Sada* in *Khafaqān* (Palpitation) (RRIUM, Aligarh; RRC, Allahabad)

A study on validation of a Unani pharmacopoeial formulation *Dawaul Misk Motadil Sada* in the patients of *Khafaqān* (Palpitation) was carried out at RRIUM, Aligarh and RRC, Allahabad. The patients received *Dawaul Misk Motadil Sada* in the dose of five gram orally twice daily with water for a period of four weeks.

During the reporting period, 137 patients were studied, of which 95 patients completed the study. Out of the completed patients, 42 (44.2%) patients were relieved, 45 (47.4%) patients were partially relieved and eight (8.4%) patients showed no response. Twenty-nine patients were under study and 13 patients dropped out of the study. So far, 128 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Safoof Hajrul Yahood* in *Haṣāh al-Kulya* (Nephrolithiasis) (CRIUM, Hyderabad; RRIUMs, Chennai and Srinagar)

A study on validation of a Unani pharmacopoeial formulation *Safoof Hajrul Yahood* in the patients of *Haṣāh al-Kulya* (Nephrolithiasis) was carried out at CRIUM, Hyderabad; and RRIUMs, Chennai and Srinagar. The patients received *Safoof Hajrul Yahood* in the dose of five gram orally twice daily for a period of eight weeks.

During the reporting period, 230 patients were studied, of which 92 patients completed the study. Out of the completed patients, 36 (39.1%) patients were relieved, 31 (33.7%) patients were partially relieved and 25 (27.2%) patients showed no response. Forty-six patients were under study and 92 patients dropped out of the study. So far, 142 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Tursh Mushtahi* in *Zu'f al-Ishtihā'* (Anorexia) (RRIUMs, Mumbai, Srinagar and Aligarh)

A study on validation of a Unani pharmacopoeial formulation *Habb-e-Tursh Mushtahi* in the patients of *Zu'f al-Ishtihā'* (Anorexia) was carried out at RRIUMs, Mumbai, Srinagar and Aligarh. The patients received *Habb-e-Tursh Mushtahi* in the dose of one pill (250 mg) orally thrice daily with water for a period of two weeks.

During the reporting period, 71 patients were studied, of which 30 patients completed the study. Out of the completed patients, 18 (60.0%) patients were relieved, nine (30.0%) patients were partially relieved and three (10.0%) patients showed no response. Fifteen patients were under study and 26 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Safoof Pathar Phori* and *Sharbat-e-Bazoori Motadil* in *Haṣāh al-Kulya* (Nephrolithiasis) (RRIUM, Bhadrak; CRUs, Burhanpur and Bhopal)

A study on validation of Unani pharmacopoeial formulations *Safoof Pathar Phori* and *Sharbat-e-Bazoori Motadil* in the patients of *Haṣāh al-Kulya* (Nephrolithiasis) was carried out at RRIUM,

Bhadrak; and CRUs, Burhanpur and Bhopal. The patients received *Safoof Pathar Phori* three gram and *Sharbat-e-Bazoori Motadil* 25 ml orally twice daily for a period of eight weeks

During the reporting period, 31 patients were studied, of which 21 patients completed the study. Out of the completed patients, 11 (52.4%) patients were relieved and 10 (47.6%) patients were partially relieved. Seven patients were under study and three patients dropped out of the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Sharbat-e-Belgiri* in *Zahīr* (Dysentery) (RRIUM, New Delhi; CRUs, Meerut and Bhopal)

A study on validation of a Unani pharmacopoeial formulation *Sharbat-e-Belgiri* in the patients of *Zahīr* (Dysentery) was carried out at RRIUM, New Delhi; and CRUs, Meerut and Bhopal. The patients received *Sharbat-e-Belgiri* in the dose of 25 ml orally twice daily for a period of two weeks.

During the reporting period, 145 patients were studied, of which 116 patients completed the study. Out of the completed patients, 59 (50.9%) patients were relieved, 42 (36.2%) patients were partially relieved and 15 (12.9%) patients showed no response. Fifteen patients were under study and 14 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Damavi* in *Sū' al-Qinya* (Anaemia) (CRIUM, Lucknow; RRIUMs, New Delhi and Aligarh)

A study on validation of a Unani pharmacopoeial formulation *Damavi* in the patients of *Sū' al-Qinya* (Anaemia) was carried out at CRIUM, Lucknow; and RRIUMs, New Delhi and Aligarh. The patients received *Damavi* in the dose of two tablets orally once daily for a period of eight weeks.

During the reporting period, 155 patients were studied, of which 29 patients completed the study. Out of the completed patients, six (20.7%) patients were relieved, 16 (55.2%) patients were partially relieved and seven (24.1%) patients showed no response. Seventy-seven patients were under study and 49 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Itrifal Muqawwi Dimagh* in *Nisyān* (Amnesia) (CRIUMs, Hyderabad and Lucknow; RRIUM, Mumbai)

A study on validation of a Unani pharmacopoeial formulation *Itrifal Muqawwi Dimagh* in the patients of *Nisyān* (Amnesia) was carried out at CRIUMs, Hyderabad and Lucknow; and RRIUM, Mumbai. The patients received *Itrifal Muqawwi Dimagh* in the dose of five gram orally twice daily with water for a period of eight weeks.

During the reporting period, 113 patients were studied, of which 41 patients completed the study. Out of the completed patients, six (14.6%) patients were relieved, 12 (29.3%) patients were partially relieved and 23 (56.1%) patients showed no response. Sixty-one patients were under study and 11 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Itrifal Shahtara* and *Sharbat Unnab* in *Busūr Jild* (Macules/ Pustules) (RRIUMs, Bhadrak and Patna; CRU, Burhanpur)

A study on validation of Unani pharmacopoeial formulations *Itrifal Shahtara* and *Sharbat Unnab* in the patients of *Busūr Jild* (Macules/ Pustules) was carried out at RRIUMs, Bhadrak and Patna; and CRU, Burhanpur. The patients received *Itrifal Shahtara* five gram and *Sharbat Unnab* 20 ml orally twice daily for a period of six weeks.

During the reporting period, 341 patients were studied, of which 254 patients completed the study. Out of the completed patients, 85 (33.5%) patients were relieved, 137 (53.9%) patients were partially relieved and 32 (12.6%) patients showed no response. Ten patients were under study and 77 patients dropped out of the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of Unani pharmacopoeial formulations *Majoon Jograj Gugal* and *Raughan Malkangani* in *Waja' al-Mafāsil* (Rheumatoid Arthritis) (CRIUM, Lucknow; RRIUM, Patna; CRU, Meerut)

A study on validation of Unani pharmacopoeial formulations *Majoon Jograj Gugal* and *Raughan Malkangani* in the patients of *Waja' al-Mafāsil* (Rheumatoid Arthritis) was carried out at CRIUM, Lucknow; RRIUM, Patna; and CRU, Meerut. The patients received *Majoon Jograj Gugal* in the dose of seven gram orally twice daily along with local application of *Raughan Malkangani* on the affected joints for a period of 12 weeks.

During the reporting period, 295 patients were studied, of which 147 patients completed the study. Out of the completed patients, 20 (13.6%) patients were relieved, 84 (57.1%) patients were partially relieved and 43 (29.3%) patients showed no response. Seventy-four patients were under study and 74 patients dropped out of the study. The test drugs were found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Zimad-e-Bars* in *Kalaf* (Melasma) (RRIUMs, Chennai and Kolkata)

A study on validation of a Unani pharmacopoeial formulation *Zimad-e-Bars* in the patients of *Kalaf* (Melasma) was carried out at RRIUMs, Chennai and Kolkata. The patients were given *Zimad-e-Bars* for local application on the affected parts twice daily for a period of eight weeks.

During the reporting period, 37 patients were studied, of which 17 patients completed the study. Out of the completed patients, three (17.6%) patients were relieved, eight (47.1%) patients were partially relieved and six (35.3) patients showed no response. Four patients were under study and 16 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Majoon Suparipak* in *Sayalān al-Rahīm* (Leucorrhoea) (CRIUM, Lucknow; RRIUM, Patna and Aligarh)

A study on validation of a Unani pharmacopoeial formulation *Majoon Suparipak* in the patients of *Sayalān al-Rahīm* (Leucorrhoea) was carried out at CRIUM, Lucknow; and RRIUM, Patna

and Aligarh. The patients received *Majoon Suparipak* in the dose of seven gram orally twice daily for a period of eight weeks.

During the reporting period, 18 patients were studied, of which 12 patients completed the study. Out of the completed patients, two (16.7%) patients were relieved, nine (75.0%) patients were partially relieved and one (8.3%) patient showed no response. Six patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Asgand* in *Waja' al-Mafāsil* (Rheumatoid Arthritis) (RRIUMs, New Delhi, Mumbai, Aligarh; CRU, Bengaluru)

A study on validation of a Unani pharmacopoeial formulation *Habb-e-Asgand* in the patients of *Waja' al-Mafāsil* (Rheumatoid Arthritis) was carried at RRIUMs, New Delhi, Mumbai, Aligarh; and CRU, Bengaluru. The patients received *Habb-e-Asgand* in the dose of one tablet orally twice daily for a period of six weeks.

During the reporting period, 14 patients were registered, and all of them were under study.

Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Bawaseer Damiya* in *Bawāsīr* (Piles) (RRIUMs, Bhadrak and Kolkata; CRU, Kurnool)

A study on validation of a Unani pharmacopoeial formulation *Habb-e-Bawaseer Damiya* in the patients of *Bawāsīr* (Piles) was carried out at RRIUMs, Bhadrak and Kolkata; and CRU, Kurnool. The patients received *Habb-e-Bawaseer Damiya* in the dose of one tablet orally twice daily for a period of two weeks.

During the reporting period, 60 patients were studied, of which 35 patients completed the study. Out of the completed patients, 17 (48.6%) patients were relieved, 12 (34.3%) patients were partially relieved and six (17.1%) patients showed no response. Twelve patients were under study and 13 patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

The following studies under validation of Unani pharmacopoeial drugs were allotted/ initiated during the reporting period:

- Clinical validation of a Unani pharmacopoeial formulation *Itrifal Fauladi* in *Sū' al-Qinya* (Anaemia)
- Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Hilteet* in *Zu'f al-Ishtihā'* (Anorexia)
- Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Tinkar* in *Zu'f al-Ishtihā'* (Anorexia)
- Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Suranjan* in *Waja' al-Mafāsil* (Arthritis)
- Clinical validation of a Unani pharmacopoeial formulation *Laoq-e-Katan* in *Zīq al-Nafas* (Bronchial Asthma)

- Clinical validation of a Unani pharmacopoeial formulation *Khamira-e-Gaozaban Sada* in *Zu'f al-Dimāgh* (Cerebro-asthenia)
- Clinical validation of a Unani pharmacopoeial formulation *Itrifal Mulayyin* in *Şudā'-i Muzmin* (Chronic Headache)
- Clinical validation of a Unani pharmacopoeial formulation *Itrifal Ustukhuddus* in *Nazla Muzmin* (Chronic Sinusitis)
- Clinical validation of a Unani pharmacopoeial formulation *Sharbat-e-Sadar* in *Su'āl* (Cough)
- Clinical validation of a Unani pharmacopoeial formulation *Sufoof-e-Habis-ud-Dam* in *Kasrat-i Tams* (Heavy Menstrual Bleeding)
- Clinical validation of a Unani pharmacopoeial formulation *Majoon-e-Dabeed-ul-Ward* in *Waram al-Kabid* (Hepatitis)
- Clinical validation of a Unani pharmacopoeial formulation *Majoon Muqawwi-e-Rahim* in *Sayalān al-Rahim* (Leucorrhoea)
- Clinical validation of a Unani pharmacopoeial formulation *Sufoof-e-Sailan* in *Sayalān al-Rahim* (Leucorrhoea)
- Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Bawaseer Amya* in *Bawaseer Auiya* (Non-Bleeding Piles)
- Clinical validation of a Unani pharmacopoeial formulation *Jawarish-e-Shahi* in *Khafaqān* (Palpitation)
- Clinical validation of a Unani pharmacopoeial formulation *Khamira Sandal Sada* in *Khafaqān* (Palpitation)
- Clinical validation of a Unani pharmacopoeial formulation *Majoon-e-Chobchini* in *Jarab* (Scabies)
- Clinical validation of a Unani pharmacopoeial formulation *Laoq-e-Badam* in *Khushūnat-i Ḥalq* (Sore throat)

Validation of Unani Pharmacopoeial Fast-Acting Drugs

During the reporting period, the Council initiated the programme of validating the efficacy and safety of some Unani pharmacopoeial fast-acting drugs in different disease conditions at seven clinical centres.

Clinical validation of seven Unani pharmacopoeial drugs was carried out in seven disease conditions, which included *Habb-e-Shifa* in *Nazla-i Hārr* (Common Cold), *Sharbat Zufa Murakkab* in *Su'āl-i Raṭb* (Productive Cough), *Zaroor Kath* in *Qulā'* (Stomatitis), *Arq Ajeeb* in *Sudā'* (Headache), *Raughan Ikseer* in *Waja' al-Asnān* (Toothache), *Qurs Asfar* in *Sharā* (Urticaria), and *Sharbat Toot Siyah* in *Waram-i Ḥalaq* (Pharyngitis). The following studies were conducted:

Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Shifa* for symptomatic relief in the patients of *Nazla-i Hārr* (Common Cold) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna; RRC, Silchar, CRUs, Kurnool and Karimganj)

Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Shifa* was conducted in the patients of *Nazla-i Hārr* (Common Cold) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, RRC, Silchar, and CRUs, Kurnool and Karimganj. The study drug *Habb-e-Shifa* was given orally in the dose of 1-2 pills (according to body weight, one pill in the patients with body weight <50 kg and two pills in patients with body weight >50 kg) twice daily. The treatment was given for a period of seven days.

During the reporting period, 62 patients were studied, of which 54 patients completed the study. Out of the completed patients, 45 (83.3%) patients were relieved, eight (14.8%) patients partially relieved whereas one (1.9%) patient showed no response. Eight patients dropped out of the study. So far 310 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Sharbat Zufa Murakkab* in the patients of *Su'āl-i Raṭb* (Productive Cough) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Sharbat Zufa Murakkab* was conducted in the patients of *Su'āl-i Raṭb* (Productive Cough) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Sharbat Zufa Murakkab* was given orally in the dose of 10 ml with lukewarm water thrice daily. The treatment was given for a period of 14 days.

During the reporting period, 52 patients were studied, of which 36 patients completed the study. Out of the completed patients, 31 (86.1%) patients were relieved, and five (13.9%) partially relieved. Sixteen patients dropped out of the study. So far 157 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Zaroor Kath* for symptomatic relief in the patients of *Qulā'* (Stomatitis) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Zaroor Kath* was conducted in the patients of *Qulā'* (Stomatitis) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Zaroor Kath* was sprinkled locally on the lesions in the mouth twice daily. The treatment was given for a period of seven days.

During the reporting period, 230 patients were studied, of which 203 patients completed the study. Out of the completed patients, 115 (56.6%) patients were relieved, 74 (36.5%) patients were partially relieved whereas 14 (6.9%) patients showed no response. Twenty-seven patients dropped out of the study. So far 380 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Arq Ajeeb* for symptomatic relief in *Sudā'* (Headache) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Arq Ajeeb* was conducted in the patients of *Sudā'* (Headache) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Arq Ajeeb* was applied locally on the forehead twice daily. The treatment was given for a period of seven days.

During the reporting period, 311 patients were studied, of which 269 patients completed the study. Out of the completed patients, 128 (47.6%) patients were relieved, 119 (44.2%) patients were partially relieved whereas 22 (8.2%) patients showed no response. Forty-two patients dropped out of the study. So far 409 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Raughan Ikseer* for symptomatic relief in *Waja' al-Asnān* (Toothache) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Raughan Ikseer* was conducted in the patients of *Waja' al-Asnān* (Toothache) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Raughan Ikseer* was applied locally on the aching tooth twice daily. The treatment was given for a period of seven days.

During the reporting period, 212 patients were studied, of which 189 patients completed the study. Out of the completed patients, 101 (53.4%) patients were relieved, 69 (36.5%) patients partially relieved whereas 19 (10.1%) patients showed no response. Twenty-one patients dropped out of the study and two patients were under study at the end of the reporting period. So far, 192 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Qurs Asfar* for symptomatic relief in *Sharā'* (Urticaria) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Qurs Asfar* was conducted in the patients of *Sharā'* (Urticaria) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Qurs Asfar* was given orally in the dose of one tablet (775 mg) with water twice daily. The treatment was given for a period of 14 days.

During the reporting period, 145 patients were studied, of which 87 patients completed the study. Out of the completed patients, 37 (42.6%) patients were relieved, 43 (49.4%) patients partially relieved whereas seven (8.0%) patients showed no response. Forty-two patients dropped out of the study and 16 patients were under study at the end of the reporting period. So far, 88 patients have completed the study. The test drug was found well-tolerated and no adverse effects were observed.

Clinical validation of a Unani pharmacopoeial formulation *Sharbat Toot Siyah* in the patients of *Waram-i Halaq* (Pharyngitis) (RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool)

Clinical validation of a Unani pharmacopoeial formulation *Sharbat Toot Siyah* was conducted in the patients of *Waram-i Halaq* (Pharyngitis) at RRIUMs, Mumbai, Chennai, Bhadrak and Patna, and CRU, Kurnool. The study drug *Sharbat Toot Siyah* was given orally in the dose of 20 ml twice daily. The treatment was given for a period of seven days.

During the reporting period, 203 patients were studied, of which 166 patients completed the study. Out of the completed patients, 66 (39.8%) patients were relieved, 90 (54.2%) patients partially relieved whereas 10 (6.0%) patients showed no response. Thirty-seven patients dropped out of the study. The test drug was found well-tolerated and no adverse effects were observed.

The following studies under validation of Unani pharmacopoeial fast-acting drugs were allotted/initiated during the reporting period:

- Clinical validation of a Unani pharmacopoeial formulation *Raughan Laboob Saba* in *Sahar* (Insomnia)
- Clinical validation of a Unani pharmacopoeial formulation *Laoq Sapistan* in *Nazla* (Common Cold)
- Clinical validation of a Unani pharmacopoeial formulation *Habb-e-Surfa* in *Su'āl* (Cough)

Validation of Regimen Therapies

Apart from pharmacotherapy, Unani Medicine also offers *Ilāj bi'l-Tadbīr* (Regimen therapy) such as *Hijāma* (Cupping), *Ta'liq* (Leeching), *Dalk* (Massage), *Hammām Yābis* (Sauna), *Hammām al-Bukhār* (Steam bath), etc. for certain disease conditions. During the reporting period, various regimen therapy procedures were performed in a total of 2,854 patients with different diseases. These patients showed significant therapeutic effects in subsiding the signs and symptoms of the diseases.

Hijāma bilā Sharṭ (Dry cupping) was performed in 1,126 patients with different diseases including *Waja' al-Mafāṣil* (Rheumatoid arthritis), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *Irq al-Nisā* (Sciatica), *Tahajjur-i Mafāṣil-i 'Unuq* (Cervical spondylosis), *Tahajjur-i Mafāṣil-i Zahr* (Lumbar spondylosis), *Katif Mujammad* (Frozen shoulder), *Waja' al-Zahr* (Backache), *Waja' al-Katif* (Shoulder pain), *Waja' al-'Unuq* (Neck pain), *Waja' al-Rukba* (Knee pain), *Waja' al-'Aqib* (Achillodynia), *Dawālī* (Varicose veins), *Kasrat-i Ṭams* (Menorrhagia), *'Uṣr al-Ṭams* (Dysmenorrhoea), *Ṣudā'* (Headache), *Ṣala'* (Baldness), *Huẓn* (Depression), etc. at RRIUMs Chennai, Bhadrak, Patna, New Delhi, Aligarh, Srinagar and Mumbai.

Hijāma bi'l Sharṭ (Wet cupping) was performed in 625 patients with different diseases including *Nār Fārsi* (Eczema), *Busūr Labaniyya* (Acne vulgaris), *Dā' al-Sa'lab* (Alopecia), *Bawāsīr* (Haemorrhoid), *Zaght al-Dam Qawī* (Hypertension), *'Uqr* (Infertility), *Iltihāb Fawq al-Luqma Jānibī* (Tennis Elbow), *Waja' al-Mafāṣil* (Rheumatoid arthritis), *Tahajjurr-i Mafāṣil*

(Osteoarthritis), *Irq al-Nisā* (Sciatica), and other musculoskeletal disorders at RRIUMs Chennai, Bhadrak, Patna, New Delhi, Srinagar and Mumbai.

Hijāma bi'l Nār (Fire cupping) was performed in 330 patients with different diseases including *Waja' al-Mafāṣil* (Rheumatoid Arthritis), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *Irq al-Nisā* (Sciatica), *Waja' al-Zahr* (Backache) and *Katif Mujammad* (Frozen shoulder) *Waja' al-Katif* (Shoulder pain) and *Waja' al-Rukba* (Knee pain) at RRIUMs Chennai, Bhadrak, Patna and Srinagar.

Hijāma Muzliqa (Moving cupping) was performed in 268 patient with different diseases including *Waja' al-Zahr* (Backache) and *Katif Mujammad* (Frozen shoulder) at RRIUMs Chennai, Bhadrak, Patna and Srinagar.

Ta'liq (Leeching) was performed in 419 patients with different diseases including *Dawālī* (Varicose veins), *Takhassur al-Dam* (Deep vein thrombosis), *Qadam Zayābūtusiyya* (Diabetic foot), *Khaṣar-o-Taṣqi'* (Frostbite), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *Katif Mujammad* (Frozen shoulder), *Qillat-i Darqiyyat* (Hypothyroidism), *Nār Fārsi* (Eczema), *Dā' al-Ṣadaf* (Psoriasis), *Dā' al-Sa'lab* (Alopecia), *Ṣala'* (Baldness), *Baraṣ* (Vitiligo) and *Marz Takayyus al-Mabyaz* (Polycystic ovarian disease) at RRIUMs Srinagar, Bhadrak and Aligarh.

Hammām al-Bukhār (Steam bath) was performed in 10 patients with different diseases including *Waja' al-Katif* (Upper back pain), *Busūr-i Jild* (Macules/ Papules/ Pustules), *Qūbā* (Ringworm), *Siman Mufrit* (Obesity) and *Bafā* (Dandruff) at RRIUM, Bhadrak.

Dalk Mu'tadil (Moderate Massage) was performed in 65 patients with different diseases including *Waja' al-Mafāṣil* (Rheumatoid Arthritis), *Tahajjurr-i Mafāṣil* (Osteoarthritis), *Tahajjurr-i Mafāṣil-i 'Unuq* (Cervical spondylosis), *Katif Mujammad* (Frozen shoulder), *Waja' al-Zahr* (Backache), *Waja' al-Katif* (Shoulder pain), and *Waja' al-'Aqib* (Achillodynia) at RRIUMs Bhadrak, New Delhi and Aligarh.

Hammām Yābis (Sauna) was performed in 11 patients of *Waja' al-Mafāṣil* (Rheumatoid arthritis) at RRIUM, New Delhi.

Validation of Fundamentals

Theory of *Akhlāt* wa *Mizāj* (humours and temperament)

The objective of the project was to test scientifically the concept of *Akhlāt* (Humours) and *Mizāj* (Temperament), and its relevance to the states of health and diseases. This project was undertaken at the Central Research Institute of Unani Medicine (CRIUM), Hyderabad. The project was aimed at studying the clinical, physiological, pathological, biochemical and genetic parameters of subjects of different temperaments, conducting clinical assessment of *Mizāj* (Temperament) in different diseases, and scientifically establishing correlation among them.

Genetic studies on theory of humours

Genetic studies on theory of humours with special reference to diabetes mellitus, essential hypertension, vitiligo, hepatitis, *Sawdāwī* and other related diseases were carried out; and healthy volunteers served as control. Pharmacogenomic studies of Unani formulations in vitiligo

were also conducted. The studies carried out in each participant included determination of dominant temperament by *Ajnās-i 'Ashara* and special CRF on assessment of temperament, genetic marker studies in relation to temperament, studies of biochemical, physiological and pathological parameters, and pulse wave analysis and its component study in relation to temperament. During the reporting period, the following studies were carried out in 598 patients and healthy volunteers. So far, 832 cases have completed the studies.

Genetic studies on theory of humours with special reference to diabetes mellitus and essential hypertension

During the reporting period, 108 patients of diabetes mellitus and 59 patients of essential hypertension were registered and completed the study. All the patients were of *Damawī* temperament. This study has been completed on a sample size of 169 patients with diabetes mellitus and 123 patients with essential hypertension.

Genetic studies on theory of humours with special reference to vitiligo

During the reporting period, 176 patients of vitiligo were registered and completed the study. All the patients were of *Balghamī* temperament. This study has been completed on a sample size of 202 patients of vitiligo.

Genetic studies on theory of humours with special reference to hepatitis

During the reporting period, 17 patients of hepatitis were registered and completed the study. All the patients were of *Safrāwī* temperament. So far, 18 patients have completed the study.

Genetic studies on theory of humours with special reference to cancer and other diseases

During the reporting period, 62 patients of *Sawdāwī* and other related diseases were registered and completed the study. All the patients were of *Sawdāwī* temperament. So far, 96 patients have completed the study.

Genetic studies on theory of humours with special reference to healthy volunteers

During the reporting period, 176 healthy volunteers were studied, who served as control. Of them, 92 were *Damawī*, 43 were *Balghamī*, 25 were *Safrāwī*, and 16 were *Sawdāwī*. So far, 224 healthy volunteers have completed the study.

The patients and healthy volunteers were referred for genetic marker, biochemical, physiological and pathological studies. Pulse wave analysis and component study in relation to temperament in each subject was also carried out.

Pharmacogenomics of Unani formulations in vitiligo

For the pharmacogenomic studies, blood samples were collected from 28 vitiligo patients and 30 controls. Serum samples from the patients and controls were also collected and stored at -80°C to assess other biological parameters as per the protocol. The real time primers were designed for NLRP1 and GAPDH genes using gene tool software. The RNA was isolated from collected whole blood samples using paxgene blood RNA isolation kit; and isolated RNA was checked qualitatively by agarose gel electrophoresis and quantitatively by nanodrop reading.

The isolated RNA was converted into cDNA using reverse transcriptase enzyme; and the converted cDNA samples were subjected to expression studies using RT-PCR. Expression studies were completed for NLRP1 gene using GAPDH gene as an internal control. The results of the study will be statistically analysed on completion of the sample size.

Genetic studies

For genetic studies, genomic DNA was isolated from peripheral blood samples by using HiPurA™ blood genomic DNA isolation kit. The DNA was then dissolved in Elution buffer; and quality and quantity were checked by agarose gel electrophoresis and nanodrop reading by using multimode reader. The isolated DNA samples were stored at -20°C. The endothelial nitric oxide synthase (eNOS) gene 894G>T polymorphism was detected by polymerase chain reaction (PCR) and restriction fragment length polymorphism (RFLP) methods in 100 essential hypertension patients and 100 healthy controls. From isolated genomic DNA, the eNOS gene was amplified by PCR. After amplification, mutational analysis of the gene was carried out by RFLP. The eNOS PCR product was digested with Mbol restriction enzyme. The PCR-RFLP results were checked on 3% Agarose gel, and the band patterns were analyzed. The results were correlated with the temperament and other biological parameters. The genotype frequencies of the eNOS gene 894G>T in 100 patients with essential hypertension and in 100 healthy control subjects were as follows:

Genotype frequency of G894T gene in 100 patients of essential hypertension

- Wild type (GG) (Homozygous normal) : 78 (78%)
- Heterozygous (GT) : 21 (21%)
- Homozygous (TT) (Homozygous mutated) : 01 (1%)

Genotype frequency of G894T gene in 100 healthy volunteers

- Wild type (GG) (Homozygous normal) : 86 (86%)
- Heterozygous (GT) : 13 (13%)
- Homozygous (TT) (Homozygous mutated) : 01 (1%)

Clinical assessment of Mizāj (temperament)

During the reporting period, assessment of temperament of 5,678 patients attending the OPD of CRIUM, Hyderabad was done. These included 5,108 patients of *Baraṣ* (vitiligo), 208 patients of *Dā' al-Ṣadaf* (Psoriasis), 50 patients of *Kasrat-i Shahmuddam* (Hyperlipidaemia), 82 patients of *Zayābītus Sukkari* (Diabetes mellitus), seven patients of *Zu'f-i- Masāna* (Over-active bladder), two patients of *Nisyān* (Amnesia), two patients of *Waram al-Kabid* (Hepatitis), 21 cases of Hepatitis B healthy carriers, 30 patients of *Zaght al-Dam Qawi Lāzimi* (Essential hypertension), 68 patients of *Iltihāb-i Tajāwīf-i Anf* (Sinusitis), 74 patients of *Ḥasāh al-Kulya* (Nephrolithiasis) and 26 patients of Osteoarthritis.

- In *Baraṣ* (Vitiligo), 546 (10.7%) patients showed *Damawī* (Sanguine) temperament, 4,359 (85.3%) showed *Balghamī* (Phlegmatic) temperament, 197 (3.9%) showed *Safrāwī* (Bilious) temperament and six (0.1%) showed *Sawdāwī* (Melancholic) temperament.

- In *Dā' al-Ṣadaf* (Psoriasis), 67 (32.2%) patients showed *Damawī* temperament, 61 (29.3%) *Balghamī*, 21 (10.1%) *Safrāwī* and 59 (28.4%) *Sawdāwī*.
- In *Kasrat-i Shahmuddam* (hyperlipidaemia), all the patients showed *Balghamī* temperament.
- In *Zayābitus Sukkari* (Diabetes mellitus), 65 (79.3%) patients were of *Damawī* temperament and 17 (20.7%) of *Balghamī* temperament.
- In *Zu'f-i-Masāna* (Over-active bladder), one (14.3%) patient was of *Damawī* temperament, and six (85.7%) of *Balghamī* temperament.
- In *Nisyān* (Amnesia), all the patients were of *Safrāwī* temperament.
- In *Waram al-Kabid* (Hepatitis), one (50%) patient was of *Damawī* temperament, and one (50%) of *Balghamī* temperament.
- In Hepatitis B healthy carriers, seven (33.3%) cases belonged to *Damawī* temperament, 12 (57.2%) cases to *Balghamī*, and two (9.5%) cases to *Safrāwī* temperament.
- In *Zaght al-Dam Qawi Lāzimi* (Essential hypertension), nine (30%) patients were *Damawī*, 17 (56.7%) *Balghamī*, three (10%) *Safrāwī*, and one (3.3%) *Sawdāwī*.
- In *Iltihāb-i Tajāwīf-i Anf* (Sinusitis), 20 (29.4%) patients were *Damawī*, and 48 (70.6%) *Balghamī*.
- In *Ḥasāh al-Kulya* (Nephrolithiasis), 56 (75.6%) patients belonged to *Damawī* temperament, nine (12.2%) to *Balghamī*, and nine (12.2%) to *Safrāwī* temperament.
- In Osteoarthritis, 17 (65.4%) patients belonged to *Damawī* temperament and nine (34.6%) to *Balghamī* temperament.

In these patients, susceptibility for acquiring diseases in relation to different temperaments was also studied. An interim analysis of data revealed that patients of *Balghamī* temperament were more susceptible to *Baraṣ* (Vitiligo) followed by *Damawī*, *Safrāwī* and *Sawdāwī* temperaments. Similarly, persons of *Balghamī* temperament were more susceptible to *Iltihāb-i Tajāwīf-i Anf* (Sinusitis) followed by *Damawī* (Sanguine) temperament. Patients of *Damawī* temperament were more susceptible to diabetes mellitus and *Balghamī* temperament to essential hypertension.

Research-oriented Healthcare

General Out-patient Department (GOPD) Programme

The GOPD programme which also includes Geriatric OPD and RCH/ MCH OPD is aimed at promoting, protecting, and preserving public health through Unani Medicine. Besides, OPDs for post-trial access (PTA) are also conducted in order to provide treatment facility to the research patients after completing the trial. During the reporting period, this programme continued at Central Research Institutes of Unani Medicine (CRIUMs), Hyderabad and Lucknow; Regional Research Institutes of Unani Medicine (RRIUMs), Chennai, Bhadrak, Patna, Aligarh, Mumbai, Srinagar, Kolkata and New Delhi; Regional Research Centres, Allahabad and Silchar (with an extension at Karimganj); Clinical Research Units (CRUs), Bengaluru, Bhopal, Burhanpur, Meerut, Kurnool and Edathala; Clinical Research Pilot Project, Manipur; Hakim Ajmal Khan

Institute for Literary and Historical Research in Unani Medicine, New Delhi and AYUSH Wellness Centre, President's Estate, New Delhi. During the reporting period, a total of 4,10,147 patients comprising 3,48,597 patients in GOPDs, 30,680 in Geriatric OPDs, 12,764 in RCH/ MCH OPDs, and 18,106 in OPDs for post-trial access were treated at different centres. These patients were also assessed for their temperaments and various other factors responsible for occurrence of the disease, thus generating data for research feedback and Unani treatment was prescribed accordingly. These patients were treated with Unani pharmacopoeial formulations and response was recorded.

Mobile Clinical Research Programme

The mobile clinical research programme is aimed at providing healthcare to the population residing in rural areas, urban slums, scheduled caste and scheduled tribe pockets; besides reducing the disease burden in the society by creating health awareness among them. This programme is conducted under the scheme of Special Component Plan of the Government of India comprising Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan (TSP). Under this programme, rural areas, urban slums and pockets predominantly inhabited by SC/ ST population with no medical facility are covered. The Council's researchers visit the adopted pockets at regular intervals and provide free Unani treatment to the patients at their door steps, and thus serve as a potential source of healthcare delivery to the masses. The cases of different ailments are also referred to the institute/ centre for clinical research. Besides, health awareness is also created among the population under coverage particularly the women and senior citizens through health lectures and group meetings on the preventive, promotive and curative health aspects based on the principles of Unani Medicine. They are also made aware of the therapeutic uses of medicinal plants growing in their vicinity in the management of different common/ seasonal ailments.

During the reporting period, this programme continued at Central Research Institutes of Unani Medicine (CRIUM), Hyderabad and Lucknow; Regional Research Institutes of Unani Medicine (RRIUM), Chennai, Bhadrak, Patna, Kolkata, Mumbai, New Delhi and Srinagar; Regional Research Centre (RRC), Allahabad; and Clinical Research Unit (CRU), Burhanpur. During the reporting period, 37 rural pockets/ urban slums covering over 20 lakh population were adopted. A total of 25,257 patients were treated with Unani pharmacopoeial formulations in 615 mobile visits made to these pockets. Predominant diseases as observed were rheumatoid arthritis, osteoarthritis, joint pain, piles, leucorrhoea, skin infections, fever, cough, catarrh, etc.

3.1.2.4. LITERARY RESEARCH PROGRAMME

During the reporting period, Urdu and English translations of Persian book *Mujarrabāt-i Razāi* were completed. This book comprising a collection of formulations tested by the author, Hakim Syed Raza Hasan Jafri may prove useful in selecting formulations for pharmacological and clinical studies. Besides, Urdu translation of Persian book *Muhīt-i 'Azam*, volume-IV was also completed.

Three projects for compilation of Unani classical information on *Saratān* (Cancer), *Dhayābītus* (Diabetes) and *Waja' al-Mafāṣil* (Rheumatoid Arthritis) were completed during the reporting

period. Under these projects, information on each topic under the headings – Introduction, Definition, Types, Causes, Signs & Symptoms, Diagnosis, Principles of Treatment, Dietotherapy, Regimen Therapy, Pharmacotherapy, Preventive & Promotive Measures, and References has been gathered from classical books of Unani Medicine. The evidence-based information has also been provided under the heading *‘Ilāj bi’l-Dawa* (pharmacotherapy) where certain preclinical and clinical studies have been referred. Three monographs; one each on Mental Health, Reproductive and Child Health (RCH), and Healthy Ageing were also compiled during the reporting period.

During the reporting period, the Council was able to compile second volume of *Standard Unani Treatment Guidelines for Common Diseases*, comprising description of 60 commonly occurring diseases. The overall methodology of writing this volume remained same as of the first volume except that the investigations relevant to each disease have been added. Besides common diseases, it also includes many lifestyle disorders, e.g., diabetes, hypertension, benign prostatic hypertrophy (BPH), etc.

Under the programme of reprinting rare books, the work on books, *Intikhāb-i Jalīl* and *Tajvīz-i Jalīl* authored by Hakim Hafiz Jalil Ahmed Ansari, a legendary Hakim of twentieth century was continued.

For distribution in ‘Swasthya Rakshan Programme’ and National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), the publicity material on various topics including Sanitation for Healthy Living, Healthy Living through Unani Medicine, Oral Hygiene, Elderly Care, Maternal and Child Health (MCH), Anaemia, Obesity, Management of Lifestyle Diseases, Managements of Skin Diseases, Dietary Management, Diabetes Mellitus, Cancer, Hypertension, Stroke, Bronchial Asthma, Hyperlipidaemia, Rheumatoid Arthritis, Dementia and BPH was prepared.

The work of abstracting *Jahan-i Tib*’s articles in English continued and 100 articles were abstracted during the reporting period.

3.2. STUDIES UNDER INTRAMURAL RESEARCH (IMR) POLICY

To utilize the full potentials of the scientists working in the different centres and to conduct studies based on region-specific needs, the Council adopted a new Intramural Research (IMR) Policy. The policy also aims to conduct studies in a time-bound manner. During the reporting period, following studies under IMR policy were conducted at Central Research Institute of Unani Medicine, Hyderabad:

Evaluation of therapeutic efficacy and safety of coded Unani drugs PTV-6(O) + PTV-7(O) and TA-1 and TA-1 plus (topical) in *Baraṣ* (Vitiligo) patients of different skin grades

A pilot study to evaluate the safety and efficacy of a combination of coded Unani drugs PTV-6(O) + PTV-7(O), TA-1 (topical) and TA-1 plus (topical) was carried out in vitiligo patients of different skin grades. In group-I, the drug PTV-6 (one tablet of 500 mg thrice daily) and PTV-7 (one tablet of 500 mg twice daily) was given after food, whereas the ointment of the drug TA-1 was applied locally on the affected parts early in the morning and the affected parts were exposed to sunlight for 10-15 minutes. Treatment was given for six months. In group-

II, the patients were treated with PTV-6(O) + PTV-7(O) and TA-1 plus (topical). The dosage, mode of application and duration of treatment was same as in group-I.

During the reporting period, 51 patients were registered in group-I, of which 26 patients completed the study. Out of the completed patients, 18 (69.2%) patients showed repigmentation between 1-40% and eight (30.8%) patients showed no response. Nine patients were under study and 16 patients dropped out of the study.

In group-II, 64 patients were registered, of which 27 patients completed the study. Out of the completed patients, 20 (74.1%) patients showed repigmentation between 1-40% and seven (25.9%) patients showed no response. Five patients were under study and 32 patients dropped out of the study. The test drugs were found well-tolerated and no adverse effects were observed.

Evaluation of therapeutic efficacy and safety of coded Unani drugs PTH-1, PTH-2 and PTH-3 in asymptomatic hepatitis B carriers

A pilot study to evaluate the safety and efficacy of coded Unani drugs PTH-1, PTH-2 and PTH-3 was conducted in 27 patients of asymptomatic hepatitis B carriers. The patients were divided into three treatment groups. In group-I, the patients were treated with the oral drug PTH-1 in the dose of two capsules of 500mg each thrice daily after food. In group-II, the patients were treated with the oral drug PTH-2 in the dose of two capsules of 500mg each thrice daily after food. In group-III, the patients were treated with the oral drug PTH-3 in the dose of two capsules of 500 mg each thrice daily after food. The duration of treatment was six months in all the groups.

During the reporting period, six new patients were registered in group-I, whereas three patients continued from the previous year bringing the total patients studied to nine. Out of them, four patients completed the study and showed no response to treatment. Three patients were under study and two patients dropped out of the study.

In group-II, seven new patients were registered, whereas three patients continued from the previous year bringing the total patients studied to 10. Out of them, five patients completed the study and showed no response to treatment. Four patients were under study and one patient dropped out of the study.

In group-III, eight new patients were registered, whereas two patients continued from the previous year bringing the total patients studied to 10. Out of them, four patients completed the study. Out of the completed patients, one (25%) patient responded to treatment and three (75%) patients showed no response. Two patients were under study and four patients dropped out of the study.

The test drugs were found well-tolerated and no adverse effects were observed.

Single centre, randomized, single blind, parallel group, comparative study to evaluate the efficacy and safety of coded Unani drugs PTA-2+PTA-4 and PTA-3+PTA-4 in osteoarthritis – A pilot study

A pilot clinical study to compare the efficacy and safety of coded Unani drugs PTA-2+PTA-4 and PTA-3+PTA-4 in the patients of osteoarthritis was carried out. The patients were divided

into two groups. The first group received PTA-2 in the dose of one tablet (500mg) thrice daily after food and PTA-4 (Oil form) for local application on the affected parts. The second group received PTA-3 in the dose of one tablet (500mg) thrice daily after food and PTA-4 (Oil form) for local application on the affected parts. The duration of treatment was 12 weeks in both groups.

During the reporting period, 14 new patients were registered in group-I (PTA-2+PTA-4), whereas one patient continued from the previous year bringing the total patients studied to 15. Out of them, seven patients completed the study. Out of the completed patients, five (71.4%) patients were relieved and two (28.6%) patients were partially relieved. Three patients were under study and five patients dropped out of the study.

In group-II (PTA-3+PTA-4), 12 new patients were registered, whereas one patient continued from the previous year bringing the total patients studied to 13. Out of them, 10 patients completed the study. Out of the completed patients, seven (70.0%) patients were relieved and three (30.0%) patients were partially relieved. One patient was under study and two patients dropped out of the study.

The test drugs were found well-tolerated and no adverse effects were observed.

Evaluation and study of the effect of Unani formulation(s) on various biomarkers in patients with *Baras* (Vitiligo)

The study was aimed to establish any potential biomarkers in vitiligo patients and to evaluate the effect of the tested Unani formulations on these biomarkers. The study was conducted in the patients of vitiligo and healthy volunteers (control). The patients were given coded Unani drugs UNIM-001 (two tablets of 800 mg each orally twice daily) and UNIM-003 for topical application. The duration of treatment was eight months. The patients were thereafter followed-up clinically at every two weeks, whereas biomarker analysis was done at baseline, four months and eight months.

During the reporting period, 36 vitiligo patients and 27 healthy individuals fulfilling the criteria were studied and undergone clinical, biochemical and pathological examination. The blood samples from all subjects were stored as serum/ plasma at -80°C for biochemical biomarker analysis. The blood samples were also processed for RNA isolation and cDNA conversion for genetic biomarkers. Four genes (NLRP-1, FoX-P3, MIF, and IL22) along with the GAPDH as control gene were studied; and the real time PCR was done for all four genes. The bio-levels of TNF-a and IL-2 were also measured in all subjects. The biomarkers will be assessed and compared with that of healthy controls.

Evaluation of anti-inflammatory activity of Unani formulation(s) – An in-vitro and in-vivo study

A study to evaluate the in-vitro and in-vivo anti-inflammatory activity of coded Unani drugs UNIM-301 and UNIM-302 was carried out. The aqueous (AQ), hydro-ethanolic (HE) and methanolic (ME) extracts from both the drugs were lyophilized and used for the study. Antioxidant activities measured by FRAP methods of two Unani formulations extracts were performed. Cell proliferation assay (MTT assay) of extracts of UNIM-301 and UNIM-302

were performed on RAW 264.7 cell lines. The procedure for cell line maintenance, passaging and cryopreservation was standardized. The in-vivo studies and acute and sub-acute toxicity studies in rats were continued.

Effect of Unani formulation(s) used for treatment of *Baraṣ* (Vitiligo) on melanocytes: An in-vitro and in-vivo study

An in-vitro and in-vivo study to evaluate the effect of coded Unani drugs UNIM-001, UNIM-003, UNIM-004 and UNIM-005 on melanocytes was carried out in patients with *Baraṣ* (Vitiligo). The aqueous (AQ), hydro-ethanolic (HE) and methanolic (ME) extracts from all the four drugs were used for in-vitro assay. The FRAP assay, representing antioxidant potential, was performed for all three extracts of all the four drugs. In this study, for FRAP assay, mean values <2 were considered the poor anti-oxidant activity, and mean values >2 were considered strong antioxidant activity. Cell proliferation assay (MTT assay) of extracts of UNIM-001, UNIM-003, UNIM-004 and UNIM-005 was performed on B16F10 cell lines. The in-vivo studies and acute and sub-acute toxicity studies were continued.

Developing UPLC fingerprint profile of a coded Unani formulation, UNIM-041

A study to develop a UPLC fingerprint profile of a coded Unani formulation UNIM-041 was carried out. The formulation UNIM-041 and its ingredients were collected for different solvent extractions. The coded Unani formulation, UNIM-041 is a *Mushil* (purgative) drug comprising three ingredients, Zanjabeel (*Zingiber officinale* Rosc), Barg-e-Sana (*Cassia angustifolia* Linn.) and Turbud (*Operculina turpethum* (L.) Silva Manso). A Reversed-phase ultra-performance liquid chromatography coupled with a PDA detector fingerprinting method was developed for UNIM-041 in the methanolic extract for the simultaneous determination of reference marker compounds 6-Gingerol, Sennoside A and Sennoside B and also Operculinic acid B. A BEH C18 column by gradient elution and 0.1% formic acid in water (v/v) and 0.1% formic acid in methanol (v/v) as mobile phase, at 280nm wavelength and flow rate of 0.2 mL/min was used for the experiment. The proposed method can be successfully applied for quality control in batch to batch analysis of UNIM-041. The assay for quantification of Sennoside B, Sennoside A and 6-Gingerol in 12 batches for UNIM-041 formulations in methanolic extract were carried out. The UPLC analysis in other solvent systems like aqueous and hydroalcoholic extract of UNIM-041 was also done. The UPLC method developed is simple, precise, and can be used as a standard reference for the quality control. Thus the formulation UNIM-041 was successfully standardized, along with physico-chemical parameters, TLC, UPLC-PDA analysis, batch to batch assay and the different solvent extract assay.

Developing UPLC fingerprint profile of a coded Unani formulation, UNIM-040

A study to develop UPLC fingerprint profile of a coded Unani formulation, UNIM-040 was carried out. The coded Unani formulation, UNIM-040 is a *Munzij* (concoctive) drug comprising ten ingredients *Asl-us-Soos*, *Anjeer Zard*, *Badiyan Desi*, *Beekh-e-Badiyan*, *Parsiyaoshan*, *Tukhm-e-Khatmi*, *Tukhm-e-Khubazi*, *Gul-e-Surkh*, *Maweez Munaqqa*, and *Beekh-e-Karafs*. A reversed-phase ultra-performance liquid chromatography coupled with a PDA detector fingerprinting method was developed for UNIM-040 in the methanolic extract using acquity BEH C18 column (2.1×100 mm, 1.7µm) by gradient elution under the optimized chromatographic conditions,

using mobile phase as 0.05% aqueous trifluoroacetic acid (v/v) and 0.05% methanolic trifluoroacetic acid (v/v) at 0.2 ml/min at 254 nm wavelength using PDA detector. The method was found to be accurate, precise, reproducible and capable of separating the compounds present in the UNIM-040 along with identified compounds. Under LCMS analysis carried out for 14 standard reference compound mixture, only 10 peaks were identified and confirmed as Gallic acid, 4-O-Caffeoylquinic acid, Caffeic acid, Ferulic acid, Rutin, Quercitrin hydrate, Apigenin, Glycyrrhizin, Palmitic acid, Cyanidin-3, 5-di-O-glucoside in the methanolic extract of UNIM-040 through LCMS data; and marker compounds were detected and identified by UV spectrum and ESI-MS Mass data. The UPLC method developed can be used as a standard reference for the quality control, revealing specific identities for the *Munziji* drug as reference standard. UPLC analysis was also carried out in the aqueous and hydroalcoholic extracts of UNIM-040. Thus, the formulation UNIM-040 was successfully standardized, along with physico-chemical parameters, TLC, UPLC and LCMS analysis, batch to batch assay and the different solvent extract assay.

3.3. COLLABORATIVE RESEARCH

Comparison of clinical efficacy and safety of PUVAsol and Unani formulation UNIM-401 (oral) and UNIM-403 (oil) and UVA in the treatment of chronic plaque psoriasis at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi

A randomized controlled clinical trial (RCT) to compare and evaluate the safety and efficacy of conventional therapy (oral PUVAsol) and coded Unani formulations – UNIM-401 (oral) + UNIM-403 (oil) with UVA in patients with chronic plaque psoriasis was conducted at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi. Patients above the age of 18 years with chronic plaque psoriasis involving body surface area (BSA) of $\leq 10\%$ or a psoriasis area severity index (PASI) of ≤ 10 were included in the study. After baseline investigations, patients were randomly allocated to one of the two study groups. In group I (Test group), patients were given UNIM-401 in the dose of two capsules (500 mg each) orally twice a day and UNIM-403 oil for local application once a day in the morning, followed two hours later by gradually increasing sun exposure. In group II (control group), patients were given 8-Methoxsalen (8-MOP) orally in the dose of 0.6mg/kg as a single morning dose with food on alternate days, followed two hours later by application of petroleum jelly and gradually increasing sun exposure. Response was assessed by reduction in PASI score at 2, 4, 8 and 12 weeks of treatment from baseline.

A total of 287 patients were registered in both the groups, 147 patients in group I and 140 patients in group II. Out of them, 84 patients in group I and 67 patients in group II completed the trial. In group I, six (7.1%) patients and in group II, four (5.9%) patients achieved PASI score of 90 and more. Eighteen (21.4%) patients in group I and 18 (26.9%) patients in group II achieved PASI score of 75 and more. Thirty six (42.9%) patients in group I and 23 (34.3%) patients in group II achieved PASI score 50 and more. Twenty four (28.6%) patients in group I and 22 (32.9%) patients in group II achieved PASI score less than 50. The test drugs were found well-tolerated and no adverse effects were observed.

Comparison of clinical efficacy and safety of Unani therapy in the form of systemic UNIM-004 & topical UNIM-005 and conventional allopathic therapy in the form of PUVAsoL and topical mometasone cream in the treatment of clinically stable vitiligo at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi

A randomized controlled clinical trial (RCT) to compare and evaluate the safety and efficacy of conventional allopathic therapy (oral PUVAsoL and topical mometasone) and coded Unani formulations – UNIM-004 (oral) + UNIM-005 (topical) with UVA in patients with clinically stable vitiligo was conducted at Department of Dermatology, All India Institute of Medical Sciences (AIIMS), New Delhi. Patients of clinically stable vitiligo aged 18 years or over with body surface area (BSA) involvement of > 2% were included in the study. Exclusion criteria were pregnancy, lactation, significant cardiac/ pulmonary/ hepato-renal dysfunction, and segmental/ lip-tip/ universal vitiligo.

After baseline investigations, patients were randomly allocated to one of the two study groups using block randomization method. In group A (test group), patients were given Unani formulations – UNIM-004 two tablets (500mg each) orally twice daily an hour after meals and UNIM-005 lotion for local application once a day, followed 2 hours later by sun exposure between 11 am and 3 pm, starting with 5 minutes with increments of 2 minutes every third sitting till patient develops mild erythema. In group B (control group), patients were given 8-Methoxypsoralen (8-MOP) in the dose of 20-40 mg (according to body weight) after meals on alternate days, along with sun exposure in the same manner as in test group and topical mometasone cream at night daily. The duration of treatment was 36 weeks in each group. Response was assessed by change in pre-specified outcome measures (VASI, PGA, IGA, color match, DLQI, VIS-22) at 4, 12, 20, 28, and 36 weeks of treatment.

During the reporting period, a total of 31 patients were registered in both the groups. There were 16 patients in group A and 15 patients in group B. Out of them, four patients dropped out of the study and 27 patients were under study.

A randomised clinical trial to study the effects of *Safoof Muhazzil* with *Arq-e-Zeera* and orlistat on biomarkers of obesity at Department of Medicine, Jawaharlal Nehru Medical College, AMU, Aligarh

A randomized controlled clinical trial (RCT) to compare and evaluate the safety and efficacy of allopathic therapy (orlistat) and Unani formulations – *Safoof Muhazzil* + *Arq-e-Zeera* in patients with obesity was conducted at Department of Medicine, Jawaharlal Nehru Medical College, AMU, Aligarh. Patients of obesity aged 18-60 years with body mass index (BMI) 25-40 kg/m² falling in the category of overweight, class I and class II obesity were included in the study. After baseline investigations, patients were randomly allocated to one of the two study groups. In group A (control group), patients were given orlistat in the dose of 120 mg orally twice a day. In group B (Test group), patients were given 6 gm of *Safoof Muhazzil* with 40 ml of *Arq-e-Zeera* in the morning and evening. The duration of treatment was two months in each group. Response was assessed by reduction in BMI, waist-hip ratio (WHR), and abdominal circumference at the 15th, 30th, 45th and 60th day of treatment.

During the reporting period, 58 patients were registered, of which 50 patients completed the study. There were 25 patients in group A and 25 in group B. Out of the completed patients, 8.0% belonged to *Damawī*, 6.0% to *Ṣafrāwī*, 82.0% to *Balghamī*, and 4.0% to *Sawdāwī* temperament. At the end of two months, both groups showed significant reduction in BMI, waist-hip ratio (WHR), and abdominal circumference as compared to their respective baseline values. However, reduction was more in test group as compared to control group. Six patients dropped out of the study and two patients were under study. The test drugs were found well-tolerated and no adverse effects were observed.

Double blind placebo controlled randomized study on autism in children using a Unani herbal neuro-restorative supplement and standard rehabilitation therapies at FSMHP-UDAAN for the Disabled, New Delhi

A randomized placebo controlled clinical trial to assess the efficacy of a polyherbal Unani formulation as a supplement to standard rehabilitation therapies in enhancing quality of life in children with autism was conducted at Foundation for Spastics & Mentally Handicapped Persons (FSMHP)-UDAAN for the Disabled, New Delhi. Children aged 2-10 years, diagnosed as autism using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) autism criteria were included in the study, after obtaining a written informed consent from their parents. Exclusion criteria were other genetic disabilities, cerebral palsy, insufficiency of liver/kidney/ marrow functions, and chronic uncontrolled illness. Patients were randomly allocated to one of the two study groups. In test group, patients were given Unani formulation in the dose of 2.5-10 g (according to body weight) orally twice a day on empty stomach along with standard rehabilitation therapies. In control group, patients were given an identical placebo in the same dosage along with standard rehabilitation therapies. The duration of treatment was three months in each group.

Response was assessed by improvement in cognitive parameters using internationally approved scales, including Childhood Autism Rating Scale (CARS), Vineland Adaptive Behavior Scales (VABS), Vineland Social Maturity Scale (VSMS) and IQ scales as applicable to a particular child. During the reporting period, seven patients were registered, and were under study.

Investigation on Pharmacodynamic and Pharmacokinetic interaction of Unani plants *Tinospora cordifolia* and *Eugenia jambolana* (anti-diabetic potential) with hypoglycaemic drug at Department of Pharmaceutical Chemistry, SPP SPTM-SVKM's NMIMS, Mumbai

A preclinical study to determine the pharmacokinetic and pharmacodynamic interactions of *Tinospora cordifolia* (TC) and *Eugenia jambolana* (EJ) with oral hypoglycaemic drug (metformin) was carried out at Shobhaben Pratapbhai Patel (SPP) – School of Pharmacy & Technology Management (SPTM), SVKM's NMIMS, Mumbai. *Tinospora cordifolia* stem bark and *Eugenia jambolana* seeds were authenticated at Agarkar Research Institute, Pune. Macroscopic and microscopic studies of drugs were carried out; and their physicochemical studies were performed to determine the percentage of foreign matter, loss on drying, total ash, acid insoluble ash, and extractive values. Dried aqueous extracts of both drugs were prepared, and the yields of TC stem bark and EJ seeds were 2.1g/100 g and 6.3g/100 g respectively. Preliminary phytochemical screening of extracts of both the drugs showed the presence of

steriods, glycosides, flavonoids, alkaloids, and tannins & phenolic compounds. Thin layer chromatography (TLC) of TC extract was performed in Chloroform : Methanol : Formic Acid (4.5:0.4:0.1) solvent system. Total phenolic content in TC and EJ extracts were determined by the Folin-Ciocalteu Assay. The high phenolic content was observed in EJ (0.192 mg GAE/0.04 g) as compared to TC (0.093 mg GAE/0.06 g). Total flavonoid content was determined by the Aluminium Chloride (AlCl₃) Colorimetric Assay. The high flavonoid content was observed in EJ (1.055 mg QE/0.04 g) as compared to TC (0.727 mg QE/0.04 g).

A preclinical pilot study to determine the pharmacokinetic and pharmacodynamic interactions of *Tinospora cordifolia* with oral hypoglycaemic drug was carried out for 21 days using Streptozotocin (single IP injection at a dose of 53 mg/kg) induced diabetes rat model. The animals were divided into five groups of three animals each. The groups were organized as: Group I: Normal control rats, Group II: Diabetic control rats, Group III: Diabetic rats given TC extract at 200 mg/kg orally, Group IV: Diabetic rats given Metformin at 90 mg/kg orally and Group V: Diabetic rats given TC extract at 200 mg/kg orally + Metformin at 90 mg/kg orally. Blood was withdrawn from retro-orbital plexus of each rat at different time intervals (0,0.5,1,2,4,6,8 and 24 hrs) on 1st, 7th, 14th and 21st day during study. After 21 days of treatment, total cholesterol, blood urea nitrogen (BUN), and aspartate aminotransferase (AST) were determined by Erba Kits. Treatment with TC extract, Metformin and combination of TC extract + Metformin attenuated the elevated levels to normal. Development of TLC and preclinical study of *Eugenia jambolana* extract were under progress.

Redesigning of dosage form of *Majoon-e-Dabeed-ul-Ward* and *Majoon-e-Falasfa* into tablet form along with their physico-chemical and pharmacological evaluation at Department of Saidla, Ajmal Khan Tibbiya College, AMU, Aligarh

The study was aimed to redesign the classical dosage form of *Majoon-e-Dabeed-ul-Ward* and *Majoon-e-Falasfa* into tablet form for better patient compliance, and to make sugar free formulations with improved stability and efficacy. This study was carried out in Department of Saidla, Ajmal Khan Tibbiya College, AMU, Aligarh. Ingredients of *Majoon-e-Dabeed-ul-Ward* and *Majoon-e-Falasfa* were authenticated; and their physicochemical standardisation was done. Physicochemical standards of *Ood-e-Balsan* (*Commiphora opobalsamum*), *Tabasheer* (*Bambusa bambos*) and *Bekh-e-Babuna* (*Matricaria chamomilla* roots) were established in the laboratory of Department of Saidla, as standards for these drugs were not reported. Before manufacturing of tablets, physicochemical standardisation of in process material (powder of ingredients) of *Majoon-e-Dabeed-ul-Ward* was done. Thin layer chromatography (TLC) of extracts of *Ood-e-Balsan*, *Luk Maghsool*, *Tabasheer* and *Bekh-e-Babuna* was carried out as their TLC profiles were not reported. TLC of extract of in process material of *Majoon-e-Dabeed-ul-Ward* was carried out.

Tablets of *Majoon-e-Dabeed-ul-Ward* were prepared and got tested in Delhi Test House, Delhi for the presence of heavy metals, aflatoxins, pesticide residue and microbes. Heavy metals, aflatoxins and pesticide residue were not detected in the tablets. Total bacterial count and total yeast & mould were found within permissible limits. Other specific pathogens, including *Escherichia coli*, *Salmonella*, *Staphylococcus aureus*, and *Pseudomonas aeruginosa* were not detected.

Preparation, physicochemical standardisation, and safety evaluation of tablets of *Majoon-e-Falasfa* were under progress. Also, preclinical study for comparative assessment of safety and efficacy of redesigned dosage form (Tablet) along with classical *Majoon* form were under progress.

3.4. PUBLICATIONS

3.4.1. BOOKS, MONOGRAPHS, REPORTS, ETC.

During the reporting period, the Council brought out the following books, monographs and reports, etc.:

- Unani Medicinal Plants & their Folklore Claims from Chamarajanagar Wildlife Division of Karnataka
- Training Manual – Integration of Unani Medicine in NPCDCS
- Clinical Study of Polyherbal Unani Formulations in *Waram Tajawif al-Anf Muzmin* (Chronic Sinusitis)
- Souvenir and Book of Abstracts – National Seminar on Hakim Ajmal Khan's Multidimensional Personality and Enduring Contributions
- Central Research Institute of Unani Medicine – An Introduction
- CCRUM Annual Report – 2014-15 (English)
- CCRUM Annual Report – 2014-15 (Hindi)
- CCRUM Newsletter (January – February, 2015)
- CCRUM Newsletter (March – April, 2015)
- CCRUM Newsletter (May – August, 2015)
- CCRUM Newsletter (September – December, 2015)
- CCRUM Calendar – 2016
- Reprinting of –
 - ❖ Unani Treatment for Bars – A Success Story (English)
 - ❖ Unani Treatment for Bars – A Success Story (Hindi)
 - ❖ Unani Treatment for Waja-al-Mafasil (Arthritis)– A Success Story (English)
 - ❖ Unani Treatment for Waja-al-Mafasil (Arthritis)– A Success Story (Hindi)
 - ❖ Unani Treatment for Eczema and Psoriasis– A Success Story (English)
 - ❖ Unani Treatment for Eczema and Psoriasis– A Success Story (Hindi)
 - ❖ Cupping Therapy (English)

- ❖ Health Promoting Unani Medicinal Plants (English)
- ❖ Health Promoting Unani Medicinal Plants (Hindi)
- ❖ Health Promoting Unani Medicinal Plants (Urdu)

3.4.2. JOURNALS

During the reporting period, the Council published the following journals:

- Hippocratic Journal of Unani Medicine, Volume-9, Issue-4
- Hippocratic Journal of Unani Medicine, Volume-10, Issue-1
- Hippocratic Journal of Unani Medicine, Volume-10, Issue-2
- Hippocratic Journal of Unani Medicine, Volume-10, Issue-3
- Hippocratic Journal of Unani Medicine, Volume-10, Issue-4

3.4.3. RESEARCH PAPERS

During the reporting period, the following research papers written by the Council's officers were published in reputed journals/ presented in seminars/ conferences:

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3.5. EXTENSION OF HEALTHCARE SERVICES

3.5.1. SCHOOL HEALTH PROGRAMME

School Health Programme is aimed at improving the health and hygiene status of school children and to reduce morbidity rate among them through healthcare and health education. Under this programme, the Council's researchers perform visits to the selected primary and

secondary schools, particularly those in rural areas and urban slums. A baseline health check-up of school children is conducted and those found suffering from any ailment are treated with Unani medicines. Thereafter, health education is provided to them through lectures on different preventive, promotive and curative health aspects; and health related literature is distributed. The children are also educated about the potentialities of the commonly available plants in their vicinity for the management of different diseases. Specific lectures are given on oral hygiene, cleanliness of body and environment, safe drinking water, nutrition, balanced diet, etc.

During the reporting period, this programme continued at CRIUMs, Hyderabad and Lucknow; RRIUMs, Chennai, Bhadrak, Patna, and Srinagar; RRC, Allahabad; and CRU, Burhanpur. The Council's physicians visited 18 schools that were adopted under the School Health Programme particularly those falling in the pockets adopted under mobile clinical research programme. A total of 5,223 school children were covered under this programme. Out of them, health check up of 4,550 children was conducted; and 2,484 children suffering from different ailments were treated in 97 visits made to these schools. With a view to educate the children on healthy living, 52 lectures were delivered on preventive and promotive health aspects. The most common diseases found among the school children included helminthiasis, skin infections, otorrhoea, cold & cough and conjunctivitis.

3.5.2. UNANI MEDICAL CENTRES IN ALLOPATHIC HOSPITALS

Under the scheme of collocation of AYUSH centres in allopathic hospitals in Delhi, a Unani Medical Centre was established at Dr. Ram Manohar Lohia (RML) Hospital on 14 January, 1998 with a view to provide Unani treatment facility to the patients desirous of taking treatment of this system. On the demand of the public, another Unani Specialty Centre started functioning at Deen Dayal Upadhyay (DDU) Hospital, New Delhi on 01 November, 2010. These centres are run by the Council. Besides the general out-patient department (GOPD) facilities, these centres also provide specialized Unani treatment for some selected disorders like vitiligo, eczema, psoriasis, rheumatoid arthritis, bronchial asthma, sinusitis, infective hepatitis, diabetes mellitus, etc. During the reporting period, 29,579 patients were treated at Unani Medical Centre in RML Hospital and 17,183 patients at Unani Speciality Centre in DDU Hospital, New Delhi. A large number of patients visiting the centres were suffering from chronic diseases. Counseling of patients, particularly the senior citizens, was also done to improve their physical activities and mental health.

3.5.3. HEALTH CAMPS

The Council organised health camps through its Institutes/Units with a view to create health awareness among the masses and to provide treatment through Unani System of Medicine. During the reporting period, 54 health camps were organised and 12,238 patients were treated in these camps. Lectures on preventive and promotive health aspects were also delivered by the physicians of the Council. Referral of the patients to the Council's centres as well as other hospitals was also done. The council also participated in one month long Magh Mela at Sangam, Allahabad (U.P.) and treated 2,632 patients with different ailments.

3.5.4. ACTIVITIES UNDER GENDER COMPONENT PLAN FOR WOMEN

The Council continued research and treatment facilities for women under Gender Component Plan. Treatment facilities were made available to women at all clinical centres of the Council. Besides, female patients in the pockets adopted under mobile clinical research programme were also treated by the physicians in the mobile OPD scheme. During the reporting period, 2,24,258 female patients in different OPDs were treated. Efficacy of the Unani pharmacopoeial formulations was also validated under this component. Health lectures/group meetings on preventive and promotive health aspects were also organised in the pockets adopted under mobile clinical research programme. Published literature on preventive, promotive and curative health aspects was also distributed among the masses. Clinical studies on the diseases specific to female such as *Sayalān al-Rahim* (Leucorrhoea) and *Sū' al-Qinya* (Anaemia) also continued.

3.5.5. ACTIVITIES IN THE NORTH-EASTERN REGION

The three centres of the Council in the North-Eastern region – Regional Research Centre, Silchar (with an extension centre at Karimganj) and Clinical Research Pilot Project, Manipur continued Research/ GOPD programme. During the reporting period, 12,606 patients were treated. The most commonly occurring diseases were *Hummā* (Fever), *Hummā Ijāmiya* (Malaria), *Ishāl* (Diarrhoea), *Zahīr* (Dysentery) and *Waja' al-Mafāsil* (Rheumatoid arthritis). The patients were treated with Unani pharmacopoeial drugs.

3.5.6. ACTIVITIES UNDER SPECIAL COMPONENT PLAN – SCHEDULED CASTE SUB-PLAN (SCSP) AND TRIBAL SUB-PLAN (TSP)

Under the Special Component Plan – Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan (TSP), the Council continued research-oriented medicare activities to benefit the SC/ST population at the OPDs of its Institutes/ Units and also through Mobile OPDs in the adopted pockets, besides creating health awareness among the masses. During the reporting period, over 3.85 lakh SC and 1.64 lakh ST populations were covered. A total of 28,826 SC patients were treated at the GOPDs and 7,781 patients in the Mobile OPDs. Similarly, 4,613 and 4,262 ST patients were treated in the GOPDs and Mobile OPDs respectively.

4. INFORMATION, EDUCATION AND COMMUNICATION

4.1. LIBRARY SERVICES

The Council has a Library and Information Centre (LIC) at the Headquarters that aims to collect and preserve scattered literature on Unani System of Medicine, and to disseminate information to the researchers, academicians and practitioners of Unani Medicine.

During the reporting period, services of the LIC remained fully automated through Local Area Network (LAN). The Centre provided its services to the readers through Troodon and *e-Granthalaya* software that control the Online Public Access Catalogue (OPAC), circulation of books, etc. The database of 490 MD (Unani) theses and 50 digitized manuscripts of Unani classics remained available on the OPAC for search and consultation. A total of 281 books were acquired, 147 books accessioned, 2,438 books circulated, and 2,992 issues of daily newspapers and 215 issues of popular magazines were purchased during the year. Besides, 329 issues of journals were received, of which 50 were related to Unani Medicine and 32 were in Hindi language. The LIC carried out cataloguing of 1,470 books, editing of 27,615 fields of existing catalogue and physical processing of 158 books. Besides, bar-coding of 9,500 books was also completed during the period. The LIC provided spiral binding and photocopying, and reference services to the readers. Comb or thermal binding of 166 items and photocopying of 7,300 pages were carried out. The LIC also continued information retrieval service through compiling and disseminating Current Content of Journals (quarterly) and started it in digital form. Another information retrieval service, the Bimonthly Medical New Index was upgraded to the email-based Daily Medical News Alert in the later part of the period. The Selective Dissemination of Information (SDI) service also continued at the LIC. Under this service, 2,995 news clippings were collected, of which 2,884 important ones were sent to Deputy Director General and 1,531 were displayed on the library notice board.

The Centre continued institutional membership of British Council Library, American Resource Centre and Developing Library Network (DELNET) during the year. The LIC also retained access of 22 online journals for its readers. These innovative full text online journals allow users to search articles instantly.

Besides the researchers of the Council working in the Headquarters, a total of 340 members/non-members from all over India visited the library. The following international guests also visited the library:

- Mr. Mohd. Akkas-Uddin Patha, Librarian, Khulna University of Engineering & Technology, Khulna, Bangladesh
- Mr. Chafic Elbeck, Beirut, Lebanon
- Dr. Pinky Mphahlele, Ibn Sina Institute of Tibb, South Africa

The project to develop Union Catalogue of Unani Medical Manuscripts allotted to Regional Research Institute of Unani Medicine, Aligarh continued and total number of cards prepared in the excel form reached 2,792 at the end of the reporting period.

4.2. ORGANIZATION OF CONFERENCE, SEMINAR, ETC.

4.2.1. NATIONAL SEMINAR ON HAKIM AJMAL KHAN'S MULTIDIMENSIONAL PERSONALITY AND ENDURING CONTRIBUTIONS

The CCRUM's Hakim Ajmal Khan Institute for Literary and Historical Research in Unani Medicine (HAKILHRUM) in collaboration with Jamia Millia Islamia organized a two-day 'National Seminar on Hakim Ajmal Khan's Multidimensional Personality and Enduring Contributions' during 12-13 February, 2016 at New Delhi. The seminar highlighted various aspects of Hakim Ajmal Khan's life and contributions and stressed the need to extend his legacy of unity in diversity, patriotism and research and development (R&D) in indigenous systems of medicine. It also demanded to recognize Hakim Sahib's contributions by awarding him Bharat Ratna and establish a university for Unani Medicine.

The seminar had six technical sessions, besides inaugural and valedictory sessions. During the two-day deliberations, over 50 papers were presented on different aspects of multidimensional personality of Hakim Ajmal Khan. On this occasion, five important publications of the Council were also released.

The seminar was inaugurated by Dr. Najma Heptulla, Hon'ble Union Minister of Minority Affairs. In her inaugural speech, she said that Hakim Ajmal Khan was such a unique ambassador of unity in diversity and communal harmony that nobody doubted his character, credibility or intention and that's why he presided over the sessions of Muslim League on the one hand and that of Hindu Mahasabha on the other. She further said that Hakim Sahib left behind a legacy of developing and promoting our indigenous knowledge and science and there was a need to extend that legacy.

Prof. Talat Ahmad, Vice-Chancellor, Jamia Millia Islamia said that Hakim Ajmal Khan was a multifaceted personality and a versatile genius who played pivotal role in the establishment and development of Jamia Millia Islamia and other academic institutions.

Speaking on the occasion, Dr. G.N. Qazi, Vice-Chancellor, Jamia Hamdard said that Hakim Ajmal Khan was one of the pioneers of Unani Medicine. He indeed laid a great path for modern scientists to look into the chemical constituents of various herbs used in traditional medicines in India.

In his keynote address, Prof. Altaf Ahmad Azmi mentioned that besides being a great healer, Hakim Ajmal Khan was a renowned scholar of Arabic and Persian literature and a prolific writer. He made immense contribution to educational advancement of the Indian Muslims and uplifting of Unani Medicine.

Earlier in his welcome address, Prof. Rais-ur-Rahman, Director General, CCRUM stated that there was a need of extending Hakim Ajmal Khan's legacy of unity in diversity, patriotism and research and development (R&D) in indigenous systems of medicine. He complained that the contributions of Hakim Ajmal Khan didn't get due recognition and urged that the Government of India should confer Bharat Ratna on him.

Recognizing their contributions to the cause of Unani Medicine, the CCRUM conferred posthumous Lifetime Achievement Awards on Hakim Mazhar Subhan Usmani and Prof. Isthiyaq Ahmad. The Lifetime Achievement Award was also conferred on Prof. Abdul Jabbar Khan, whereas Hakim Khurshid Ahmad Shafqat Azmi, Hakim Wasim Ahmad Azmi and Dr. Shariq Ali Khan were honoured with Appreciation Awards.

The valedictory session had Dr. Ummul Fazal, formerly director of CCRUM as the chief guest. Dr. Mohammad Khalid Siddiqui, Prof. Syed Shakir Jamil, both formerly Director General, CCRUM; Prof. Rais-ur-Rahman, Director General, CCRUM, Dr. Khalid Mehmood Siddiqui, Deputy Director General, CCRUM, Dr. Rashidullah Khan, Vice President, Central Council of Indian Medicine (CCIM) and Dr. Sagheer Ahmad Siddiqui, Nodal Officer, Jamia Millia Islamia were the other dignitaries present on the dais.

To begin with, Prof. Rais-ur-Rahman summarized key points of presentations made during different sessions of the seminar. He remembered the services of former stakeholders towards CCRUM and made a special mention of the founder director Hakim Abdul Razzack.

Speaking on the occasion, Dr. Ummul Fazal recalled the efforts made by the then director of the Council in its early days and specially mentioned the organization of international seminar in 1987 for the development and propagation of Unani System of Medicine.

Concluding the session, Dr. Khalid Mehmood Siddiqui extended gratitude to the chief guest, dignitaries, delegates, guests, audience, media persons and staff of the Council for making the seminar a grand success.

4.2.2. TECHNICAL OFFICIAL LANGUAGE CONFERENCE

The Council's Regional Research Institute of Unani Medicine (RRIUM), Patna organised a day-long Technical Official Language Conference at Patna on 30 March, 2016. The conference aimed at creating awareness about the importance and provisions of the Official Languages Act and encouraging the officials of the institute to use the official language in day-to-day official works.

In his inaugural speech, Dr. S. Sikandar Ali Khan, formerly Research Officer In-Charge of the institute informed about the efforts being made by the institute for promotion and use of the official language in day-to-day business.

Speaking on the occasion, Dr. M. Shahbaz Ahmad, Secretary, Town Official Language Implementation Committee, Patna advised to adopt new techniques and technologies being introduced by the Department of Official Language for propagation and promotion of the official language.

Prof. Allauddin Ahmad, formerly Vice-Chancellor of Jamia Hamdard, New Delhi urged the officials of the institute to put in their best efforts for promotion of the official language.

Dr. K.B. Ansari, Deputy Director In-Charge, RRIUM, Patna highlighted the role of Unani Medicine in healthcare delivery across the country especially in rural and far-flung areas. He also made a mention of the initiatives being taken by the Council in spreading information about Unani Medicine in Hindi language.

In the technical sessions, Dr. Ishtiaque Alam, Dr. Ayesha Praween, Dr. Rajesh, Shri Aslam Siddiqui, Dr. Tasleem Ahmad, Dr. Rizwanullah, Dr. Mohammad Wasim Ahmed, Dr. Mahboob-us-Salam, Dr. Najmus Sehar, Dr. Mumtaz Ahmad and Dr. Hashmat Imam presented papers related to the contributions of Unani Medicine.

The valedictory session was addressed by Dr. S. Manzar Ahsan, formerly Deputy Director of RRIUM, Patna, Prof. Tawheed Kibria, Government Tibbia College, Patna, Dr. Devanand Prasad Singh, Medical Superintendent, Government Ayurvedic College, Patna and Dr. Rizwanul Haque, Head, Centre for Biological Sciences, Central University of South Bihar, Patna.

Besides, a poetry recitation event was also organized in the evening wherein the guests and officials of the institute recited their Hindi poetry.

4.2.3. BSS ON REVISITING OF NFUM AND UPI

The CCRUM, being the secretariat of Unani Pharmacopoeia Committee (UPC), organized a Brainstorming Session (BSS) on revisiting of National Formulary of Unani Medicine (NFUM) and Unani Pharmacopoeia of India (UPI) on 29 August, 2015 at Jamia Hamdard, New Delhi. The session resolved that all the pharmacopoeial documents should be revisited and updated.

In his introductory remarks, Prof. Rais-ur-Rahman, Director General, CCRUM and Member Secretary of the UPC highlighted the need to revisit and update NFUM and UPI as it provides an opportunity to rectify mistakes and incorporate new developments.

Prof. K.M.Y. Amin, Aligarh Muslim University, Aligarh suggested that vetting of documents should be as per classical literature involving experts while revisiting NFUM and UPI.

In the post-inaugural sessions, Prof. Syed Shakir Jamil, Jamia Hamdard, New Delhi stated that NFUM should be updated regularly as it is a legal document and a part of the Drug and Cosmetic Act. Dr. Asad Pasha, Hyderabad said that identification of drugs and method of preparation should be incorporated in the present draft of NFUM.

Dr. G.N. Qazi, Vice Chancellor, Jamia Hamdard, New Delhi urged the Unani drug industry to come forward and get involved in the making of pharmacopoeias. Prof. Sharique Zafar, Thane highlighted the need of initiating measures to curb contamination of raw drugs.

Prof. M.A. Jafri, Jamia Hamdard, New Delhi pointed out that taxonomy undergoes constant change; hence pharmacopoeias too need to be updated. Prof. Wazahat Hussain, Aligarh; Dr. Mohsin Dehlvi, Dehlvi Remedies, New Delhi; Dr. Asim Ali Khan, Dr. Vidhu Aeri, and Dr. Akhtar Siddiqui – all from Jamia Hamdard, New Delhi – highlighted some points that need to be updated in the NFUM.

Dr. M.U.R. Naidu, Hyderabad stated that drugs need to be developed according to the need of the patients. Dr. Farhan Jalees, Jamia Hamdard, New Delhi expressed that the formulations must be simplified. Dr. Sayeed Ahmad, Jamia Hamdard, New Delhi stated that pharmacological actions should be mentioned together with toxicity data. Dr. M.A. Waheed, Hyderabad said that new technologies may be adopted to conduct safety studies. Dr. Shahid Ansari, Jamia Hamdard, New Delhi too emphasized the need for developing safety parameters. Dr. Ghufra

Ahmad, AMU, Aligarh stated that original references should be consulted while revisiting. Prof. Tajuddin, AMU, Aligarh stressed the need for redesigning Unani formulations.

The BSS ended with concluding remarks by Dr. Khalid Mehmood Siddiqui, Deputy Director General, CCRUM.

4.2.4. NATIONAL CONFERENCE ON APPLICATION OF SOCIAL MEDIA IN INNOVATIVE KNOWLEDGE SERVICES

The CCRUM, in collaboration with the Society for Information Research and Studies (SIRs), organized a day-long 'National Conference on Application of Social Media in Innovative Knowledge Services' at New Delhi on 19 December, 2015. The conference laid emphasis on the application of social media and information technology to disseminate the knowledge and information related to the potentials of Unani Medicine.

Inaugurating the conference, Prof. Rais-ur-Rahman, Director General, CCRUM said that the strengthening of library infrastructure and facilities is very essential for preservation and dissemination of knowledge and research findings.

Earlier, in his introductory remarks, Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM said that library and information professionals play very important role in enabling research and bridging the gap between knowledge resources and researchers. Dr. A.M. Siddiqui, Director, SIRs and Mr. Anand Jha, SIRs also addressed the session.

Later, at the three technical sessions, a total of 37 papers were presented on the impact of social media in library services, user expectations, digital marketing in enhancing library services and other important aspects.

Those who attended the conference included Prof. Uma Kanjilal, Dr. Indra Kaul, Dr. N.K. Bar, Prof. Naushad Ali. Besides, researchers and library staff of the CCRUM and over 100 delegates participated in the conference.

4.2.5. SYMPOSIUM ON HAKIM AJMAL KHAN

The Council's Hakim Ajmal Khan Institute for Literary and Historical Research in Unani Medicine (HAKILHRUM) organized a symposium on Hakim Ajmal Khan in the campus of Jamia Millia Islamia (JMI), New Delhi on 19 May, 2015.

In his presidential address, Prof. Talat Ahmad, Vice Chancellor, JMI said that it was a proud moment for him to address the symposium on Hakim Ajmal Khan, one of the illustrious founders of Jamia. He termed the MoU between Jamia and CCRUM a historical decision saying that it would provide opportunities to researchers from different disciplines to come up together for research and development in their respective fields.

Speaking on the occasion, Prof. Rais-ur-Rahman, Director General, CCRUM said that Hakim Ajmal Khan was an outstanding personality who played very important role in the development of Unani Medicine in the country at a time when the system was passing through a phase of crisis.

In his keynote address, Prof. Abdul Haq, formerly Head, Department of Urdu, University of Delhi emphasized the need to upgrade Ayurvedic & Unani Tibbia College of University of Delhi at Karol Bagh to a university and also suggested that Jamia should establish a Unani college in its campus.

Addressing the inaugural session, Mr. Irshad Ahmad, President, AMU Old Boys Association, Delhi said that Hakim Ajmal Khan was a great Unani physician, an outstanding politician, an educationist, and a symbol of unity in diversity.

In the technical session that was chaired by Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM, four papers on various aspects of the life and contributions of Hakim Ajmal Khan were presented by Hakim K.A.S. Azmi, Hakim Raziul Islam Nadvi, Hakim Fakhr-e-Alam and Hakim Ahmad Sayeed.

4.2.6. ORIENTATION WORKSHOP ON RESEARCH METHODOLOGY

The CCRUM organized a two-day orientation workshop on research methodology at its Headquarters in New Delhi during 8-9 June, 2015. The workshop mainly aimed at sensitizing new Research Officers to fundamentals and methodologies of research and activities and functioning of the Council.

In his welcome address, Prof. Rais-ur-Rahman, Director General, CCRUM emphasized that there is need to expedite the process of validating the safety and efficacy of Unani drugs.

Prof. K.M.Y. Amin, Aligarh Muslim University (AMU), Aligarh said that Unani System of Medicine is a science that has some unique principles and researchers need to master them before conducting study.

Prof. Y.K. Gupta, Head, Department of Pharmacology, All India Institute of Medical Sciences, New Delhi said that researchers should add something new to the science in order to make it evolve, else that science would be stagnant.

Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM also addressed the session and hoped that the newly recruited Research Officers would be great assets for the Council.

In the technical sessions, Prof. Y.K. Gupta, Prof. K.M.Y. Amin, Dr. Roli Mathur, Prof. A. Ray, Dr. N.C. Jain, Dr. Srikant Gaur, Dr. Shariq Ali Khan, Dr. Qamar Uddin and Dr. Nighat Anjum delivered lectures on various topics related to research methodology.

4.2.7. HANDS-ON TRAINING ON *HĪJĀMA* (CUPPING PROCEDURE)

The CCRUM organized a hands-on training on *HĪJĀMA* (cupping procedure) at its Regional Research Institute of Unani Medicine (RRIUM), New Delhi during 9-17 May, 2015. During this extensive training programme, 29 Research Officers of the CCRUM from its different Institutes/ Units in the National Capital Region were given firsthand experience of this unique regimen therapy in two batches by Prof. Abdul Qawi of Al-Farooq Unani Medical College, Indore. Similar training was also provided to the Officials at RRIUM, Patna during 8-11 June, 2015 and other institutes in the later part of the reporting period.

In his inaugural address at RRIUM, New Delhi, Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM said that the objective of organizing the training programme was to revive and promote the age-old regimen therapy and exploit its potentials in curing various diseases.

Earlier in his introductory remarks, Dr. Mohammad Fazil Khan, Research Officer In-charge, RRIUM, New Delhi said that the Council organized the training programme to develop skilled manpower in order to employ the ancient technique at its different institutes.

The theoretical training started with a detailed presentation by Prof. Abdul Qawi, who besides elaborating on the method and technique of this procedure shared his personal experience during his medical practice. He also gave live demonstration of wet cupping on few patients.

The training programme at RRIUM, Patna started on 8 June, 2015 in two batches and concluded on 11 June, 2015. Prof. Abdul Qawi trained the Officials of the Institute for application of the procedure through live demonstration and hands-on training.

4.2.8. SYMPOSIUM ON REDESIGNING OF DOSAGE FORMS OF UNANI FORMULATIONS

The CCRUM organized a symposium on redesigning of dosage forms of Unani formulations on 9 May, 2015 at its Headquarters in New Delhi. The symposium aimed to discuss various aspects of the topic including designing of sugar-free formulations for diabetics, syrup/suspension for paediatric uses, dose reduction, and improvement in palatability and stability.

In his introductory remarks, Prof. Rais-ur-Rahman, Director General, CCRUM stressed the need to redesign conventional forms of Unani formulations into the ones that can increase their acceptability and suit the health conditions arisen due to modern-day lifestyle.

In his inaugural address, Dr. Mohammad Khalid Siddiqui, formerly Director General, CCRUM said that the need for redesigning had been felt intensely but doubts regarding compromise on the Unani fundamentals had cropped up time and again.

Delivering the presidential address, Dr. Anwar Ahmad, formerly Senior Faculty at Ayurvedic & Unani Tibbia College, University of Delhi anticipated that redesigned Unani drugs would be helpful in the propagation of Unani System of Medicine among masses.

Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM summed up the inaugural session and thanked the august gathering.

In the post-inaugural sessions, the symposium had two extensive panel discussions and deliberated sugar-free dosage forms, decrease in dosage bulk, compatibility and palatability, shelf-life, stability and safe packaging of Unani formulations. The symposium resolved that redesigning of Unani formulations should be done without compromising on the fundamentals of Unani Medicine and efficacy of the drugs. It was decided that collaboration with pharmaceutical institutions engaged in drug development should be sought and proposals under Extramural Research Scheme should be invited through expression of interest. It was also agreed upon that fast-acting formulations from Essential Drug List should be taken up in the first phase and a herbal hub be created.

Prof. S. Shakir Jamil, Prof. K.M.Y. Amin, Dr. Srikant Gaur, Prof. Idris Ahmad, Dr. Sagheer A. Siddiqui, Mr. Kafeel Ahmad, Dr. Asim Ali Khan, Prof. Naim Ahmed Khan, Dr. Muzayyana Khatoon, Dr. O.P. Aggarwal, Dr. Rashidullah Khan, Dr. Shariq Ali Khan and Mr. Mohsin Dehlvi were among the invitees and participants of the symposium.

4.3. PARTICIPATION IN CONFERENCES/WORKSHOPS, ETC.

4.3.1. INDIA-US WORKSHOP ON TRADITIONAL MEDICINE

The CCRUM participated in the two-day India-US workshop on traditional medicine organized by the Ministry of AYUSH, Government of India and the US Government during 3-4 March, 2016 at New Delhi. Held under the auspices of the first US-India Health Dialogue in September, 2015 in Washington, D.C., the workshop aimed to collaborate on research and development of traditional medicines for preventive and palliative cancer care.

Representatives from the US Department of Health and Human Services (HHS), Office of Global Affairs (OGA), the National Institutes of Health (NIH), National Cancer Institute (NCI), and the US academic institutions participated in the workshop. From the Indian side, experts of traditional medicine and stakeholders of AYUSH systems, oncologists and scientists from premier research and clinical institutions participated in the workshop.

Both sides agreed in principle on collaboration in standardisation and quality improvement of AYUSH products. It was agreed in principle to form joint working groups on the two sides to take forward the consultation process and mutual learning on sustainable basis. Apart from tangible collaboration between India and the US, the Ministry of AYUSH also identified various stakeholders and scientific institutions with which it plans to work closely in mainstreaming AYUSH in cancer management.

The workshop was jointly inaugurated by the Minister of State for AYUSH (Independent Charge) and Health & Family Welfare, Shri Shripad Yesso Naik, US Ambassador to India, Mr. Richard Verma and Assistant Secretary of Global Affairs at HHS, Ambassador Jimmy Kolker on 3 March, 2016.

Prof. Rais-ur-Rahman, Director General, and Dr. Khalid M. Siddiqui, Deputy Director General, CCRUM participated in the event from the Council's side.

4.3.2. NATIONAL WORKSHOP ON BOTANICAL NOMENCLATURE

Three of the Council's researchers engaged in survey and cultivation of medicinal plants programme participated in the National Workshop on Botanical Nomenclature organized by St. Joseph's College at Kozhikode, Kerala during 9-11 March, 2016.

The objective of the workshop was (i) to generate awareness about International Code of Nomenclature (ICN); (ii) to impart awareness about provision in the code and correct interpretation of articles; (iii) to generate awareness about significant changes in the rules

governing nomenclature; (iv) to provide training in interpretation of legislative and esoteric language of the code; and (v) to provide training to solve nomenclatural problems.

During the technical sessions, different aspects of nomenclature – including history, need and recent trends, practical aspects, problems related to effective and valid publication, problems related to author citation – were discussed through lectures. The workshop also had practical exercises.

4.3.3. VIGYAN SAKSHARTA UTSAV-2016

The CCRUM participated in Vigyan Saksharta Utsav-2016 (science literacy festival) held at Jhanjharpur, Madhubani, Bihar during 21-23 February, 2016. The event was organized by the Centre for Studies of Popular Sciences in collaboration with the Ministry of AYUSH and other government departments.

Inaugurating the event on 21 February, 2016, Shri Ram Nath Kovind, Hon'ble Governor of Bihar said that science plays very important role in human life and it has transformed the world into a global village. He further said that science makes us judge things on the basis of reasons and scientific parameters rather than perception. Speaking on the occasion, Shri Birendra Kumar Chaudhary, Member of Parliament from Jhanjharpur constituency said that science has eased life for the human being through its innovations.

The CCRUM participated in the event and created awareness about the role of science in human health and interventions of Unani System of Medicine in the maintenance of health and prevention of diseases.

4.3.4. ADVANTAGE HEALTHCARE INDIA-2015

The CCRUM participated in Advantage Healthcare India-2015, an international summit on Medical Value Travel held during 5-7 October, 2015 at Pragati Maidan, New Delhi with the aim to promote healthcare services exports from India.

Inaugurating the summit, Ms. Rita A. Teatoria, Commerce Secretary, Government of India said that the Government of India was promoting India as Premier Global Healthcare Destination and to enable streamlined medical services exports from India which is a unique conglomeration of the 5 T's – Talent, Tradition, Technology, Tourism and Trade.

The summit had three plenary sessions on Advantage India – Opportunities and Overview of Indian Healthcare, Innovations and Indian Healthcare, and AYUSH and Wellness. Shri Shripad Naik, Hon'ble Union Minister of State for AYUSH (Independent Charge) delivered keynote address in the third and closing session. In this session, Prof. Rais-ur-Rahman, Director General, CCRUM and Advisor (Unani), Ministry of AYUSH, Government of India informed the gathering about the status of Unani System of Medicine in India, and activities and achievements of the CCRUM.

The Council showcased its achievements through the display of monographs, pharmacopoeias, formularies, other publications and posters.

4.3.5. GLOBAL CONFERENCE ON UNANI MEDICINE

The CCRUM's researchers participated in the Global Conference on Unani Medicine – Emerging Trends and Future Prospects held at the Sher-i-Kashmir International Conference Centre, Srinagar (J&K) during 12-13 October, 2015. It was organised by the Directorate General of Indian System of Medicines, Jammu and Kashmir and sponsored by the Ministry of AYUSH, Government of India and World Unani Foundation (WUF).

Inaugurating the two-day conference on October 12, Hon'ble Union Minister of State for AYUSH (I/C), Shri Shripad Yesso Naik said that India is the world leader in Unani Medicine and the government is committed to its all-round development along with other Indian systems of medicine.

Speaking on the occasion, Shri Mufti Mohammad Sayeed, Honb'le Chief Minister of Jammu and Kashmir said that the alternative systems of medicine were going through a transitional phase and the research being carried out would help dispel many fears and doubts that had emerged about their efficacy.

Shri Chaudhary Lal Singh, Minister for Health & Medical Education, Government of J&K; Ms. Asiya Naqash, Minister of State for Health & Social Welfare, Government of J&K; Prof. Rais-ur-Rahman, Advisor (Unani), Ministry of AYUSH, Government of India and Director General, CCRUM; Dr. M.K. Bhandari, Commissioner/Secretary, Health & Medical Education; Dr. Abdul Kabir Dar, Director General, ISM; and Dr. Mohsin Dehlvi, President, World Unani Foundation were also present during the inaugural session.

Dr. Khalid M. Siddiqui, Deputy Director General, Shri Shamsul Arfin, Research Officer (Chemistry), Shri Aminudin, Research Officer (Botany), Dr. Mohammad Fazil, Dr. Ahmad Sayeed and Dr. Younis Iftikhar Munshi, all three Research Officer (Unani), participated in the event on behalf of the CCRUM.

4.3.6. SEMINAR ON RESEARCH METHODOLOGY IN 'ILĀJ BI'L-TADBĪR

The CCRUM participated in the National Seminar on Research Methodology in 'Ilāj bi'l-Tadbīr (Regimen Therapy) organized by State Takmil-ut-Tib College (STTC), Lucknow during 10-11 October, 2015 at Lucknow.

In his inaugural address, Prof. Sikander Hayat Siddiqui, Principal, State Takmeel-ut-Tib College and Director, State AYUSH Services, Uttar Pradesh highlighted the potentials of 'Ilāj bi'l-Tadbīr and stressed the need to exploit them in the promotion of health and management of ailments, especially non-communicable diseases.

Shri Anup Chandra Pandey, Principal Secretary, AYUSH Services, Uttar Pradesh and Prof. Khan Masood Ahmad, Vice Chancellor, Khwaja Moinuddin Chishti Urdu, Arabi-Farsi University, Lucknow laid emphasis on conducting research on emerging and challenging diseases like dengue, chikungunya and swine flu and advocated for adopting regimen therapies.

Recognizing their contributions for the cause of Unani Medicine, Hakim Wasim Ahmad Azmi and Hakim Sayed Ahmad Khan from CCRUM and eight others were honored by the STTC.

During the two-day seminar that was attended by about 200 delegates, 110 researchers including seven officers from CCRUM presented their research papers and posters.

4.3.7. WORKSHOP TO IMPROVE KNOWLEDGE OF OFFICIAL LANGUAGE

The CCRUM participated in a two-day workshop on official language organized by the Commission for Scientific and Technical Terminology (CSTT) at National Council of Educational Research and Training, New Delhi during 29-30 June, 2015. The workshop aimed to improve the knowledge of official language among official language officers of the offices associated with the Town Official Language Implementation Committee.

Inaugurating the workshop, Prof. Keshari Lal Verma, Chairman, CSTT informed that the Commission has developed Administrative Terminology in 22 languages and played crucial role in the publication of scientific magazines and literary publications. He asked the Officers attending the workshop to organize workshops on the official language in their offices and benefit from the schemes of the Commission.

Mr. Indradev Shukla, Assistant Director, Crime Record Bureau said that in order to promote the use of official language and not limit it to the elite class, it is necessary to make it simple and avoid difficult words.

In the technical sessions, eight lectures on various aspects of official language and the role of the CSTT in its implementation were delivered by experts. Dr. Salim Siddiqui, Research Officer (Unani) and In-charge of Official Language Section at the CCRUM participated in the workshop and benefited.

4.3.8. YOGA DAY CELEBRATION AND INTERNATIONAL CONFERENCE ON YOGA FOR HOLISTIC HEALTH

The CCRUM participated in International Yoga Day Celebration organized by the Ministry of AYUSH, Government of India. The celebrations at New Delhi included a massive Yoga demonstration and a two-day International Conference on Yoga for Holistic Health.

Inaugurating the conference on 21 June, 2015, Hon'ble Prime Minister described Yoga as a journey from "Aham to Vayam; Sva to Samasti" (I to We; Self to Universe). He said that if we perceive our human body to be a unique creation, then Yoga is similar to a "user manual" that makes one aware of the immense capabilities of that creation.

Speaking on the occasion, Shri Shripad Yesso Naik, Minister of State (I/C) for AYUSH said that Yoga is one of the greatest gifts of this country to the entire mankind.

The Minister of State for Finance Shri Jayant Sinha, and Yoga exponents Baba Ramdev, Dr. Nagendra and Dr. Veerendra Heggade also spoke on the occasion.

Earlier, the day kicked off with a massive yoga demonstration involving 35,985 participants on a 1.4 km segment Rajpath. It started with a speech by the Prime Minister, who also participated in Yoga demonstration.

The officials of the CCRUM and other organizations under the Ministry of AYUSH were engaged in the organization of the events and made their best efforts to make them successful.

4.3.9. GLOBAL EXHIBITION ON SERVICES

The CCRUM participated in the first edition of Global Exhibition on Services (GES) organized by the Ministry of Commerce and Industry at Pragati Maidan, New Delhi from 23 to 25 April, 2015. The exhibition aimed to provide the service sector a global visibility.

The GES was inaugurated by Honorable Prime Minister Shri Narendra Modi, while Union Minister for Science & Technology & Earth Sciences Dr. Harsh Vardhan, Union Minister for Health & Family Welfare Shri Jagat Prakash Nadda, Union Minister for Human Resource Development Smt. Smriti Zubin Irani, Union Minister for Micro, Small and Medium Enterprises Shri Kalraj Mishra, Union Minister for Communications and Information Technology Shri Ravi Shankar Prasad, and Minister of State for Commerce and Industry (Independent Charge) Smt. Nirmala Sitharaman were present in the inaugural session.

The valedictory session was addressed by Shri Arun Jaitley, Minister of Finance, Corporate Affairs and Information and Broadcasting.

Healthcare, Information and Technology, and Research and Development were among the focus sectors of the GES. The exhibition attracted over 300 national and international exhibitors and 500 foreign delegates from 55 countries. It also witnessed participation of 18 Indian states. The event had a series of seminars and conferences on relevant sectors.

The CCRUM participated in this global event and showcased its achievements in the research programmes and other allied activities through its stall. Dr. Shaista Urooj, Dr. Ahmed Sayeed and Dr. Merajul Haq represented the Council in the event.

4.4. TRAINING PROGRAMME

The Council, with a view to develop and update their knowledge and skills, provides its medical and non-medical staff the opportunities to attend various training programmes, workshops, etc. During the reporting period, they participated in the following programmes:

- 11th JK Science Congress, University of Kashmir, Srinagar, 12-14 October, 2015.
- 5th International Science Conference, World Science Congress, New Delhi, 10-12 October, 2015.
- India-US Workshop on Traditional Medicine, Ministry of AYUSH, Government of India and US Government, New Delhi, 3-4 March, 2016.
- International Conference on Ayurveda, Unani, Yoga and Naturopathy – Global Wellness Meet 2016, Karnataka Ayurveda and Unani Practitioners Board, Bangalore, 26-28 February, 2016.

- International Seminar on Neuro Rehabilitation and Management of Paralysis in Unani Medicine, The Neuro Rehabilitation and Management Academy, Hyderabad, 20-22 August, 2015.
- International Seminar on *Urdu Tibbi Tarajim - Meyaar Aur Meezan*, Islahi Healthcare Foundation, New Delhi, 19-20 February, 2016.
- National Conference cum Workshop on Intervention of Ilaj Bit Tadbeer in Management of Pain & Disability, Aligarh Muslim University, Aligarh, 7-8 March, 2016.
- National Conference on Ethics, Copyrights and Plagiarism in Research & Publications, Society for Social Development & People's Action and Central Council for Research in Homoeopathy, New Delhi, 8 August, 2015.
- National Seminar cum Workshop on Modernization of Unani Pharmacy – Need and Importance, Aligarh Muslim University, Aligarh, 14-15 November, 2015.
- National Seminar on Unani Medicine and Tibb-e-Nabvi, All India Tibbi Congress, Hyderabad, 8-9 November, 2015.
- National Symposium on Integration of Indian Medicinal System into Modern Medicine, Society of Paediatric Gastroenterology, Hepatobiliary Transplant and Nutrition, Jaipur, 11-14 February, 2016.
- National Workshop on Botanical Nomenclature, St. Joseph's College Kozhikode, Kerala, 9-11 March, 2016.
- Seminar on Role of Unani Medicine in Development of Indian System of Medicine, All India Unani Tibbi Congress, Srinagar, 12-13 May, 2015.
- Winter Institute in Global Health (WIGH) 2016, PACE University, BITS Pilani & Apollo Institute of Medical Sciences & Research, Hyderabad, 5 January, 2016.
- Workshop on Official Language, Commission for Scientific and Technical Terminology (CSTT), New Delhi, 29-30 June, 2015.
- World Yoga & Arogya Convention, Art Exotica, Hyderabad, 18-21 June, 2015.
- XXXIV International Conference, All India Persian Teacher's Association, Patna, 26-28 December, 2015.

4.5. PARTICIPATION IN AROGYA FAIRS/ EXPOS

The Ministry of AYUSH, Government of India in collaboration with State Governments and other stakeholders organises Arogya Fairs/ Expos to propagate Indian systems of medicine, highlight activities and achievements of its research councils, provide free-of-cost diagnosis and treatment to the ailing visitors, and impart awareness about health, hygiene, and curative aspects of ill-health. The CCRUM and its institutes on the direction of Ministry of AYUSH participated in National and State level Arogya Fairs and similar events organised by the ministry during the reporting period.

During all these events, the CCRUM showcased its progress in the area of clinical research, drug standardisation, survey and cultivation of medicinal plants, and literary research. It also displayed posters and charts highlighting various concepts of Unani System of Medicine. Besides, some important publications of the Council like Unani Pharmacopoeia of India, National Formulary of Unani Medicine, Hippocratic Journal of Unani Medicine, Standard Unani Medical Terminology, and Standard Unani Treatment Guidelines for Common Diseases were put on display. With a view to create awareness about healthy living and intervention of Unani Medicine in curing diseases and promoting health, free-of-cost literature on Unani Medicine and success stories on treatment of some chronic and common diseases were distributed among the visitors. The Council also deployed its physicians to provide free consultation and treatment to the ailing visitors seeking Unani treatment. Lectures on various health issues were also delivered by the Council's researchers. Snapshots of some important events are as follows:

4.5.1. STATE AROGYA FAIR AT IMPHAL (MANIPUR)

The State Arogya Fair held at Imphal during 24-27 April, 2015 was inaugurated by Shri Phungzathang Tonsing, State Minister for Health & Family Welfare and AYUSH who advocated for mass plantation of the medicinal herbs to boost the production of medicines in the state. The inaugural function was attended by Dr. M. Nara Singh, President, Homoeopathic Medical Association, Manipur, Dr. O. Ibomcha, Director of Health Services & State Mission, Manipur, Dr. K. Rajo Singh, Director of Family Welfare Services, Manipur and Dr. K. Lokendro Singh, Director of AYUSH, Manipur.

The fair had a total of 41 stalls that exhibited different varieties of plant species along with medicinal herbs and other natural healing ingredients in the course of the four-day long fair. The event also accommodated various scientific sessions focusing on the Science of AYUSH that were addressed by renowned resource persons. There were also interaction sessions between the resource persons, public and media.

4.5.2. NATIONAL AROGYA EXPO-2015 AT THIRUVANANTHAPURAM (KERALA)

The National Arogya Expo-2015 was held at Thiruvananthapuram, Kerala during 21-24 May, 2015. Inaugurating the event, Union Minister of State for AYUSH (Independent Charge) Shri Shripad Yesso Naik said that AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) services would be improved at all levels from primary health centres to All India Institute of Medical Sciences (AIIMS). Stating that India would sign MoUs on bilateral ties with other countries to set up Indian alternative medicine centres, he informed that Hungary, Bangladesh, Mauritius and Nepal had signed pacts thus far.

Speaking on the occasion, Shri V.S. Sivakumar, Minister of Health & Family Welfare, Government of Kerala said that AYUSH department under the state government would start functioning by next week. Shri Nilanjan Sanyal, Secretary, Ministry of AYUSH, Government of India also addressed the audience at inaugural function.

The expo had about 300 stalls from 200 companies. As many as 17 stalls from the subordinate organizations of the Ministry of AYUSH displayed their products and services. Three seminars and a workshop related to health and Indian systems of medicine were also part of the event.

4.5.3. NATIONAL AROGYA FAIR AT VARANASI (UP)

The National Arogya Fair held at Varanasi during 12-15 December, 2015 was inaugurated by Shri Shripad Yesso Naik, Hon'ble Minister of AYUSH, Government of India. Addressing the event Shri Naik said, 'With the establishment of Ministry of AYUSH the Government of India is making all-round efforts to promote and propagate AYUSH systems as a safe, economic and preferred alternative to the modern medicine'. The event was also addressed by Sh. Anil Ganeriwala, Joint Secretary to Government of India, Ministry of AYUSH and officials from U.P. Government.

4.5.4. STATE AROGYA FAIR AT RAJKOT (GUJARAT)

The State Arogya Fair held at Rajkot during 8-11 January, 2016 was a part of the multi-sectoral show Vibrant Saurashtra Expo and Summit-2016 which had eight dedicated pavilions of different segments including one dedicated to AYUSH systems. The four-day event saw an immense footfall of over 2,00,000 people. The visitors primarily shopped for a variety of medicines, life giving therapies and herbal products.

The main event was inaugurated by Smt. Anandiben Patel, Hon'ble Chief Minister of Gujarat. Other eminent political figures included Shri Mohan Kundariya, Hon'ble Minister of Agriculture and Farmers Welfare, India and Shri Vijay Rupani, Hon'ble Minister of Transport, Water Supply, Labour and Employment, Gujarat.

4.5.5. STATE AROGYA FAIR AT JODHPUR (RAJASTHAN)

The State Arogya Fair held at Jodhpur, Rajasthan during 28-31 January, 2016 was inaugurated by Shri Rajendra Singh Rathore, Hon'ble Health Minister of Rajasthan. Addressing the inaugural function, he informed that his government was committed to the development of AYUSH systems and their budgetary allocation would get significant hike in the next financial year. He also announced that the posts lying vacant in hospitals would be filled up by AYUSH doctors and 1700 vacancies related to traditional systems of medicine would be created.

4.5.6. AROGYA EXPO AT KOZHIKODE (KERALA)

The Arogya Expo at Kozhikode, Kerala was organized alongside the third edition of Global Ayurveda Festival during 31 January to 04 February, 2016. Addressing Vision Conclave of the Global Ayurveda Festival on 02 February, Hon'ble Prime Minister Shri Narendra Modi said, 'The country needs healthcare systems that can lower the burden of noncommunicable and lifestyle-related diseases. Ayurveda and Yoga are among the systems that could bring about physical, mental and social well-being'. He further said that the Central Government was focused on tapping the potential of holistic medicine as not only an efficacious system

of treatment, but also as a viable economic activity. Union Minister of State for AYUSH Shri Shripad Yesso Naik said that the government was into tie-ups with Asian and European countries to promote Indian systems of medicine globally.

4.5.7. STATE AROGYA FAIR AT AMBALA (HARYANA)

The State Arogya Fair held at Ambala during 3-6 March, 2016 was inaugurated by Shri Anil Vij, Minister of Health & Medical Education, and AYUSH, Government of Haryana. In his inaugural address, he announced that an integrated hospital would be started soon in the state which will provide healthcare services of all the traditional medical systems as well as modern medicine. He also said that in the newly constructed hospital in Ambala, one floor will be allotted to the AYUSH systems, so that traditional medical expertise could be utilized.

The event was also addressed by Shri Ashok Sangwan, Deputy Commissioner, Ambala, Shri P.K. Mahapatra, Additional Chief Secretary (Health), Dr. Saket Kumar, Director of AYUSH and other senior officials of Haryana.

4.5.8. NATIONAL AROGYA FAIR AT PUNE (MAHARASHTRA)

The National Arogya Fair held at Pune during 19-22 March, 2016 was inaugurated by Shri Shripad Yesso Naik, Hon'ble Minister of State (I/C) for AYUSH, Government of India. Shri Ajit M. Sharan, Secretary (AYUSH), Government of India and officials from Maharashtra Government were also present on the occasion. In his inaugural address, Shri Shripad Naik said that AYUSH systems have potential to combat various non-communicable and emerging diseases and the Government of India is making efforts to harness that potential.

4.5.9. NATIONAL AROGYA FAIR AT PANAJI (GOA)

The National Arogya Fair held at Panaji, Goa during 27-30 March, 2016 was inaugurated by Union Minister of State (Independent Charge) for AYUSH, Shri Shripad Yesso Naik in the presence of Goa Chief Minister Shri Laxmikant Parsekar, Speaker of Goa Legislative Assembly Shri Anant Shet, Deputy Chief Minister Shri Francis D'Souza, Forest Minister Shri Rajendra Arlekar, Science and Technology Minister Ms. Alina Saldanha and Leader of Opposition Shri Pratap Singh Rane.

On the occasion, Shri Shripad Yesso Naik also released the Yoga Protocol for the second International Day of Yoga falling on 21st June, 2016. In his inaugural address, Shri Naik informed that the Union Government contemplates to open one AYUSH hospital in every district of the country. He further said that the AYUSH Ministry has plans to establish an All India Institute of Yoga and Naturopathy and a unit of each system under AYUSH in Goa in the near future.

4.6. PARTICIPATION IN PROMOTION OF OFFICIAL LANGUAGE

With a view to motivating the employees to create an environment for implementation of the Official Language Policy in day-to-day work, Hindi Pakhwara (fortnight) was celebrated at the CCRM Headquarters in New Delhi and its different institutes. Besides organization

of various competitions, Hindi work done in different sections of the headquarters was also reviewed section-wise during the celebration. The Pakhwara at the CCRUM headquarters was conducted during 03-17 September, 2015.

Inaugurating the Pakhwara on 03 September, Prof. Rais-ur-Rahman, Director General, CCRUM said that it is the duty of every employee of the Council to use Hindi in day-to-day official work and participate enthusiastically in various competitions of Hindi Pakhwara.

During the Hindi Pakhwara, the Council organised Hindi Shrutlekh (Dictation), Hindi Translation, Hindi Note Writing, Hindi Debate, Hindi Poetry and Essay Writing Competitions at its headquarters. The Hindi Pakhwara was also celebrated in different institutes/centres under the Council which includes Central Research Institutes of Unani Medicine (CRIUMs), Hyderabad and Lucknow; Regional Research Institutes of Unani Medicine (RRIUMs), New Delhi, Aligarh, Bhadrak, Mumbai, Patna, Chennai, Srinagar; Hakim Ajmal Khan Institute for Literary and Historical Research in Unani Medicine (HAKILHRUM), New Delhi; Drug Standardisation Research Institute (DSRI), Ghaziabad; Regional Research Centre (RRC), Allahabad; and Clinical Research Units (CRUs), Burhanpur, Meerut, etc. to promote Hindi in official work.

The prize distribution function at CCRUM headquarters was held on 17 September. The function had Shri Pramod Kumar Sharma, Deputy Director, Northern Regional Implementation Office-1 (Delhi), Department of Official Language as the chief guest. In his address, he informed about important aspects of the official language policy and emphasized that sincere efforts at each level were needed for greater promotion of Hindi language.

At CCRUM headquarters, winners of first prize – Dr. Jamal Akhtar, Dr. Misbahuddin Azhar, Mrs. Veena Sharma, Mrs. Gul Rukh, Miss Neha Sachdeva, Mrs. Leelavati, Mr. Sompal – and other winners were awarded by Shri Pramod Kumar Sharma, Prof. Rais-ur-Rahman and Dr. Khalid M. Siddiqui. Dr. Salim Siddiqui, Research Officer (Unani) and In-charge, Rajbhasha Section was the organiser of the event and was assisted by Hindi Assistant Mrs. Akhtar Parveen, Miss Shabnum Siddiqui and Mrs. Veena Sharma.

Apart from organizing Hindi Pakhwara, Dr. Salim Siddiqui participated and represented the Council in the meetings of Town Official Language Implementation Committee and meetings of Ministry of AYUSH pertaining to the official language. The Rajbhasha Section conducted quarterly meetings of official language implementation committee wherein matters related to the organization of workshops, promotion of letter writing in Hindi, making the website bilingual, review of Hindi works in various sections of the Council, review of quarterly reports of various institutes/centres of the Council, etc. were discussed and specific strategy was developed. Besides, information, education and communication materials related to the promotion of Unani Medicine were printed in Hindi for distribution in health camps, Swasthya Rakhshan programme, Arogya fairs and exhibitions.

4.7. APPOINTMENTS

Dr. Syed Hajra Begum was appointed Research Officer (Pathology) at RRIUM, Chennai on 19 May, 2015.

Dr. Afshan Qaiser was appointed Research Officer (Unani) at CRU, Bhopal on 12 June, 2015.

Dr. Mohd. Manzar Alam was appointed Research Officer (Unani) at RRIUM, Mumbai on 12 June, 2015.

Dr. Noman Anwar was appointed Research Officer (Unani) at RRIUM, Chennai on 12 June, 2015.

Miss. Shabnam Siddiqui was appointed Assistant Editor at CCRUM headquarters on 12 June, 2015.

Dr. Abdul Rasheed was appointed Research Officer (Unani) at RRIUM, Bhadrak on 18 June, 2015.

Dr. Mohd. Masihuzzaman Ansari was appointed Research Officer (Unani) at RRC, Silchar on 20 June, 2015.

Dr. Mohd. Sheeraz Mustaque Ahmad was appointed Research Officer (Unani) at RRIUM, Bhadrak on 22 June, 2015.

Dr. Heena Rahman was appointed Research Officer (Unani) at CRIUM, Hyderabad on 23 June, 2015.

Dr. Mohd. Afsahul Kalam was appointed Research Officer (Unani) at RRIUM, Kolkata on 24 June, 2015.

Dr. M.A. Waheed was appointed Research Officer (Unani) at CRU, Kerala on 25 June, 2015.

Dr. Athar Parvez Ansari was appointed Research Officer (Unani) at RRIUM, Chennai on 26 June, 2015.

Dr. Mohd. Tariq was appointed Research Officer (Unani) at CRIUM, Hyderabad on 22 July, 2015.

4.8. PROMOTIONS

Dr. Mohd. Fazil Khan was promoted as Deputy Director (Unani) at RRIUM, New Delhi on 22 December, 2015.

Dr. Shariq Ali Khan was promoted as Deputy Director (Unani) at RRIUM, Aligarh on 22 December, 2015.

Dr. Khadeerunnisa was promoted as Deputy Director (Unani) at CRIUM, Hyderabad on 23 December, 2015.

Dr. Zubair Ahmad Khan was promoted as Assistant Director (Unani) at DSRI, Ghaziabad on 28 December, 2015.

Dr. K.B. Ansari was promoted as Deputy Director (Unani) at RRIUM, Patna on 06 February, 2016.

Dr. Mohd. Ismail was promoted as Deputy Director (Unani) at RRIUM, Chennai on 01 March, 2016.

Mr. F.A. Bazaz was promoted as Assistant Director (Administration) at CCRUM Headquarters on 10 March, 2016.

4.9. RETIREMENTS

Mrs. Neelam Rani, UDC at CCRUM headquarters retired on 30 April, 2015.

Mr. J. Kashinath, Lab Attendant at CRIUM, Hyderabad retired on 30 April, 2015.

Ms. Nadira S. Ahmad, Lab Technician at RRIUM, Mumbai retired on 31 May, 2015.

Mrs. C.H. Bharti, Aya at CRIUM, Hyderabad retired on 31 May, 2015.

Ms. K. Jaya Prada, Staff Nurse at CRIUM, Hyderabad retired on 31 May, 2015.

Dr. Sagheer Ahmed Siddiqui, Research Officer (Unani) at LRIUM, New Delhi retired on 30 June, 2015.

Dr. N. Hasnain, Research Officer (Biochemistry) at CRIUM, Lucknow retired on 30 June, 2015.

Mr. Sheikh Afsar Ali, Investigator at CRIUM, Hyderabad retired on 30 June, 2015.

Mr. R. Ashok, Electrician at CRIUM, Hyderabad retired on 30 June, 2015.

Mr. Chatar Bhoj, Lab Technician at RRIUM, New Delhi retired on 30 June, 2015.

Mrs. Naheed Khatoon, Research Officer (Biochemistry) at CRIUM, Lucknow retired on 31 July, 2015.

Mr. K.S. Mohd. Zafarullah, Junior Administrative Officer at RRIUM, Chennai retired on 31 July, 2015.

Mr. Abdul Luqman, Driver at RRIUM, Bhadrak retired on 31 July, 2015.

Dr. A.B. Alvi, Research Officer (Unani) at CRIUM, Lucknow retired on 31 August, 2015.

Dr. Aslam Khan, Research Officer (Pathology) at Clinical Research Unit, Bhopal retired on 31 August, 2015.

Mr. Basheer Ahmed Teli, Pharmacist at RRIUM, Srinagar retired on 31 August, 2015.

Dr. Sadaqatullah Sadiq, Research Officer (Unani) at RRIUM, New Delhi retired on 30 September, 2015.

Dr. Wahiduzzaman, Research Officer (Unani) at CRIUM, Lucknow retired on 30 November, 2015.

Mr. Mazhar Baksh, Chowkidar at RRIUM, Bhadrak retired on 31 December, 2015.

Dr. Musheer Ahmed Khan, Research Officer (Unani) at CRIUM, Hyderabad retired on 31 January, 2016.

Mr. Wasiq Imam, Administrative Officer at CCRUM headquarters retired on 28 February, 2016.

Mr. M. Jafar Hussain Khan, Peon at CRIUM, Hyderabad retired on 28 February, 2016.

Mrs. Archana Guha, Aya at RRIUM, Bhadrak retired on 28 February, 2016.

4.10. DEATHS

Mr. Hamid Alam, Lab Attendant at RRIUM, Patna died in harness on 08 July, 2015.

Mr. Suheb Arsalan, Cook at RRIUM, Bhadrak died in harness on 18 February, 2016.

Mr. J.R. Toppo, Junior Administrative Officer at RRIUM, Patna died in harness on 31 March, 2016.

5. FINANCIAL STATEMENT

5.1. AUDIT REPORT

SEPARATE AUDIT REPORT OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA ON THE ACCOUNTS OF CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE (COUNCIL) FOR THE YEAR ENDED 31 MARCH, 2016

We have audited the attached Balance Sheet of Central Council for Research in Unani Medicine (Council) as on 31 March, 2016, the Income & Expenditure Account and Receipts & Payments Account for the year ended on that date under Section 20(1) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971. The audit has been entrusted for the period upto 2018-19. These financial statements include the accounts of nine regional offices of the Council. These financial statements are the responsibility of the Council's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Laws, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/ Comptroller and Auditor General's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

- (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
- (ii) The Balance Sheet, Income & Expenditure Account and Receipts & Payments Account dealt with by this report have been drawn up in the format approved by the Ministry of Finance, Government of India.
- (iii) In our opinion, proper books of accounts on double entry system of accounting have been maintained by the Council in so far as it appears from our examination of such books.
- (iv) We further report that:

A. Balance Sheet

A.1. Liabilities

A.1.1. Current Liabilities Rs. 51.37 crore

A.1.1.1. The provision for retirement benefits as required in the common format of accounts for the central autonomous bodies was not made on actuarial basis.

A.1.1.2. Time barred cheques worth Rs. 0.03 crore issued before December, 2015 were not written back. This has resulted in understatement of current liabilities and bank by Rs. 0.03 crore each.

B. General

B.1. The Council is accounting for the payment of salary and allowances on cash basis instead of accrual basis which is not consistent with the accrual concept of accounting.

C. Grants-in-aid

(i) Health Account

Out of the grant-in-aid of Rs. 92.42 crore (Plan Rs. 43.92 crore and Non-Plan Rs. 48.50 crore) received during 2015-16, Rs. 1.88 crore was received in March, 2016. The Council had an unspent balance of previous year Rs. 3.16 crore (Plan Rs. 3.10 crore and Non-Plan Rs. 0.06 crore). The Council had its own receipt of Rs. 13.41 crore (Plan Rs. 2.28 crore and Non-Plan Rs. 11.13 crore). The Council utilized Rs. 107.70 crore (Plan Rs. 48.04 crore and Non-Plan Rs. 59.66 crore), leaving an unutilized balance of Rs. 1.29 crore (Plan Rs. 1.26 crore and Non-Plan Rs. 0.03 crore) during 2015-16.

(ii) Specific Project Account

The Council also received grants of Rs. 0.52 crore for specific projects from various agencies, in addition to unspent balance of previous year Rs. 3.03 crore. The Council had its own receipt of Rs. 0.63 crore. The Council utilized Rs. 1.23 crore, leaving an unutilized balance of Rs. 2.95 crore during 2015-16.

D. Management Letter: Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director General, Central Council for Research in Unani Medicine, through a management letter issued separately for remedial/corrective action.

- (v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.
- (vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India:
- In so far as it relates to the Balance Sheet of the state of affairs of the Central Council for Research in Unani Medicine as on 31 March, 2016; and
 - In so far as it relates to Income and Expenditure Account of the deficit for the year ended on that date.

For and on the behalf of the C&AG of India



**Director General of Audit
(Central Expenditure)**

Place: New Delhi
Date: 22 September, 2016

ANNEXURE**1. Adequacy of internal audit system**

The internal audit of the Council was conducted up to 2012-2015 by the Ministry of Health and Family Welfare in July, 2015.

2. Adequacy of internal control system

Internal control system was not adequate as risk assessment was not made and meetings of BOG/Committees were not held on due dates. Further, 35 paras pertaining to the period 2000-01 to 2013-14 were outstanding for settlement.

3. System of physical verification of fixed assets

The physical verification of fixed assets was conducted up to 2015-16 and no discrepancy was reported.

4. System of physical verification of inventory

The physical verification of Books and Publications was conducted up to 2015-16. Books worth Rs. 7326/- were found untraceable during physical verification of library, pending adjustment in accounts. The physical verification of stationery and consumables, etc. was conducted up to 2015-16 and no discrepancy was reported.

5. Regularity in payment of statutory dues

No payment over six months in respect of statutory dues was outstanding as on 31 March, 2016.

5.2. AUDITED STATEMENT OF ACCOUNTS

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Index of the Annual Accounts for the Year 2015-16

S. No.	Name of the accounts	Page No.	Schedules at Page No.
1.	Receipt & Payment account	134-135	138 – 173
2.	Income & Expenditure account	136	174 – 176
3.	Balance Sheet	137	177 – 180
4.	Notes on Accounts	181	–

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Receipt & Payment Account for the year ended 31 March 2016

S. No.	Receipts	Current Year	Previous Year	S. No.	Payments	Current Year	Previous Year
1.	Opening balance			1.	Establishment expenses	75,66,77,479.00	59,12,13,290.00
	(i) Cash in hand	2,09,867.60	2,16,854.75	2.	Administrative Expenses	12,21,28,770.31	7,77,96,429.00
		-	-	3.	Other Expenses	-	-
	(ii) Cash-at-bank	6,57,44,875.50	7,88,51,787.89		(i) Material & Supplies	9,12,05,982.00	4,34,32,721.00
	Total Opening balance	6,59,54,743.10	7,90,68,642.64		(ii) Advance to Govt. Servants	17,12,500.00	12,59,000.00
2.	G.I.A. received				(iii) Outstanding advances	1,27,64,536.00	2,50,67,270.15
	(i) From Government of India	92,93,75,000.00	73,86,37,000.00		(iv) Other charges	2,26,29,642.00	84,83,678.00
	(ii) From other sources	-	-	4.	Investments (Out of own funds)	29,90,50,392.84	23,50,63,169.30
3.	Bank interest	2,00,58,976.94	1,64,69,284.57	5.	Fixed assets	2,98,80,647.79	2,44,27,449.00
4.	Interest on refundable advances	6,39,707.00	8,55,747.00	6.	Work in progress	1,31,25,000.00	-
5.	Other receipts	17,62,99,412.33	5,13,44,562.91	7.	Publication (Priced)	2,12,697.00	34,82,647.00
			-	8.	Remittance of recoveries	8,10,46,180.00	6,33,62,943.00
6.	By adjustment of Advances pertaining to previous years	1,38,07,679.15	40,72,286.00	9.	Amount to be received from concerned a/c, Instts.	13,967.00	1375.00
7.	Recoveries for remittance	7,99,83,710.00	6,04,04,718.00		-do-	2,82,294.67	31,066.00
8.	Sale of Publications (Priced)	1,96,587.00	1,93,826.00	10.	LIC amount disbursed	2,00,000.00	1,00,000.00
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Receipts	Current Year	Previous Year	S. No.	Payments	Current Year	Previous Year
9.	Recovery of subscription & advances	5,87,56,351.00	5,30,12,499.00	11.	Other Misc. payments/ transfers	15,90,70,409.00	12,20,44,544.00
10.	Investment received	26,05,04,811.97	22,12,71,573.10			-	
11.	Amount receivable received	3,30,11,566.27	3,07,97,182.33	12.	Amount remitted by decentralized Institutes to be contra against their receipts in Hqrs N. Delhi	87,620.00	5169.00
12.	Security Deposit receivable received	-	15,000.00	13.	Amount payable paid	3,69,71,091.00	1,97,46,525.00
13.	Security deposit	2,15,312.00	2,46,963.00	14.	NPS amount transferred to NPS Trustee Bank a/c	9,98,798.00	12,96,814.00
14.	In transit in Previous Year received	9,70,31,066.00	2,36,00,000.00	15.	Closing Balance		
15.	Payable to other a/cs	1,77,795.00	7072.00		Cash-in-hand	4,25,854.75	2,09,867.60
16.	Recovery of refundable advances	23,34,194.00	25,67,307.00		Cash-at-bank	11,01,00,670.40	6,57,44,875.50
17.	LIC for disbursement	1,50,000.00	2,00,000.00				
18.	Amount received to be contra against their remittance by the decentralized Institutes	87,620.00	5169.00				
	Total Rs.	1,73,85,84,531.76	1,28,27,68,832.55		Total Rs.	1,73,85,84,531.76	1,28,27,68,832.55

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Income & Expenditure Account for the year ending 31 March 2016

S. No.	Expenditure	Current Year	Previous Year	S. No.	Income	Current Year	Previous Year
1.	Establishment expenditure	75,26,59,692.00	62,71,05,469.00	1.	GIA	92,41,75,000.00	81,77,57,000.00
2.	Administrative expenditure	12,12,20,152.99 9,12,05,982.00	7,72,16,545.00 4,29,45,983.00	2.	Other income	1,98,05,729.33	1,70,02,010.00
3.	Other charges	2,26,29,642.00	84,83,678.00	3.	Less : Capitalised expenditure	(-)3,56,97,057.79	(-)1,83,77,064.00
4.	Depreciation	1,66,77,112.79	2,52,74,701.69	4.	Excess of expenditure over Income	9,61,08,910.24	-
5.	Balance being Excess of Income over Expenditure:	-	3,53,55,569.31			-	
	Total (Rs.)	1,00,43,92,581.78	81,63,81,946.00		Total (Rs.)	1,00,43,92,581.78	81,63,81,946.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Balance Sheet as on 31 March 2016

S. No.	Liabilities	Schedule No.	Current Year	Previous Year	S. No.	Assets	Schedule No.	Current Year	Previous Year
1.	Capital fund	(S/1)	1,00,07,01,441.47	1,06,46,53,852.02	1.	Fixed assets	(S/3)	89,91,39,266.00	88,37,26,874.00
2.	Current Liabilities	(S/2)	51,37,29,657.01	45,49,60,881.97	2.	Investments (Others)	(S/5C)	39,93,29,306.18	36,07,83,725.31
3.	Earmarked/Endowment fund	S/3(A)	2,94,67,365.73	3,02,73,768.05	4.	Current assets:		-	-
			-	-	(i)	Loans & advances	(S/5B)	13,49,03,366.88	23,94,23,159.63
			-	-	(ii)	Bank/Cash balance : 8,10,59,159.42 2,94,67,365.73	(S/5A)	11,05,26,525.15	6,59,54,743.10
	Total Rs.		1,54,38,98,464.21	1,54,98,88,502.04		Total Rs.		1,54,38,98,464.21	1,54,98,88,502.04

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Receipts for the year ending 31 March 2016

S. No.		Opening Balance		GIA		Bank Interest	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(1)		(2)		(3)
1.	Health Scheme a/c						
	(1) NON-PLAN						
	(i) Health Scheme						
	(a) Cash in hand (Imprest)	12,200.00	15,200.00	48,50,00,000.00	40,50,00,000.00	17,20,737.00	32,94,381.00
	(b) Cash-at-bank	6,08,557.11	96,774.11	-	-	-	-
	Total (Non-Plan) S.No. 1	6,20,757.11	1,11,974.11	48,50,00,000.00	40,50,00,000.00	17,20,737.00	32,94,381.00
2.	PLAN	-	-	-	-	-	-
	(i) Health Scheme a/c	-	-	43,91,75,000.00	31,57,57,000.00	35,45,873.00	2,08,695.00
	(a) Cash-in-hand (Imprest)	1,97,667.60	1,97,667.60	-	-	-	-
	(b) Cash-in-hand (other than Imprest)	-	3,987.15	-	-	-	-
	(c) Cash-at-bank	3,07,73,401.42	4,61,98,973.42	-	-	-	-
	Total (H) PLAN	3,09,71,069.02	4,64,00,628.17	43,91,75,000.00	31,57,57,000.00	35,45,873.00	2,08,695.00
	(ii) ROTP a/c	-	-	-	-	-	-
	(iii) Herb Garden a/c	34,813.00	33,461.00	-	-	1,407.00	1352.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.		Opening Balance		GIA		Bank Interest	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(1)		(2)		(3)	
	(iv) Pub. of Text Books a/c	49,306.00	47,391.00			1,992.00	1915.00
	(v) UPS a/c I	42,361.00	40,752.00			1,674.00	1609.00
	(vi) DSOP	1,91,399.05	1,84,091.05			7,603.00	7308.00
	(vii) AIUM a/c	20,71,856.00	20,00,000.00		-	83,703.00	71,856.00
	(viii) Digitalization of Manuscript a/c	111.00	107.00			4.00	4.00
	(ix) WHO a/c	1,978.00	1901.00			80.00	77.00
	(x) International Events conference a/c	6,31,103.00	6,06,597.00			25,496.00	24,506.00
	(xi) DST a/c	1,01,64,034.00	62,09,801.09	52,00,000.00	1,48,80,000.00	4,38,976.00	985.00
	(xii) CRISM a/c	1,39,36,413.00	1,35,21,852.00	-		5,04,510.00	4,14,561.00
	(xiii) South African a/c	31,50,394.00	21,19,266.00	-	30,00,000.00	1,01,350.00	71,059.00
	Total (Plan) S.No. 2 (ii) to(xiii)	3,02,73,768.05	2,47,65,219.14	52,00,000.00	1,78,80,000.00	11,66,795.00	5,95,232.00
3.	(i) NPS a/c	16,73,580.81	9,06,925.81	-		83,252.00	52,437.00
	(ii) CPF/GPF a/c	15,17,326.88	8,13,993.18	-		1,23,56,640.34	1,08,08,678.15+1946.00
	(iii) GIS a/c	3,57,760.10	6,95,901.10	-		9,16,291.60	1,51,876.42
	(iv) Pension fund a/c	5,40,481.13	53,74,001.13	-		2,69,388.00	13,56,039.00
	Total S.No. 3	40,89,148.92	77,90,821.22	-	-	1,36,25,571.94	1,23,70,976.57
	Grand Total S.No. 1 to 3	6,59,54,743.10	7,90,68,642.64	92,93,75,000.00	73,86,37,000.00	2,00,58,976.94	1,64,69,284.57

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.		Miscellaneous Receipts		Interest on Refundable Advances		By Adjustment of Advances Pertaining to Previous Years	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(4)	(5)	(6)	(7)	(8)	(9)
1.	Health Scheme a/c						
	(1) NON-PLAN						
		93,80,293.00	1,03,39,276.00	5,38,099.00	5,75,553.00	7,40,551.00	6,79,278.00
	Total (Non-Plan) S.No. 1	93,80,293.00	1,03,39,276.00	5,38,099.00	5,75,553.00	7,40,551.00	6,79,278.00
2.	PLAN						
	Health Scheme a/c	45,19,119.33	22,88,186.00	1,01,608.00	2,80,194.00	1,30,67,128.15	32,13,008.00
	Total (H) PLAN	45,19,119.33	22,88,186.00	1,01,608.00	2,80,194.00	1,30,67,128.15	32,13,008.00
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Books a/c						
	(v) UPS a/c I						
	(vi) South African Unani Chair a/c						1,80,000.00
	(vii) DSOP						
	(viii) EMR						
	(ix) Digitalization of Manuscript a/c						
	(x) WHO a/c						
		Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.		Miscellaneous Receipts		Interest on Refundable Advances		By Adjustment of Advances Pertaining to Previous Years	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(4)		(5)		(6)
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICST a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c	51,00,000.00	1,91,777.91				
	(xvii) CRISM a/c						
	(xviii)	CI/CI/SM a/c					
	Total (Plan) S.No. 2 (ii) to (xviii)	51,00,000.00	1,91,777.91				1,80,000.00
3.	(i) NPS a/c						
	(ii) CPF/GPF a/c						
	(iii) GIS a/c						
	(iv) Pension fund a/c	15,73,00,000.00	3,85,00,000.00 25,323.00				
	Total S.No. 3	15,73,00,000.00	3,85,25,323.00				
	Grand Total S.No. 1 to 3	17,62,99,412.33	5,13,44,562.91	6,39,707.00	8,55,747.00	1,38,07,679.15	40,72,286.00
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	



S. No.		Recoveries of Refundable Advances		Sale of Council's Publications	
		Current Year	Previous Year	Current Year	Previous Year
			(7)		(8)
1.	Health Scheme a/c				
	(1) NON-PLAN				
	Health Scheme	18,95,334.00	20,50,876.00		
	Total (Non-Plan) S.No. 1	18,95,334.00	20,50,876.00		
2.	PLAN				
	(i) Health Scheme a/c	(-) 6000/- + 4,44,485/- + 375/-	5,16,431.00	1,96,587.00	1,93,826.00
	(b) Cash-at-bank	-			
	Total (H) PLAN	4,38,860.00	5,16,431.00	1,96,587.00	1,93,826.00
	(ii) ROTP a/c				
	(iii) Herb Garden a/c				
	(iv) Pub. of Text Books a/c				
	(v) UPS a/c				
	(vi) Seminar a/c				
	(vii) DSOP				
	(viii) EMR				
	(ix) Digitalization of Manuscript a/c				
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	
				Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.		Recoveries of Refundable Advances		Sale of Council's Publications	
		Current Year	Previous Year	Current Year	Previous Year
		(7)	(8)		
	(x) WHO a/c				
	(xi) NMPB a/c				
	(xii) UPS a/c II				
	(xiii) ICST a/c				
	(xiv) Donation a/c				
	(xv) International Events conference a/c				
	(xvi) DST a/c				
	(xvii) CRISM a/c				
	(xviii) CICISM a/c				
	Total (Plan) S.No. 2				
3.	(i) NPS a/c				
	(ii) CPF/GPF a/c				
	(iii) GIS a/c				
	(iv) Pension fund a/c				
	Total S.No. 3		-		-
	Grand Total S.No. 1 to 3	23,34,194.00	25,67,307.00	1,96,587.00	1,93,826.00
		Sd/- (Syed Asif Mian) Consultant (Accounts)	Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.		Recoveries for Remittance		Recovery of Subscription/Advances		Misc. Receipt to be Transferred to Pension Fund A/c	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(9)		(10)		(11)	
1.	Health Scheme a/c						
	(1) NON-PLAN						
	Health Scheme	5,43,68,748.00	4,60,40,145.00				
			3,76,893.00				
	Total (Non-Plan) S.No. 1	5,43,68,748.00	4,64,17,038.00	-	-	-	-
2.	PLAN			-			
	(i) Health Scheme a/c	2,08,39,154.00	95,89,807.00				
	(b) Cash-at-bank						
	Total (H) PLAN	2,08,39,154.00	95,89,807.00			-	-
	(ii) ROTP a/c				-		
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Book a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
	(vii) DSOP						
	(viii) EMR						
	(ix) Digitalization of Manuscript a/c						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.		Recoveries for Remittance		Recovery of Subscription/Advances		Misc. Receipt to be Transferred to Pension Fund A/c	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(9)		(10)		(11)	
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICST a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c						
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	Total (Plan) S.No. 2	-		-		-	-
3.	(i) NPS a/c			28,43,154.00	20,11,032.00		
	(ii) CPF/GPF a/c			5,49,86,507.00	5,01,74,247.00		
	(iii) GIS a/c			9,26,690.00	8,27,220.00		
	(iv) Pension fund a/c	35,52,114.00 12,000.00 12,11,694.00	12,000.00 23,88,561.00 19,97,312.00				
	Total S.No. 3	47,75,808.00	43,97,873.00	5,87,56,351.00	5,30,12,499.00	-	
	Grand Total S.No. 1 to 3	7,99,83,710.00	6,04,04,718.00	5,87,56,351.00	5,30,12,499.00	-	

Sd/-
 (Syed Asif Mian)
 Consultant (Accounts)

Sd/-
 (Mohammad Parvez)
 Accountant

Sd/-
 (Ramiz Uddin Choudhury)
 Assistant Director (Admn.)

Sd/-
 (Prof. Rais-ur-Rahman)
 Director General



S. No.		Receivable amount received		Security deposit lying with the Council	
		Current Year	Previous Year	Current Year	Previous Year
		(12)		(13)	
1.	Health Scheme a/c				
	(1) NON-PLAN				
	Health Scheme		7806.00		
	Total (Non-Plan) S.No. 1		7806.00		
2.	PLAN				
	(i) Health Scheme a/c	2296.00	2,26,451.00 11,41,639.00	2,15,312.00 (CCRUM)	2,46,963.00 (CCRUM)
	Total (H) PLAN	2296.00	13,68,090.00	2,15,312.00	2,46,963.00
	(ii) ROTP a/c				
	(iii) Herb Garden a/c				
	(iv) Pub. of Text Book a/c				
	(v) UPS a/c I				
	(vi) Seminar a/c				
	(vii) DSOP a/c				
	(viii) EMR a/c				
	(ix) Digitalization of Manuscript a/c				
(Syed Asif Mian) Consultant (Accounts)		(Mohammad Parvez) Accountant		(Ramiz Uddin Choudhury) Assistant Director (Admn.)	Sd/- (Prof. Rais-ur-Rahman) Director General

S. No.		Receivable amount received		Security deposit lying with the Council	
		Current Year	Previous Year	Current Year	Previous Year
		(12)	(13)		
	(x) WHO a/c				
	(xi) NMPB a/c				
	(xii) UPS a/c II				
	(xiii) ICST a/c				
	(xiv) Donation a/c				
	(xv) International Events conference a/c				
	(xvi) DST a/c				
	(xvii) CRISM a/c				
	(xviii) CICISM a/c				
	Total (Plan) S.No. 2	2296.00	-	2,15,312.00	-
3.	(i) NPS a/c				
	(ii) CPF/GPF a/c	2,86,71,143.87	2,19,20,591.01		
	(iii) GIS a/c	25,98,999.40	9,91,863.32		
	(iv) Pension fund a/c	17,39,127.00	65,08,832.00		
	Total S.No. 3	3,30,09,270.27	2,94,21,286.33		-
	Grand Total S.No. 1 to 3	3,30,11,566.27	3,07,97,182.33	2,15,312.00	2,46,963.00
		Sd/- (Syed Asif Mian) Consultant (Accounts)	Sd/- (Mohammad Parvez) Accountant	Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	Sd/- (Prof. Rais-ur-Rahman) Director General

S. No.		In Transit Amount Received		Security Deposit of the Council with others Received		Payable Amount	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(14)		(15)		(16)
1.	Health Scheme a/c						
	(1) NON-PLAN	15,543.00					
	(i) Health Scheme	9,70,00,000.00	2,36,00,000.00			7,268.00	100.00
	Total (Non-Plan) S.No. 1	9,70,15,543.00	2,36,00,000.00		-	7,268.00	100.00
2.	PLAN						
	(i) Health Scheme a/c	15,523.00			15000.00	86436.00 + 6859.00	
	T.D.S					30,948.00	
	Total (H) PLAN	15,523.00			15,000.00	1,24,243.00	-
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Books a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
	(vii) DSOP a/c						
	(viii) EMR a/c						
		Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Prof. Rais-ur-Rahman) Director General	
				Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)			

S. No.		In Transit Amount Received		Security Deposit of the Council with others Received		Payable Amount	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(14)	(15)	(16)			
	(ix) Digitalization of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICST a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c						
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	Total (Plan) S.No. 2		-		-		-
3.	(i) NPS a/c					39,000.00	
	(ii) CPF/GPF a/c					7284.00	6972.00
	(iii) GIS a/c						
	(iv) Pension fund a/c						
	Total S.No. 3		-		-	46,284.00	6,972.00
	Grand Total S.No. 1 to 3	9,70,31,066.00	2,36,00,000.00	-	15,000.00	1,77,795.00	7072.00
		Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	



S. No.		Investment Received		LIC Amount for Disbursement	
		Current Year	Previous Year	Current Year	Previous Year
			(17)		(18)
1.	Health Scheme a/c				
	(1) NON-PLAN				
	(i) Health Scheme				
	Total (Non-Plan) S.No. 1				
2.	PLAN				
	(i) Health Scheme a/c				
	Total (H) PLAN				
	(ii) ROTP a/c				
	(iii) Herb Garden a/c				
	(iv) Pub. of Text Book a/c				
	(v) UPS a/c I				
	(vi) Seminar a/c				
	(vii) DSOP				
	(viii) EMR a/c				
	(ix) Digitalization of Manuscript a/c				
	(x) WHO a/c				
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	
				Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.		Investment Received		LIC Amount for Disbursement	
		Current Year	Previous Year	Current Year	Previous Year
		(17)	(18)		
	(xi) NMPB a/c				
	(xii) UPS a/c II				
	(xiii) ICST a/c				
	(xiv) Donation a/c				
	(xv) International Events conference a/c				
	(xvi) DST a/c				
	(xvii) CRISM a/c				
	(xviii) CICISM a/c				
	Total (Plan) S.No. 2	-	-	-	-
3.	(i) NPS a/c				
	(ii) CPF/GPF a/c	23,18,37,727.23	16,87,02,031.10		
	(iii) GIS a/c	1,61,22,294.74	75,00,000.00	1,50,000.00	2,00,000.00
	(iv) Pension fund a/c	1,25,44,790.00	4,50,69,542.00		
	Total S.No. 3	26,05,04,811.97	22,12,71,573.10	1,50,000.00	2,00,000.00
	Grand Total S.No. 1 to 3	26,05,04,811.97	22,12,71,573.10	1,50,000.00	2,00,000.00
		Sd/- (Syed Asif Mian) Consultant (Accounts)	Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Amount Received to be Contra Against Remittance by Decentralized Institutes as Already Taken Receipts in Previous Year	Total Receipts		
	Current Year	Previous Year	Current Year	Previous Year
		(19)	(20)	
1.	Health Scheme a/c			
	(1) NON-PLAN			
	(i) Health Scheme	4,950.00	2169.00	49,20,81,451.11
			3000.00	
	Total (Non-Plan) S.No. 1	4,950.00	5169.00	49,20,81,451.11
2.	PLAN			
	(i) Health Scheme a/c	5000/- + 77000/- +670/-		38,00,77,828.17
	Total (H) PLAN	82,670.00	51,32,94,442.50	38,00,77,828.17
	(ii) ROTP a/c		-	
	(iii) Herb Garden a/c		-	34,813.00
	(iv) Pub. of Text Book a/c		-	49,306.00
	(v) UPS a/c I		-	42,361.00
	(vi) DSOP		-	1,91,399.05
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Prof. Rais-ur-Rahman) Director General

S. No.		Amount Received to be Contra Against Remittance by Decentralized Institutes as Already Taken Receipts in Previous Year		Total Receipts	
		Current Year	Previous Year	Current Year	Previous Year
		(19)		(20)	
	(vii) AIUM a/c		-	21,55,559.00	20,71,856.00
	(viii) Digitalization of Manuscript a/c		-	115.00	111.00
	(ix) WHO a/c			2058.00	1978.00
	(x) International Events conference a/c			656,599.00	6,31,103.00
	(xi) DST a/c			2,09,03,010.00	2,12,82,564.00
	(xii) CRISM a/c			1,44,40,923.00	1,39,36,413.00
	(xiii) South Asian a/c			32,51,744.00	53,70,325.00
	Total (Plan) S.No. 2 (ii) to (xiii)			4,17,40,563.05	4,36,12,229.05
3.	(i) NPS a/c			46,38,986.81	29,70,394.81
	(ii) CPF/GPF a/c			32,93,76,629.32	25,24,28,458.44
	(iii) GIS a/c			2,10,72,035.84	1,03,66,860.84
	(iv) Pension fund a/c			17,71,69,594.13	10,12,31,610.13
	Total S.No. 3			53,22,57,246.10	36,69,97,324.22
	Grand Total S.No. 1 to 3	87,620.00	5169.00	1,73,85,84,531.76	1,28,27,68,832.55
	Sd/- (Syed Asif Mian) Consultant (Accounts)	Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	
				Sd/- (Prof. Rais-ur-Rahman) Director General	

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Payments for the year ending 31 March 2016

S. No.	Name of the Scheme	Establishment Expenses		Administrative Expenses		Material & Supplies Expenses	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(1)		(2)		(3)	
1.	Non-Plan						
	(i) Health scheme a/c	55,54,30,535.00	41,90,23,500.00	19,10,053.00	25,40,199.00		10,944.00
	Total (Non-Plan) S.No. 1	55,54,30,535.00	41,90,23,500.00	19,10,053.00	25,40,199.00		10,944.00
2.	Plan						
	(i) Health scheme a/c	19,72,29,157.00	16,94,83,608.00	11,93,10,099.99	7,46,76,346.00	9,12,05,982.00	4,29,35,039.00
	Health scheme a/c						
	Health scheme a/c						
	Total(H) Plan	19,72,29,157.00	16,94,83,608.00	11,93,10,099.99	7,46,76,346.00	9,12,05,982.00	4,29,35,039.00
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Book a/c						
	(v) UPS a/c I						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Establishment Expenses		Administrative Expenses		Material & Supplies Expenses	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(1)		(2)		(3)	
	(vi) Seminar a/c						
	(vii) DSOP a/c						
	(viii) EMR a/c						
	(ix) Digitization of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c	14,63,553.00	7,03,461.00	6,68,048.00	3,62,674.00		4,86,738.00
	(xvii) CRISM a/c				-		-
	(xviii) CICISM a/c				-		-
	(xix) South African a/c	25,54,234.00	20,02,721.00	2,40,569.32	2,17,210.00		
	Total (Plan) S.No.	40,17,787.00	27,06,182.00	9,08,617.32	5,79,884.00	-	4,86,738.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General



S. No.	Name of the Scheme	Establishment Expenses		Administrative Expenses		Material & Supplies Expenses	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(1)		(2)		(3)
3.	(i) NPS a/c						
	(ii) GPF a/c						
	(iii) GIS a/c						
	(iv) Pension fund a/c						
	Total S. No. 3						
	Total S.No. 1 to 3	75,66,77,479.00	59,12,13,290.00	12,21,28,770.31	7,77,96,429.00	9,12,05,982.00	4,34,32,721.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.	Name of the Scheme	Assets		Publications (Priced)		Advances to Government Servants	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(4)		(5)		(6)
1.	Non-Plan						
	(i) Health scheme a/c						
	Total (Non-Plan) S.No. 1				-		-
2.	Plan						
	(i) Health scheme a/c	2,25,63,215.79	1,50,88,243.00	2,12,697.00	34,82,647.00	17,08,000.00	12,59,000.00
	Health scheme a/c					4500.00	
	Total(H) Plan	2,25,63,215.79	1,50,88,243.00	2,12,697.00	34,82,647.00	17,12,500.00	12,59,000.00
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Books a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
	(vii) DSOP a/c						
	(viii) EMR a/c						
	(ix) Digitization of Manuscript a/c						
	(x) WHO a/c						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Assets		Publications (Priced)		Advances to Government Servants	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(4)		(5)		(6)
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c	73,17,432.00	93,39,206.00				
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	(xix) South African a/c						
	Total (Plan)	73,17,432.00	93,39,206.00				
3.	(i) NPS a/c						
	(ii) GPF a/c						
	(iii) GIS a/c						
	(iv) Pension fund a/c						
	Total S.No. 3						
	Total S.No. 1 to 3	2,98,80,647.79	2,44,27,449.00	2,12,697.00	34,82,647.00	17,12,500.00	12,59,000.00
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Outstanding Advances		Other Charges		Works in Progress	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(7)		(8)		(9)
1.	Non-Plan						
	(i) Health scheme a/c	6,29,102.00	6,86,311.00	976.00			
		2,91,327.00	1,35,000.00	-			
	Total (Non-Plan) S.No. 1	9,20,429.00	8,21,311.00	976.00			
2.	Plan						
	(i) Health scheme a/c	98,47,883.00	1,71,52,205.15		84,83,678.00	1,31,25,000.00	
		7,96,224.00	70,93,754.00	2,25,25,161.00			
	Health scheme a/c	12,00,000.00		1,03,505.00			
	Health scheme a/c						
	Total (H) Plan		2,42,45,959.15	2,26,28,666.00	84,83,678.00	1,31,25,000.00	
	(ii) ROTP a/c	1,18,44,107.00					
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Books a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						

Sd/-
 (Syed Asif Mian)
 Consultant (Accounts)

Sd/-
 (Mohammad Parvez)
 Accountant

Sd/-
 (Ramiz Uddin Choudhury)
 Assistant Director (Admn.)

Sd/-
 (Prof. Rais-ur-Rahman)
 Director General

S. No.	Name of the Scheme	Outstanding Advances		Other Charges		Works in Progress	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(7)		(8)		(9)	
	(vii) DSOP a/c						
	(viii) EMR a/c						
	(ix) Digitization of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c						
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	(xix) South African a/c						
	Total S.No. 2		-		-		
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Outstanding Advances		Other Charges		Works in Progress	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(7)		(8)		(9)
3.	(i) NPS a/c						
	(ii) GPF a/c						
	(iii) GIS a/c						
	(iv) Pension fund a/c						
	Total S.No.3						
	Total S.No. 1 to 3	1,27,64,536.00	2,50,67,270.15	2,26,29,642.00	84,83,678.00	1,31,25,000.00	

Sd/-
 (Syed Asif Mian)
 Consultant (Accounts)

Sd/-
 (Mohammad Parvez)
 Accountant

Sd/-
 (Ramiz Uddin Choudhury)
 Assistant Director (Admn.)

Sd/-
 (Prof. Rais-ur-Rahman)
 Director General

S. No.	Name of the Scheme	Excess Paid to be Received /Adjusted		Remittance of Recoveries		Un-disbursed Amount Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(10)		(11)		(12)
1.	Non-Plan						
	(i) Health scheme a/c			5,59,23,389.00	4,92,05,005.00 376,893.00		
	Total (Non-Plan) S.No. 1	-		5,59,23,389.00	4,95,81,898.00	-	
2.	Plan						
	(i) Health scheme a/c		1375.00	2,03,46,983.00	93,83,172.00		
	Health scheme a/c						
	Total (H) Plan		1375.00	2,03,46,983.00	93,83,172.00	-	
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Books a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
	(vii) DSOP a/c						
		Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	
						Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Excess Paid to be Received /Adjusted		Remittance of Recoveries		Un-disbursed Amount Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(10)		(11)		(12)	
	(viii) EMR a/c						
	(ix) Digitization of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICJSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c						
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	(xix) South African a/c						
	Total S.No. 2						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Excess Paid to be Received /Adjusted		Remittance of Recoveries		Un-disbursed Amount Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(10)		(11)		(12)
3.	(i) NPS a/c						
	(ii) GPF a/c						
	(iii) GIS a/c						
	(iv) Pension fund a/c	7967/- + 6000.00		12000/- + 1211,694/-	23,88,561.00		
				35,52,114.00	12,000.00 19,97,312.00		
	Total S.No. 3	13,967.00		47,75,808.00	43,97,873.00		
	Total S.No. 1 to 3	13,967.00	1375.00	8,10,46,180.00	6,33,62,943.00		

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.	Name of the Scheme	Amount Receivable		Investments A/c		Received from LIC Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(13)		(14)		(15)
1.	Non-Plan						
	(i) Health scheme a/c	6,859.00	15,543.00				
	Total (Non-Plan) S.No. 1	6,859.00	15,543.00		-		-
2.	Plan						
	(i) Health scheme a/c	2,70,235.67	15,523.00				
	Health scheme a/c	5200.00					
	Health scheme a/c (From DST a/c), RRIUM, Srinagar						
	Total (H) Plan	2,75,435.67	15,523.00		-		-
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Book a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Receivable		Investments A/c		Received from LIC Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
	(vii) DSOP a/c						
	(viii) EMR a/c						
	(ix) Digitisation of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c						
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	(xix) South African a/c				-		
	Total S.No. 2						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Receivable		Investments A/c		Received from LIC Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
3.	(i) NPS a/c			20,00,000.00			
	(ii) GPF a/c			26,64,06,976.84	2,00,3,19,874.56		
	(iii) GIS a/c			1,63,67,466.00	86,22,294.74	2,00,000.00	1,00,000.00
	(iv) Pension fund a/c			1,42,75,950.00	2,61,21,000.00		
	Total S.No. 3				23,50,63,169.30		1,00,000.00
	Grand total S.No. 1 to 3	2,82,294.67	31,066.00	29,90,50,392.84	23,50,63,169.30	2,00,000.00	1,00,000.00

Sd/- (Syed Asif Mian) Consultant (Accounts)
 Sd/- (Mohammad Parvez) Accountant
 Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)
 Sd/- (Prof. Rais-ur-Rahman) Director General

S. No.	Name of the Scheme	Amount Payable Paid/Adjusted		Other Misc. Payments/Transfer		NPS Subscription & Contribution Transferred to NPS Trustee Bank A/c	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(16)	(17)	(18)		
1.	Non-Plan	2296.00					
	(i) Health scheme a/c	3,67,83,760.00	1,94,64,299.00				
	Total (Non-Plan) S.No. 1	3,67,86,056.00	1,94,64,299.00				
2.	Plan						
	(i) Health scheme a/c	1,77,963.00					
	Health scheme a/c						
	Health scheme a/c		50,000.00 (CCRUM)				
	Total (H) Plan	1,77,963.00	50,000.00				
	(ii) ROTP a/c						
	(iii) Herb Garden a/c						
	(iv) Pub. of Text Book a/c						
	(v) UPS a/c I						
	(vi) Seminar a/c						
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Payable Paid/Adjusted		Other Misc. Payments/Transfer		NPS Subscription & Contribution Transferred to NPS Trustee Bank A/c	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(16)	(17)	(18)		
	(vii) DSOP a/c						
	(viii) EMR a/c						
	(ix) Digitization of Manuscript a/c						
	(x) WHO a/c						
	(xi) NMPB a/c						
	(xii) UPS a/c II						
	(xiii) ICSJ a/c						
	(xiv) Donation a/c						
	(xv) International Events conference a/c						
	(xvi) DST a/c		2,26,451.00	29,361.00			
	(xvii) CRISM a/c						
	(xviii) CICISM a/c						
	(xix) South African a/c						
	Total S.No. 2(ii) to (xix)		2,26,451.00	29,361.00			
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Payable Paid/Adjusted		Other Misc. Payments/Transfer		NPS Subscription & Contribution Transferred to NPS Trustee Bank A/c	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(16)		(17)		(18)
3.	(i) NPS a/c			21,078/- + 21078/-		9,98,798.00	12,96,814.00
	(ii) GPF a/c	7072.00	5775.00	28,06,800.00	28,05,380.00		
	-do-			3,09,38,000.00	3,09,05,175.00		
	-do-			2,53,47,554.00	1,68,74,927.00		
	-do-						
	(iii) GIS a/c			7,00,000/- + 800/- 27,42,227/- +94760/- 300/-	7,50,000.00 5,36,806.00		
	(iv) Pension fund a/c			9,63,68,450/- + 1.00	7,01,72,256.00		
	Total S.No. 3	7072.00	5,775.00	15,90,41,048.00	12,20,44,544.00	9,98,798.00	12,96,814.00
	Grand Total S.No. 3	3,69,71,091.00	1,97,46,525.00	15,90,70,409.00	12,20,44,544.00	9,98,798.00	12,96,814.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.	Name of the Scheme	Amount Remitted by Decentralised Institutes Now Contra Against Recovery to Headquarters, New Delhi as Already Taken Receipt in Previous Year		Closing Balance		Total Payments	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(19)		(20)		(21)
1.	Non-Plan						
	(i) Health scheme a/c	4,950.00	3000.00	3,09,033.11	6,20,757.11		49,20,81,451.11
	Total (Non-Plan) S.No. 1	4,950.00	3,000.00	3,09,033.11	6,20,757.11	65,12,92,280.11	49,20,81,451.11
2.	Plan						
	(i) Health scheme a/c	670.00	2,169.00	1,25,79,966.05	3,09,71,069.02		38,00,77,828.17
	Health scheme a/c	77,000.00					
	Health scheme a/c	5,000.00					
	Total(H) Plan	82,670.00	2,169.00	1,25,79,966.05	3,09,71,069.02	51,32,94,442.50	38,00,77,828.17
	(ii) Herb Garden a/c			36,220.00	34,813.00	36,220.00	34813.00
	(iii) Pub. of Text Book a/c			51,298.00	49,306.00	51,298.00	49,306.00
	(iv) UPS a/c I			44,035.00	42,361.00	44,035.00	42,361.00
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Remitted by Decentralised Institutes Now Contra Against Recovery to Headquarters, New Delhi as Already Taken Receipt in Previous Year		Closing Balance		Total Payments	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(19)		(20)		(21)
	(v) DSOP a/c			1,99,002.05	1,91,399.05	1,99,002.05	1,91,399.05
	(vi) AIUM a/c			21,55,559.00	20,71,856.00	21,55,559.00	20,71,856.00
	(vii) Digitization of Manuscript a/c			115.00	111.00	115.00	111.00
	(viii) WHO a/c			2058.00	1978.00	2058.00	1978.00
	(ix) International Events conference a/c			6,56,599.00	6,31,103.00	6,56,599.00	6,31,103.00
	(x) DST a/c			1,14,24,616.00	1,01,64,034.00	209,03,010.00	2,12,82,564.00
	(xi) CRISM a/c			1,44,40,923.00	1,39,36,413.00	1,44,40,923.00	1,39,36,413.00
	(xii) South African a/c			4,56,940.68	31,50,394.00	32,51,744.00	53,70,325.00
	Total S.No. 2 (i to xii)	-	-	2,94,67,365.73	3,02,73,768.05	4,17,40,563.05	4,36,12,229.05
3.	(i) NPS a/c			15,98,032.81	16,73,580.81	46,38,986.81	29,70,394.81
	(ii) GPF a/c			38,70,226.48	15,17,326.88	32,93,76,629.32	25,24,28458.44
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant		Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)		Sd/- (Prof. Rais-ur-Rahman) Director General	

S. No.	Name of the Scheme	Amount Remitted by Decentralised Institutes Now Contra Against Recovery to Headquarters, New Delhi as Already Taken Receipt in Previous Year		Closing Balance		Total Payments	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
			(19)		(20)		(21)
	(iii) GIS a/c			9,66,482.84	3,57,760.10	2,10,72,035.84	1,03,66,860.84
	(iv) Pension fund a/c			6,17,35,418.13	5,40,481.13	17,71,69,594.13	10,12,31,610.13
	Total S.No. 3	87620.00		6,81,70,160.26	40,89,148.92	53,22,57,246.10	36,69,97,324.22
	Grand Total S.No. 1 to 3		5169.00	11,05,26,525.15	6,59,54,743.10	1,73,85,84,531.76	1,28,27,68,832.55

	Current year	Previous year
Cash (impres)	4,25,854.75	2,09,867.60
Bank	1,24,63,144.41	6,57,44,875.50
Total	1,28,88,999.16	6,59,54,743.10

Sd/-
 (Syed Asif Mian)
 Consultant (Accounts)

Sd/-
 (Mohammad Parvez)
 Accountant

Sd/-
 (Ramiz Uddin Choudhury)
 Assistant Director (Admn.)

Sd/-
 (Prof. Rais-ur-Rahman)
 Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Income for the year ending 31 March 2016

S. No.	Grant-in-aid	Miscellaneous Receipts	Capital Expenditure
1.	Health a/c (Plan)	35,45,873 + 45,19,119.33 + 1,01,608	2,25,63,215.79 + 1,31,25,000.00 + 2,12,697.00 (-) 1,96,587.00 (-) 7268.00
	Total (Plan)	81,66,600.33	3,56,97,057.79
2.	Health a/c (N.P.)	17,20,737.00 + 93,80,293.00 + 5,38,099.00	-
	Total (Non Plan)	1,16,39,129.00	-
	Grand Total	1,98,05,729.33	3,56,97,057.79

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Expenditure for the year ending 31 March 2016

S. No.		Depreciation	Establishment Expenses	Administrative Expenses	Material & Supplies	Other Charges	Excess of Income over Expenditure	Excess of Expenditure over Income
1.	(A) PLAN							
	Health a/c	53,60,956/- (-)40,344/- 49,15,169/- (-)6,96,677/- 53,14,543.79 + 746.00 (-)3,69,753/- + 21,85,945.00 (-)550520/- + 4,94,695/-	19,72,29,157.00	11,93,10,099.99	9,12,05,982.00	2,26,28,666.00		3,53,44,123.24
	Total (Plan)	1,66,14,760.79	19,72,29,157.00	11,93,10,099.99	9,12,05,982.00	2,26,28,666.00		3,53,44,123.24
2.	Health a/c (Non Plan)	22,326/- + 37,697/- 180/- + 14/-	55,54,30,535.00	19,10,053.00	-	976.00		6,07,62,652.00
	Total (Non Plan)	60,217.00	55,54,30,535.00	19,10,053.00	-	976.00		6,07,62,652.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

S. No.		Depreciation	Establishment Expenses	Administrative Expenses	Material & Supplies	Other Charges	Excess of Income over Expenditure	Excess of Expenditure over Income
3.	FW. a/c	1149/- + 901/- +85/-						2135.00
	Total FW.	2135.00						2135.00
	Grand Total	1,66,77,112.79	75,26,59,692.00	12,12,20,152.99	9,12,05,982.00	2,26,29,642.00		9,61,08,910.24
	Excess of Expenditure over Income							9,61,08,910.24

Sd/-
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 Consultant (Accounts)

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 Accountant

Sd/-
 (Ramiz Uddin Choudhury)
 Assistant Director (Admn.)

Sd/-
 (Prof. Rais-ur-Rahman)
 Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Assets of Balance Sheet as on 31 March 2016

S. No.	Name of Schemes	Fixed Assets (S/3)	Excess of Expenditure over Income (S/4)	Current Assets (S/5A)	Current Assets (S/5B)	Investments (S/5C)	Total Assets
1.	Health a/c	89,91,14,618.00	17,22,62,842.18	1,28,88,999.16	9,50,80,535.32	-	
2.	FW. a/c	24,648.00	1,83,917.06	-	2047.94	-	
3.	NPS a/c			15,98,032.81	6,58,003.00	1,63,26,999.99	
4.	CPF/GPF a/c			38,70,226.48	33,852.98	34,63,58,890.19	
	CPF/GPF a/c				74,48,564.00		
	CPF/GPF a/c				2,74,11,924.64		
	CPF/GPF a/c				49,300.00		
	GIS a/c			9,66,482.84	180.00	1,63,67,466.00	
	GIS a/c				8,36,074.00		
	GIS a/c				200.00		
5.	Pension fund a/c			6,17,35,418.13	33,76,685.00	2,02,75,950.00	
	Pension fund a/c				6,000.00		
	Pension fund a/c						
	Total	89,91,39,266.00	17,24,46,759.24	8,10,59,159.42	13,49,03,366.88	39,93,29,306.18	

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule of Liabilities of Balance Sheet as on 31 March 2016

S. No.	Name of Schemes	Capital Fund (S/1)	Excess of Income over Expenditure (S/4)	Current Liabilities (S/2)	Total Liabilities
1.	Health a/c	1,17,29,54,677.71		63,92,316.95	
2.	FW. a/c	1,93,523.00		17,090.00	
3.	NPS a/c			39000 + 96,64,434.80	
	NPS a/c			88,79,601.00	
4.	CPF/GPF a/c			25,35,97,376.49	
	CPF/GPF a/c			18,109.00	
	CPF/GPF a/c			74,48,564.00	
	CPF/GPF a/c			12,41,08,708.80	
5.	GIS a/c			1,81,19,376.84	
	GIS a/c			1026.00	
	GIS a/c			50,000.00	
6.	Pension fund a/c			8,53,94,053.13	
	Total	1,17,31,48,200.71		51,37,29,657.01	
	Excess of Income over Expenditure :				
	Less: Excess of Expenditure over Income :	(-17,24,46,759.24)			
	Total	1,00,07,01,441.47		51,37,29,657.01	
Sd/- (Syed Asif Mian) Consultant (Accounts)		Sd/- (Mohammad Parvez) Accountant	Sd/- (Ramiz Uddin Choudhury) Assistant Director (Admn.)	Sd/- (Prof. Rais-ur-Rahman) Director General	

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Consolidated Schedule of Fixed Assets as on 31 March 2016

				Gross Block			Less: Sale of Council's Publications (Priced)			Depreciation				Net Block		
S. No.	Name of the Assets	Opening Balance as on 01.04.14	Addition	Deductions	Wrongly capitalized in the previous year now rectified	Total	Opening Balance as on 01.04.14	Sale during the year	Total	Opening Balance as on 01.04.14	On Addition	On Deductions	As per audit objection depreciation wrongly charged excess now rectified	Total	As on 31.03.2016	As on 31.03.2015
1.	Machinery & Equipment	9,91,74,121.32	1,21,19,021.79			11,12,93,143.11				5,28,55,923.32	53,54,220.79		(-),6,96,677.00	5,75,13,467.11	5,37,79,676.00	4,63,18,198.00
2.	Furniture & Fixture	8,60,62,989.82	57,92,927.00			9,18,55,916.82				3,55,98,359.82	53,84,183.00		(-),40,344.00	4,09,42,198.82	5,09,13,718.00	5,04,64,630.00
3.	Computers	2,09,79,992.00	32,56,986.00			2,42,36,978.00				1,94,85,225.00	21,86,125.00		(-),3,69,753.00	2,13,01,597.00	29,35,381.00	14,94,767.00
4.	Land	27,85,336.00	-			27,85,336.00									27,85,336.00	27,85,336.00
5.	Works in progress	68,34,92,336.00	1,31,25,000.00			69,66,17,336.00									69,66,17,336.00	68,34,92,336.00
6.	Books & Journals	3,21,50,058.00	6,76,861.00			3,28,26,919.00				-					3,28,26,919.00	3,21,50,058.00
7.	Vehicles	87,94,455.69	7,17,420.00	(-),14,97,920.00		80,13,955.69				54,60,640.69	4,94,709.00	(-),5,50,520.00		54,04,829.69	26,09,126.00	33,33,815.00
8.	Building	13,43,46,873.00	-			13,43,46,873.00				8,51,95,180.00	49,15,169.00			9,01,10,349.00	4,42,36,524.00	4,91,51,693.00
9.	Council's Publications (Priced)	1,64,89,705.50	2,12,697.00		(-),21,09,633.00	1,45,92,769.50	19,53,664.50	2,03,855.00	21,57,519.50						1,24,35,250.00	1,45,36,041.00
	Total	1,08,42,75,867.33	3,39,00,912.79	(-),14,97,920.00	(-),21,09,633.00	1,11,65,69,227.12	19,53,664.50	2,03,855.00	21,57,519.50	19,85,95,328.83	1,83,34,406.79	(-),5,50,520.00	(-),11,06,774.00	21,52,72,441.62	89,91,39,266.00	88,37,26,874.00

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
(Mohammad Parvez)
Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General



CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Schedule Forming Part of Balance Sheet as on 31 March 2016

(Schedule -3/A) Earmarked/Endowment Funds

	Herb Garden A/c	Publication of Text Books	UPS A/c	DSOP A/c	Digitisation of Manuscript A/c	Allium A/c	WHO A/c	International Events/Conference A/c	DST A/c	CHISM A/c	South African A/c	Total	
												Current Year (12)	Previous Year (13)
(a) Opening balance	34,813.00	49,306.00	42,361.00	1,91,399.05	111.00	20,71,856.00	1978.00	6,31,103.00	1,01,64,034.00	1,39,36,413.00	31,50,394.00	3,02,73,768.05	2,47,63,219.14
Total (a)													2,47,63,219.14
(b) Additions:													
Grant-in-aid									52,00,000.00			52,00,000.00	1,78,80,000.00
Other additions a/c of:													
Bank interest	1407.00	1992.00	1674.00	7603.00	4.00	83,703.00	80.00	25,496.00	4,38,976.00	5,04,510.00	1,01,350.00	11,66,795.00	5,95,232.00
From Health a/c												51,00,000.00	180,000.00
By adjustments of advances pertaining to previous years													
Receivable received													
Misc receipts													
Total (b)	1407.00	1992.00	1674.00	7603.00	4.00	83,703.00	80.00	25,496.00	1,07,38,976.00	5,04,510.00	1,01,350.00	1,14,66,795.00	1,88,47,009.91
Total (a+b)	36,220.00	51,298.00	44,035.00	1,99,002.00	115.00	21,55,559.00	2058.00	6,56,599.00	2,09,03,010.00	1,44,40,923.00	32,51,744.00	4,17,40,563.05	4,36,12,229.05
(c) Utilization/expenditure													
i) Capital expenditure													
Fixed assets									73,17,432.00			73,17,432.00	93,39,206.00
Others													
ii) Revenue expenditure													
Salaries/wages/allowances								14,63,553.00			25,54,234.00	40,17,787.00	27,06,182.00
Other administrative expenditure								6,68,048.00			2,40,569.32	9,08,617.32	5,79,884.00
Material & supplies													4,86,738.00
Amount payable paid													2,26,451.00
Unspent balance refunded									29,361.00			29,361.00	
Temporary transfer to Health a/c to be received													
Total (c)	-	-	-	-	-	-	-	-	94,78,394.00	-	27,94,803.32	1,22,73,197.32	1,33,38,461.00
Net balance (a+b)-(c)	36,220.00	51,298.00	44,035.00	1,99,002.05	115.00	21,55,559.00	2058.00	6,56,599.00	1,14,24,616.00	1,44,40,923.00	4,56,940.68	2,94,67,365.73	3,02,73,768.05

Sd/-
(Syed Asif Mian)
Consultant (Accounts)

Sd/-
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Accountant

Sd/-
(Ramiz Uddin Choudhury)
Assistant Director (Admn.)

Sd/-
(Prof. Rais-ur-Rahman)
Director General

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

NOTES ON ACCOUNTS:

1. Annual accounts of the Council for the year 2015-16 has been prepared on the new format as prescribed by CGA and approved by the CAG of India since 2002-03.
2. The Central Council for Research in Unani Medicine is fully financed through grant-in-aid therefore income tax is not applicable on the organization.
3. The said accounts prepared on accrual basis.
4. Schedule attached where necessary.
5. Depreciation has been charged on assets on diminishing balance method.
6. The construction work being done by the CPWD & NPCC.
7. There is no valuation of inventories since it is not a profit earning organization but a research organization under Ministry of AYUSH.
8. A schedule of investment prepared every year & given to audit which is duly reconciled with actual documents figure mentioning there the rate of interest, duration, amount & name of institutions, etc.
9. Retirement benefits are treated as per GOI rules.
10. Depreciation has been charged under expenditure.
11. Earmarked/endowment fund has been shown separately in the balance sheet with necessary schedule.
12. The annual accounts of the Council for the year 2015-16 have been approved by the competent authority i.e. Standing Finance Committee on 09 August, 2016.

Assistant Director (Admn.)
CCRUM, New Delhi

APPENDIX-I

INSTITUTIONAL NETWORK OF CCRUM

1. **Central Council for Research in Unani Medicine (CCRUM) Headquarters**
61-65, Institutional Area, Opposite "D" Block, Janakpuri
New Delhi – 110 058
Phone: +91-11-28521981
Fax: +91-11-28522965
E-mail: unanimedicine@gmail.com
2. **Central Research Institute of Unani Medicine**
Opp. ESI Hospital, A.G. Colony Road, Erragadda
Hyderabad – 500 838
Tilangana
Phone: +91-40-23811551, +91-40-23811495
Fax: +91-40-23811495
E-mail: criumhyderabad@rediffmail.com
3. **Central Research Institute of Unani Medicine**
Basaha, Kursi Road
Lucknow – 226 026 (U.P.)
Phone: +91-522-2361720
Fax: +91-522-2723088
E-mail: crium_lko@yahoo.co.in
4. **Regional Research Institute of Unani Medicine**
1, West Meda Church Street
Royapuram, Chennai – 600 013
Tamil Nadu
Phone: +91-44-25955519
Fax: +91-44-25955532
E-mail: rriumchennai@gmail.com
5. **Regional Research Institute of Unani Medicine**
Chandbali Bypass, Near Rural Thana
Bhadrak – 756 100, Odisha
Phone: +91-6784-240289
Fax: +91-6784-240289
E-mail: rriumbdk_unani@yahoo.co.in
6. **Regional Research Institute of Unani Medicine**
Guzari, Patna City
Patna – 800 008, Bihar
Phone: +91-612-2631106
Fax: +91-612-2631106
E-mail: rriumpatna@gmail.com

7. **Regional Research Institute of Unani Medicine**
Post Box No. 70
A.K. Tibbiya College Hospital (New Block)
Aligarh Muslim University, Aligarh – 202 001
Uttar Pradesh
Phone: +91-571-2704781, +91-571-2701399
E-mail: rrium_aligarh@rediffmail.com
8. **Regional Research Institute of Unani Medicine**
J.J. Hospital Compound (Behind Eye Bank)
Byculla, Mumbai – 400 008
Maharashtra
Phone: +91-22-23718706
Fax: +91-22-23718706
E-mail: rrium_mumbai@gmail.com
9. **Regional Research Institute of Unani Medicine**
University of Kashmir Campus
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Jammu & Kashmir
Phone: +91-194-2421604
Fax: +91-194-2421357
E-mail: rrium.srinagar@gmail.com
10. **Regional Research Institute of Unani Medicine**
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Near Jaiswal Hospital
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Phone: +91-33-26550108
E-mail: kolrrium@gmail.com
11. **Regional Research Institute of Unani Medicine**
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Phone: +91-11-26922759
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E-mail: rriumdelhi@gmail.com
12. **Regional Research Centre**
B-501/4, G.T.B. Nagar
Opp. Dulhan Palace, Kareli
Allahabad – 211 016
Uttar Pradesh
Phone: +91-532-2551223
E-mail: rrcallahabad@gmail.com



13. **Clinical Research Unit**
Kurupatil Nina Memorial
Near Panchayat Office
P.O. Edathala (N) – 683 564
Alweye, Kerala
Phone: +91-484-2836006
Fax: +91-484-2836006
E-mail: crukerala@gmail.com
14. **Clinical Research Unit**
National Institute of Unani Medicine
Kotigepaliya, Magadi Main Road
Bengaluru – 560 091
Phone: +91-80-25480863
E-mail: crubangalore2000@yahoo.com
15. **Clinical Research Unit**
Dr. Abdul Haq Unani Medical College
40/23 Park Road, Kurnool – 518 001
Andhra Pradesh
E-mail: cru.kurnool@gmail.com
16. **Regional Research Centre**
S.M. Dev Civil Hospital
Silchar – 1, Cachar
Assam
Extension Centre
Masjid Road, Karimganj
Assam
Phone: +91-3843-267522
E-mail: crukxj522@gmail.com
17. **Clinical Research Unit (Unani)**
Cantonment General Hospital
Soti Ganj, Begumpul
Meerut – 250 001
Uttar Pradesh
Phone: +91-9012843253
E-mail: doctormtk@gmail.com
18. **Clinical Research Unit (Unani)**
Gandhi Medical College
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E-mail: cruu_incharge@yahoo.com

19. **Clinical Research Unit (Unani)**
Saida Hospital Campus
Khandwa Road, Burhanpur – 450 331
Madhay Pradesh
Phone: +91-7325-24563
E-mail: mahajankk@rediffmail.com
20. **Chemical Research Unit**
Department of Research in Unani Medicine
Near Office of Dean, Faculty of Science
Aligarh Muslim University, Aligarh – 202 001
Uttar Pradesh
21. **Drug Standardisation Research Unit**
61-65 Institutional Area
Janakpuri, New Delhi – 110 058
Phone: +91-11-28525852 (Extn. 555)
Fax : +91-11-28522965
E-Mail: dsru.newdelhi@gmail.com
22. **Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine**
Dr. M.A. Ansari Health Centre
Jamia Millia Islamia
New Delhi – 110 025
E-mail: lriumnew1986@gmail.com
23. **Drug Standardisation Research Institute**
PLIM Building, Ghaziabad
Uttar Pradesh
Phone: +91-120-2783029
Fax: +91-120-2787016
E-mail: dsriccrum@gmail.com
24. **Unani Medical Centre**
(Extension Centre of RRIUM, New Delhi)
R.No. 304, Dr. Ram Manohar Lohia Hospital
New Delhi – 110 001
Phone: +91-11-23404594
25. **Unani Speciality Centre**
(Extension Centre of RRIUM, New Delhi)
Deen Dayal Upadhyay Hospital
Ghantaghar, Harinagar
New Delhi – 110 064
26. **Clinical Research Pilot Project (Unani)**
Ground Floor, Regional Research Institute of Homoeopathy
New Checkon Road (Opp. Tribal Colony)
Imphal East
Manipur – 795 001



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CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

Ministry of Ayurveda, Yoga & Naturopathy, Unani,
Siddha and Homoeopathy (AYUSH), Government of India
61 - 65, Institutional Area, Janakpuri, New Delhi - 110 058
Telephone: +91-11-28521981, 28520501, 28525831/52/62/83/97
Fax: +91-11-28522965
Email: unanimedicine@gmail.com
Website: www.ccrum.res.in