Annual Report

2019-2020

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE

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Ministry of AYUSH, Government of India

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1. OVERVIEW

1.1. Objectives of the Council

The Central Council for Research in Unani Medicine (CCRUM) is an autonomous organization under the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Government of India. It was established on 30th March 1978 under the Societies Registration Act, 1860 and started functioning from 10th 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 CCRUM witnessed robust growth during the financial year 2019–2020. During this period, the Council took various new initiatives besides continuing its ongoing research activities in the areas of core research, namely Survey and Cultivation of Medicinal Plants, Drug Standardization Research, Clinical Research and Literary Research, and supplementary areas like information, education and communication and extension of healthcare services through a network of 22 centres throughout the country.

The upgradation of Central Research Institute of Unani Medicine (CRIUM) at Hyderabad to National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD) for its commendable work in the field of skin disorders was one of the highlights of the year. It would help the institute to develop as a state-of-the-art national facility for research and patient care for skin disorders along with other diseases.

In our effort to mainstream Unani Medicine in public healthcare delivery system and integrate and synergise all medical systems to address the health challenges, we were able to establish a new Unani Medical Centre at VMMC & Safdarjung Hospital, New Delhi. It was inaugurated by Hon'ble AYUSH Minister on September 13, 2019.

During the period under report, the Council celebrated Unani Day in a grand manner and organized an International Conference on Unani Medicine at Vigyan Bhawan, New Delhi during February 11–12, 2020. The conference organized on the theme 'Unani Medicine – Towards Achieving the Sustainable Development Goal (SDG-3) of 'Good Health and Well-Being' highlighted the role of Unani Medicine in attaining good health and wellbeing and

emphasized the need for integration and synergy of all medical systems to address the health challenges we are facing today. Apart from organizing the international conference, the Council organized various other seminars, conferences and workshops. The researchers of the Council also participated in 29 national/international seminars, conferences, workshops, training programmes for their exposure and updates in their respective fields.

The continuing research activities produced credible outcomes during the reporting period. Under the Survey and Cultivation of Medicinal Plants Programme, ethnopharmacological surveys were conducted in different forest divisions/areas. As a result of these surveys, 3,588 botanical specimens were collected and 970 plant species identified. Of the plant specimens collected, herbarium sheets of 1,237 containing their basic details were prepared and 183 index cards were compiled. The survey teams collected 645 saplings of important medicinal species for plantation and 176.5 kg of raw drugs. The surveyors also recorded 467 folk medicinal claims from the tribal inhabitants and other rural folks of the study areas. Experimental and large-scale cultivation of some important medicinal species was also undertaken which yielded 143.6 kg of raw drugs. About 160 common species of medicinal plants used in Unani Medicine were maintained in the nurseries of the Council's centres.

Under the Drug Standardization Research Programme, SOPs for manufacture of 40 Unani formulations and their pharmacopoeial standards were developed. Besides, pharmacopoeial standards for nine single drugs were developed. The drug testing laboratory at the RRIUM, Chennai analysed 31 ASU drug samples received from different organizations. The Council finalized Unani Pharmacopoeia of India (UPI), Part-I, Vol. VII consisting of monographs on 40 single drugs and submitted it to the Pharmacopoeia Commission of Indian Medicine and Homoeopathy (PCIM&H) for publication. The revision of National Formulary of Unani Medicine (NFUM), Part-I to VI and UPI, Part-I, Vol. I to VI in accordance with the format provided by the PCIM&H continued. At the end of the reporting period, revised NFUM, Part-IV comprising 166 formulations was vetted by experts, whereas 45 monographs of UPI, Part-I, Vol. I and 40 monographs of UPI, Part-I, Vol. III were revised. Approval of Unani Pharmacopoeia Committee for publication of the revised documents was under consideration.

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

During the reporting period, eight preclinical safety and pharmacological studies on Unani drugs were undertaken. In clinical research, three studies on *Baraṣ* (vitiligo) continued. Five randomized controlled trials (RCTs) - one each on *Faqr al-Dam* (iron deficiency anaemia), *Taḥajjur al-Mafāṣil* (osteoarthritis), *Ḍīq al-Nafas* (bronchial asthma), *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type II) and *Shaqīqa* (migraine) were initiated. Clinical validation of 41 Unani pharmacopoeial formulations in different diseases continued and 30 new studies were allotted / initiated. Besides, seven clinical validation on Unani pharmacopoeial fast-acting drugs continued. Various regimen therapy procedures were performed on 9,586 patients of different diseases. *Ḥijāma bilā-Sharṭ* (dry cupping) was performed on 1,611 patients, *Ḥijāma bi'l-Sharṭ* (wet cupping) on 1,904, *Ḥijāmah bi'l-Nār* (fire cupping) on 947, *Ḥijāma Muzliqa* (moving cupping) on 2,119, *Ḥammām al-Bukhār* (steam bath) on 412, *Dalk Mu'tadil* (moderate massage) on 870, *Ḥammām Yābis* (sauna)

on 113, *Naṭūl* (fomentation) on 35, *Inkibāb* (vaporization) on 218, *Munḍij-Mushil* therapy on 65, *Faṣd* (venesection) on two and *Takmīd* (fomentation) on 523 patients.

Under the validation of fundamentals of Unani Medicine, three new projects were initiated during the reporting period besides ongoing studies on clinical assessment of *Mizāj* (temperament) and genetic studies on theory of *Akhlāṭ* (humours). Six projects were undertaken under the IMR policy.

The Council also undertakes research in collaboration with other prestigious institutes. During the reporting period, 12 collaborative studies continued / were initiated at Jamia Hamdard, New Delhi, Jamia Millia Islamia, New Delhi, Vallabhbhai Patel Chest Institute (VPCI), University of Delhi, Amity Institute of Pharmacy, Amity University, Noida, All India Institute of Medical Sciences, New Delhi, Interactive Research School for Health Affairs, Pune, National Institute of Pharmaceutical Education and Research, Hyderabad, and CSIR-Central Drug Research Institute, Lucknow.

Under the Literary Research Programme, the Council published *'Unani Medicine: The Science of Health & Healing- An Overview'* and compiled zero-draft on international terminologies of Unani Medicine under an initiative taken by the WHO as part of its strategy on Traditional & Complementary Medicine. Besides, Urdu translation of two Arabic books – *Al-Masāʾil fi'l-Ṭib* and *Al-Mughnī fī Tadbīr al-Amrāḍ wa Maʿrifat al-ʿIlal wa al-Aʿrāḍ,* Urdu translation of two classical Persian texts – *Kitāb al-Abniya ʿan Ḥaqāʾiq al-Adwiya* and *Riyāḍ al-Adwiya,* and English translation of Persian book *Qarābādīn-i-Jalālī* continued. The work on compilation of monographs on Mental Health and Mental Diseases in Unani Medicine and Standard Unani Treatment Guidelines for *Ḥummayāt* (fevers) also continued. Information on Parkinson's disease and Alzheimer's disease, Cerebrovascular accident (CVA), Unani formulations useful in lifestyle diseases/NCDs, Environmental diseases, Sexual disorders and vector borne diseases were compiled. References of the most recommended Unani drugs in lifestyle diseases/NCDs, environmental diseases, vector borne diseases and male sexual disorders were also compiled. Besides, modules for *Nabḍ Mufrad* and *Nabḍ Murakkab* were also developed for incorporation in AYUSH-Hospital Management Information System (A-HMIS).

Research-oriented healthcare services continued at GOPDs and special OPDs of 19 clinical centres of the Council. During the reporting period, a total of 3,48,682 patients comprising 2,41,831 patients in GOPDs, 24,036 in Geriatric OPDs, 8,769 in RCH / MCH OPDs, 10,097 in NCD's and 13,451 in OPDs for Post-trial Access were treated at different centres. Under the Mobile Clinical Research Programme, 17 rural pockets / urban slums covering over 1.43 lakh population were adopted and a total of 11,065 patients comprising 2,042 SC patients and 1,737 ST patients were treated with Unani pharmacopoeial formulations in 465 mobile visits made to these pockets during the reporting period. Apart from providing healthcare, health awareness was also created among the masses through group meetings and public lectures. Under the School Health Programme, 6,245 children were covered, of which health check-up was conducted for 4,928 and 2,485 school children found suffering from different ailments out of which 2,470 were treated in 120 visits. To educate them on healthy living, 42 lectures were also delivered. Besides, 11 health camps were organized in which a total of 8,903 patients were treated.

The Unani Medical Centres functioning under the scheme of co-location of AYUSH centres in Dr. Ram Manohar Lohia Hospital and Deen Dayal Upadhyay Hospital and the new Unani Medical Centre at VMMC & Safdarjung Hospital, New Delhi treated 19,928, 16,607 and

6,496 patients respectively. At the AYUSH Wellness Centres running at Rashtrapati Bhawan and All India Institute of Ayurveda, New Delhi, at total of 2,080 patients were treated by Unani physicians.

Under the Gender Component Plan for Women, 1,84,708 female patients in different OPDs were treated. Clinical studies on the diseases specific to women, such as *Sayalān al-Raḥim* (leucorrhoea), *Iḥtibās al-Ṭamth* (amenorrhoea) and *Kathrat al-Ṭamth* (menorrhagia) also continued. Unani physicians delivered lectures to create health awareness among the females. Under the Activities in North Eastern Region, 5,380 patients were treated for their common and chronic ailments at the Regional Research Centre located at Silchar, Assam.

Under the Special Component Plan – Scheduled Caste Sub-Plan (SCSP) and Tribal Sub-Plan (TSP), 6,76,482 total population including 3,22,121 SC population were covered under SCSP, whereas 73,355 total population including 52,239 ST population were covered under TSP. A total of 43,634 and 15,046 individuals benefited from SCSP and TSP respectively.

With a view to disseminating the research findings, 124 research papers were published in national and international scientific journals. During the reporting period, 13 publications were also brought out. Besides, publication of the Council's quarterly bulletin CCRUM Newsletter, quarterly Urdu journal *Jahan-i Tib*, quarterly English journal Hippocratic Journal of Unani Medicine, and publicity material continued.

In the project on Integration of Unani Medicine in NPCDCS, 1,52,953 individuals were screened and treated with Unani medicine for different aliments. Of them, 1,739 individuals were enrolled in high risk group of diabetes mellitus and 2,695 as diseased, whereas 1,915 were enrolled in high risk group of hypertension and 3,867 as patients. Similarly, 165 persons were enrolled in high risk group of hyperlipidaemia and 108 as diseased. Besides, 424 health camps were organized which benefitted 8,013 individuals through health screening and distribution of disease specific health literature. A total of 560 health awareness lectures were also delivered during the health camps which were attended by 13,542 people. As much as 70,277 persons attended the Yoga classes.

The academic activities under the postgraduate programmes in Unani Medicine successfully continued. Under MD (Unani) programme, a total of 28 new scholars in addition to continuing scholars were admitted who were actively engaged in academic, research and training activities at NRIUMSD, Hyderabad and RRIUM, Srinagar. The students of 1st batch (2016-17) completed their course and submitted theses based on their research work.

The Council organized exhibitions and clinics in 44 Arogya fairs / expos and similar events to propagate Unani Medicine, highlight its activities and achievements, provide free-of-cost diagnosis and treatment to the ailing visitors and create health awareness.

The Council continued the promotion of the Official Language and organized Hindi Pakhwada at the Headquarters and different centres. Quarterly workshops on Hindi language were also organized.

We hope that the Council work even more efficiently in the coming years for the fulfillemnt of its aims and objectives in the area of research and development in Unani Medicine.

New Delhi
24 November 2020

Prof. Asim Ali Khan
Director General

2. MANAGEMENT

The management of the affairs of the Council is entrusted to Governing Body (GB), Executive Committee (EC) and Standing Finance Committee (SFC).

2.1. Governing Body

The constitution of the GB of the Council as on March 31, 2020 was as given below:

President

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

Vice-President

Secretary, Ministry of AYUSH, Government of India

Official Members

- Financial Advisor, Ministry of AYUSH, Government of India
- Additional Secretary / Joint Secretary (Dealing with CCRUM), Ministry of AYUSH, Government of India
- Advisor (Unani), Ministry of AYUSH, Government of India
- Director, National Institute of Unani Medicine, Bengaluru

Non-Official Members

- Dr. M A Waheed, Former Officiating Director, CRIUM, Hyderabad
- Prof. Aftab Ahmad, Jamia Hamdard, New Delhi
- Prof. Misbahuddin Siddiqui, Aligarh Muslim University, Aligarh
- Dr. Mohd Zafar Hasan, Private Practitioner, Bhopal
- Prof. Mohammad Haroon, Uttranchal Unani Medical College, Haridwar
- Prof. Akhilesh Verma, Department of Chemistry, University of Delhi
- Dr. Veena Gupta, National Bureau of Plant Genetic Resources, New Delhi
- Prof. Surender Singh, AIIMS, Newe Delhi
- Prof. Rajesh S Sharma, District Homeopathic Medical College & Hospital, Ratlam, Madhya Pradesh

Member Secretary

- Director General, CCRUM

2.2. Executive Committee

The constitution of the EC of the Council as on March 31, 2020 was as given below:

Chairperson

Secretary, Ministry of AYUSH, Government of India

Official Members

- Financial Advisor, Ministry of AYUSH, Government of India
- Additional Secretary / Joint Secretary (Dealing with CCRUM), Ministry of AYUSH, Government of India
- Advisor (Unani), Ministry of AYUSH, Government of India
- Director, National Institute of Unani Medicine, Bengaluru

Non-Official Members

- Dr. M A Waheed, Former Officiating Director, CRIUM, Hyderabad
- Prof. Misbahuddin Siddiqui, Aligarh Muslim University, Aligarh
- Dr. Mohd. Zafar Hasan, Private Practitioner, Bhopal
- Dr. Veena Gupta, National Bureau of Plant Genetic Resources, New Delhi
- Prof. Rajesh S Sharma, District Homeopathic Medical College & Hospital, Ratlam, Madhya Pradesh

Member Secretary

- Director General, CCRUM

2.3. Standing Finance Committee

During the reporting period, the composition of the Standing Finance Committee (SFC) of the Council 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 nominated by President of the Council : Technical Member
- Director General, CCRUM : Member-Secretary

2.4. Scientific Advisory Committee

There was no Scientific Advisory Committee (SAC) in place during the reporting period.

2.4.1. Research Sub-Committees

The SAC is assisted by five research sub-committees, namely Clinical Research Sub-committee, Drug Standardization Sub-committee, Literary Research Sub-committee, Survey and Cultivation of Medicinal Plants Sub-committee and Claim of Cure Sub-committee. There was no sub-committee in place during the reporting period.

2.5. Institutional Ethics Committee

It is mandatory that all the proposals on biomedical research involving human participants are approved by a duly constituted Institutional Ethics Committee (IEC) to protect their welfare and rights. At the end of the reporting period, there were 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.

National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad

- Prof. Akhtarul Wasey, President, Maulana Azad University, Jodhpur, Rajasthan : Chairperson
- Dr. M U R Naidu, Former Dean, Faculty of Medicine, Nizam's Institute of Medical Sciences, Hyderabad : Member

- Dr. M A Wajid, Associate Professor & Head, Department of Microbiology, ESIC, Hyderabad : Member
- Prof. Ahsan Farooqui, Government Nizamia Tibbi College, Hyderabad : Member
- Shri Abdul Fatah Khan, Advocate, Hyderabad : Member
- Smt. Chandana Pal, Apollo Hospitals, Hyderabad : Member
- Hafiz Mohammed Ajaz Ahmed, Imam, Hyderabad : Member
- In-charge, NRIUMSD, Hyderabad : Member Secretary

Central Research Institute of Unani Medicine (CRIUM), Lucknow

- Prof. Kausar Usman, King George's Medical University, Lucknow : Chairperson
- Dr. M P Darokar, Senior Principal Scientist, CSIR– CIMAP, Lucknow : Member
- Prof. Jalees Fatima, Era's Lucknow Medical College and Hospital, Lucknow : Member
- Prof. Jamal Akhtar, State Takmil-ut-Tib College & Hospital, Lucknow : Member
- Shri I H Farooqui, Former Assistant Solicitor General of India, Lucknow Bench of Allahabad High Court, Lucknow : Member
- Smt. Zahida Begum, Social Worker & Treasurer, Al- Karim Educational Society, UP : Member
- Maulana Haroon Rasheed Nadvi, Deputy Registrar, Darul Uloom Nadwat-ul-Ulama, Lucknow : Member
- In-charge, CRIUM, Lucknow : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Chennai

- Hakim Syed Imamuddin Ahmed, Former Principal, Government Unani Medical College, Chennai : Chairperson
- Dr. P Elango, Ramachandra Medical College & Research Institute, Chennai Member
- Dr. R Ilavarasan, Assistant Director Incharge, CSM Drug Research Institute of Ayurveda, Chennai : Member
- Dr. (Mrs) Chand Usmani, Principal, Government Unani Medical College, Chennai : Member
- Dr. Syed Hissar, Scientist C, ICMR-NIRT, Chennai : Member
- Dr. K Amjath Khan, Advocate, Madras High Court, Chennai : Member
- Dr. C Ponnuraja, Scientist D, NIRT, Chennai : Member
- Dr. S Nagasubramanian, Chennai : Member

- Shri Abdul Samad, Institute of Management, The New College, Chennai : Member
- In-charge, RRIUM, Chennai : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Mumbai

- Dr. Sadiq Bapumiya Patel, Former Head, Department of Pharmacology, Grant Medical College & Sir JJ Group of Hospitals, Mumbai : Chairperson
- Prof. Badrul Subhan Usmani, Navi Mumbai : Member
- Dr. Asfia Tarannum, Head, Department of Moalajat, Anjuman-i-Islam Dr. Mohammad Ishaque Jamkhanawala Tibbia Unani Medical College & Haji A R Kalsekar Tibbia Hospital, Mumbai : Member
- Prof. Hemant R Gupta, Head, Department of Medicine, Grant Medical College & Sir JJ Group of Hospitals, Mumbai : Member
- Shri Asim Khan, Advocate, Mumbai : Member
- Shri Salauddin Baig, Social Worker, PSM Department, Grant Medical College & Sir JJ Group of Hospitals, Mumbai : Member
- Shri Iftekar Ahmed Rakhangi, Mumbai : Member
- In-charge, RRIUM, Mumbai : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Srinagar

- Prof. Mohammad Afzal Zargar, Central University of Kashmir, Srinagar : Chairperson
- Dr. Shajrul Amin, Associate Professor, Department of Biochemistry, Kashmir University : Member
- Dr. Shabir Ghaffari, Sr. Medical Officer, ISM, Nodal Officer Govt. Unani Medical College, Ganderbal : Member
- Dr. Syed Mushtaq Saif Andrabi, Consultant Medicine, Srinagar : Member
- Dr. Zubair Ashai, Associate Professor, Govt. Medical College, Srinagar : Member
- Prof. S M Afzal Qadri, Central University of Kashmir, Ganderbal, Jammu & Kashmir Member
- Prof. Peerzada Mohammad Amin, Head, Department of Socialogy, University of Kashmir, Srinagar : Member
- Shri Mohammad Farooq Rathar, Srinagr : 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 : Chairperson
- Prof. M Athar Ansari, Jawaharlal Nehru Medical 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
- Dr. Nasreen Noor, Department of Gynaecology, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh : Member
- Prof. A Mannan, Department of Moalajat, Ajmal Khan Tibbiya College, Aligarh Muslim University, Aligarh : Member
- Shri Zakiuddin Khairuwala, Advocate, Civil Court, Aligarh : Member
- Dr. M Laiq Ali Khan, President, Hakim Ajmal Khan Foundation, Kasganj : Member
- Mufti Suhaib Ahmad Khan, Theologian, Aligarh : Member
- Shri Abdul Majid Khan, Aligarh : Member
- In-charge, RRIUM, Aligarh : Member Secretary

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

- Prof. Prem Kapoor, Department of Medicine, Hamdard Institute of Medical Sciences & Research, New Delhi : Chairperson
- Prof. Surender Singh, AIIMS, New Delhi Member
- Dr. K K Sharma, Former Head, Department of Pharmacology, Guru Teg Bahadur Hospital, New Delhi : Member
- Dr. Mohammad Maaz, Jamia Hamdard, New Delhi : Member
- Prof. Aftab Ahmad, Department of Ilmul Advia, Jamia Hamdard, New Delhi : Member
- Dr. Rubina Mansoori, Zakir Nagar, New Delhi : Member
- Shri M H Zaidi, Advocate, New Delhi : Member
- Prof. Nimatullah Khan, Jamia Millia Islamia, New Delhi : Member
- Prof. Nusratullah Khan, New Delhi : Member
- In-charge, RRIUM, New Delhi : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Kolkata

- Dr. Anjan Adhikari, Associate Professor, Department of Pharmacology, R G Kar Medical College, Kolkata : Chairperson
- Prof. Anwarul Haq, Head, Department of Ilaj bit Tadbeer, The Calcutta Unani Medical College & Hospital, Kolkata : Member

- Dr. Hakimuddin Akhtar, Consultant Physician, BM Birla Heart Research Centre, Kolkata : Member
- Shri Haider Ali, President, Hawrah Health Awareness Mission, Kolkata : Member
- Shri Md. Salamuddin, Advocate, Kolkata : Member
- Shri Saptarishi Sanyal, Social Worker, Kolkata : Member
- In-charge, RRIUM, Kolkata : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Patna

- Prof. Alauddin Ahmad, Former Vice-Chancellor, Jamia Hamdard, New Delhi : Chairperson
- Dr. Rajesh Kumar, Asstistant Professor, Department of Microbiology, Nalanda Medical College, Patna : Member
- Shri Mohd. Shamim Akhtar, Department of Pathology, Government Tibbi College, Patna : Member
- Dr. Md. Israrul Haque, Cardiologist, Indira Gandhi Institute of Medical Sciences, Patna : Member
- Shri Md. Imteyazuddin Azad, Advocate, Patna : Member
- Dr. Haroon Rasheed, Programme Manager for Rural Development, Government of Bihar : Member
- Prof. Shakil Ahmad Qasmi, Formerly Head, Department of Urdu, Oriental College, Patna : Member
- Shri Sandip Kumar, Social Worker, Patna : Member
- In-charge, RRIUM, Patna : Member Secretary

Regional Research Institute of Unani Medicine (RRIUM), Bhadrak

- Prof. Debashish Hota, Head, Department of Pharmacology, AIIMS, Bhubaneswar : Chairperson
- Dr. Dhirendra Kumar Roy, Mediccal Director, Institute of Medical Sciences & SUM Hospital, Bhubaneshwar : Member
- Dr. Jhasaketan Mohanty, Former Sr. Medicine Specialist, District Headquarters Hospital, Bhadrak : Member
- Dr. Sayed Mozammil Ali, Medical Officer (Unani), Government Unani Dispensary, Balasore : Member
- Shri Shaikh Zulfiqar Ali, Advocate, Bhadrak District Court : Member
- Shri SM Farooque, Secretary, Fellowship (NGO), Bhadrak : Member
- Shri Basant Kumar Nayak, Bhadrak : Member
- In-charge, RRIUM, Bhadrak : Member Secretary

Regional Research Centre (RRC), Silchar

- Dr. Pinaki Chakravarty, Associate Professor, Department of Pharmacology, Silchar Medical College & Hospital, Silchar : Chairperson
- Dr. Riturag Thakuria, Assistant Professor, Department of Medicine, Silchar Medical College and Hospital, Silchar : Member
- Dr. Suhel Uddin, Consultant, New Life Line Hospital, Karimganj : Member
- Shri Ramizur Rahman Barlaskar, Advocate, Silchar Bar Association, Silchar : Member
- Shri Lutfur Rahman Laskar, Secretary, Bank Sangha (NGO), Neairgram, Cachar : Member
- Maulana Ikramuddin Mazumder, Assistant Teacher, Ghoniwala Hafizia Madarsa, Silchar : Member
- Shri Nazrul Islam Barbhuiya, Silchar : Member
- In-charge, RRC, Silchar : Member Secretary

Regional Research Centre (RRC), Allahabad

- Dr. Tariq Mahmood, Associate Professor, Moti Lal Nehru Medical College, Allahabad : Chairperson
- Dr. P K Sinha, Formerly Chief Medical Officer, Allahabad & President, Vikalp Sewa Samiti, Allahabad : Member
- Prof. Naeemuddin Ansari, State Unani Medical College, Himmatganj, Allahabad : Member
- Dr. Rakesh Kumar Chaurasia, Associate Professor, Moti Lal Nehru Medical College, Allahabad : Member
- Shri Farooq Ahmad Khan, Advocate, Allahabad High Court, Allahabad : Member
- Prof. Pradeep Bhargava, Director, Govind Ballabh Pant Social Sciences Institute, Jhusi, Allahabad : Member
- Shri Anwar Azam Islahi, Allahabad : Member
- Shri Mohammad Anees, Managing Director, Dulhan Palace, Allahabad : Member
- In-charge, RRC, Allahabad : Member Secretary

Clinical Research Unit (CRU), Bhopal

- Prof. Arun Shrivastav, Superintendent of Hamidia Hospital, Gandhi Medical College, Bhopal : Chairperson
- Dr. Syed Mohd Abbas Zaidi, Department of Moalajat, HSZH Government Unani Medical College, Bhopal : Member

- Dr. Anil Sejwar, Associate Professor, Gandhi Medical College, Bhopal : Member
- Shri Abdul Karim Ansari, Eidgah Hills, Bhopal : Member
- Dr. Zafar Hassan, Khamgaon, Bhopal : Member
- Shri Mohd. Umar, Pari Park, Bhopal : Member
- In-charge, CRU, Bhopal : Member Secretary

Clinical Research Unit (CRU), Meerut

- Prof. Hira Lal Bhalla, Subharti Medical College, Meerut : Chairperson
- Dr. Rizwan, Unani Medical Officer, Meerut : Member
- Dr. Anuradha Gupta, Cantonment General Hospital, Meerut : Member
- Dr. Sabahatullah, Amroha : Member
- Shri Anis Khan, Advocate in Collectorate Compound, Meerut : Member
- Shri Mohd Arif, Meerut : Member
- Shri Mohd Imran, Meerut : Member
- Shri Sarfaraz Ahmad, Meerut : Member
- In-charge, CRU, Meerut : Member Secretary

Clinical Research Unit (CRU), Burhanpur

- Dr. Humanyun Shareef Dawood, Govt. Nehru District Hospital, Burhanpur : Chairperson
- Dr. K M Gupta, Formerly Civil Surgeon, Govt. Nehru District Hospital, Burhanpur : Member
- Dr. Mazhar Hussain Ansari, Assistant Professor, S.H.U. Tibbia College, Burhanpur : Member
- Dr. Mohammad Kaleem Ansari, Senior Medical Officer (Unani), Govt. Unani Dispensary, Burhanpur : Member
- Prof. Khaleel Ansari, Seva Sadan Law College, Burhanpur : Member
- Shri M F Mahajan, Retired SBI Officer, Burhanpur : Member
- Shri Abdul Hameed Ansari, Social Worker, Burhanpur : Member
- Smt. Seema Salve, Lecturer, MAIPS College, Burhanpur : Member
- In-charge, CRU, Meerut : Member Secretary

2.6. Organisational Set-Up

The Council has its Headquarters in New Delhi and a network of 22 centres functioning in different parts of the country. These centres are as follows:

Centre	Number
National Research Institute of Unani Medicine for Skin Disorders	01
Central Research Institute of Unani Medicine	01
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 Standardization Research Institute	01
Drug Standardization Research Unit	01
Chemical Research Unit (Grant-in-aid)	01

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

Andhra Pradesh

- Clinical Research Unit (CRU), Kurnool

Assam

- Regional Research Centre (RRC), Silchar

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
- Drug Standardization Research Unit (DSRU), 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
- Unani Medical Centre (Extension Centre of RRIUM, New Delhi), VMMC & Safdarjung 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 Pattiam, Kannur

Madhya Pradesh

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

Maharashtra

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

Odisha

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

Tamil Nadu

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

Telangana

- National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad

Uttar Pradesh

- Central Research Institute of Unani Medicine (CRIUM), Lucknow
- Regional Research Institute of Unani Medicine (RRIUM), Aligarh
- Drug Standardization Research Institute (DSRI), 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

2.7. Budget (Actual Expenditure)

The centre-wise actual expenditure of the Council during 2019–20 was as follows:

S. No.	Name of State and Centre	Rupees in Thousand
1.	Andhra Pradesh	
	(i) CRU, Kurnool	10,794
2.	Assam (NER)	
	(i) RRC, Silchar	5,178
3.	Bihar	
	(i) RRIUM, Patna	51,232
4.	Jammu & Kashmir	
	(i) RRIUM, Srinagar	83,922
5.	Karnataka	
	(i) CRU, Bengaluru	14,617

S. No.	Name of State and Centre	Rupees in Thousand
6.	Kerala	
	(i) CRU, Alwaye	9,486
7.	Madhya Pradesh	
	(i) CRU, Burhanpur	15,838
	(ii) CRU, Bhopal	12,156
8.	Maharashtra	
	(i) RRIUM, Mumbai	43,449
9.	Manipur (NER)	
	(i) Clinical Research Pilot Project	480
10.	New Delhi	
	(i) HAKILHRUM, New Delhi	25,932
	(ii) RRIUM, New Delhi	143,566
	(iii) Headquarters, New Delhi	200,574
	(iv) DSRU, New Delhi	12,782
11.	Odisha	
	(i) RRIUM, Bhadrak	60,845
12.	Tamil Nadu	
	(i) RRIUM, Chennai	97,645
13.	Telangana	
	(i) NRIUMSD, Hyderabad	188,387
14.	Uttar Pradesh	
	(i) DSRI, Ghaziabad	20,197
	(ii) CRIUM, Lucknow	99,270
	(iii) RRC, Allahabad	23,543
	(iv) RRIUM, Aligarh	80,181
	(v) CRU, Meerut	22,098
15.	West Bengal	
	(i) RRIUM, Kolkata / Howrah	20,668
16.	Other Charges	
	(i) AHMIS	2,608
	(ii) Contribution to NPS	24,200
	(iii) CGHS Contribution	5,995

S. No.	Name of State and Centre	Rupees in Thousand
	(iv) Pension Fund Transfer	318,700
	(v) Medical Advance	870
	(vi) DLIS	240
	(vii) Swatchhta Action Plan	1,564
	(viii) SRPP	2,211
	(ix) Hindi Pakhwada	1,054
	(x) Health Mela	1,285
	(xi) Collaborative Research Projects	8,187
	(xii) Unani Day/Seminar	687
	(xiii) Arogya Mela	1,050
	(vix) EMR	76
	(xv) Ethics Committee	162
	(xvi) UPC	35
	(xvii) NPCDCS	29,954
	(xviii) Seminar/Workshop	410
	(xix) Unani Academic Course	67,390
	(xx) NABH Accreditation	436
	(xxi) Training Programme	998
	(xxii) Health Camps	69
	(xxiii) Capital Works	85,999
	(xxiv) Advance to Govt. Servants	3,535
	(xxv) Publication (Priced)	280
	Grand Total S. No. 1 to 16	**1,800,835**

3. TECHNICAL REPORT

3.1. Intramural Research

3.1.1. Centre-wise Activities

CENTRE	ACTIVITIES

National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad	• Survey and Cultivation of Medicinal Plants Programme
	• Drug Standardization Research Programme
	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies
	  ○ Validation of Fundamentals
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Central Research Institute of Unani Medicine (CRIUM), Lucknow	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Integration of Unani Medicine in NPCDCS
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Regional Research Institute of Unani Medicine (RRIUM), Chennai	• Survey and Cultivation of Medicinal Plants Programme
	• Drug Standardization Research Programme
	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies

CENTRE	ACTIVITIES

	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Regional Research Institute of Unani Medicine (RRIUM), Bhadrak	• Survey and Cultivation of Medicinal Plants Programme
	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Tribal Sub Plan

Regional Research Institute of Unani Medicine (RRIUM), Patna	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Regional Research Institute of Unani Medicine (RRIUM), Aligarh	• Survey and Cultivation of Medicinal Plants Programme
	• Drug Standardization Research Programme
	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare

CENTRE	ACTIVITIES
	○ General Outpatient Department (GOPD) Programme ○ Mobile Clinical Research Programme ○ Mobile Healthcare Program under Schedule Caste Sub-Plan
Regional Research Institute of Unani Medicine (RRIUM), Mumbai	• Clinical Research Programme ○ Validation of Unani Pharmacopoeial Drugs ○ Validation of Unani Pharmacopoeial Fast-acting Drugs ○ Validation of Regimen Therapies • Research-oriented Healthcare ○ General Outpatient Department (GOPD) Programme ○ Mobile Clinical Research Programme • School Health Programme • Mobile Healthcare Program under Schedule Caste Sub-Plan
Regional Research Institute of Unani Medicine (RRIUM), Srinagar	• Survey and Cultivation of Medicinal Plants Programme • Drug Standardization Research Programme • Clinical Research Programme ○ Validation of Unani Pharmacopoeial Drugs ○ Pharmacological Research Programme ○ Validation of Regimen Therapies • Research-oriented Healthcare ○ General Outpatient Department (GOPD) Programme ○ Mobile Clinical Research Programme • School Health Programme
Regional Research Institute of Unani Medicine (RRIUM), Kolkata	• Clinical Research Programme ○ Validation of Unani Pharmacopoeial Drugs ○ Validation of Unani Pharmacopoeial Fast-acting Drugs • Research-oriented Healthcare ○ General Outpatient Department (GOPD) Programme ○ Mobile Clinical Research Programme • Mobile Healthcare Program under Schedule Caste Sub-Plan

CENTRE	ACTIVITIES

Regional Research Institute of Unani Medicine (RRIUM), New Delhi	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	  ○ Validation of Regimen Therapies
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• Unani Speciality Clinics at Allopathic Hospitals
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Regional Research Centre (RRC), Allahabad	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Regional Research Centre (RRC), Silchar	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme

Clinical Research Unit (CRU), Bengaluru	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme

CENTRE	ACTIVITIES

Clinical Research Unit (CRU), Meerut	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme

Clinical Research Unit (CRU), Bhopal	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	• Mobile Healthcare Program under Schedule Caste Sub-Plan

Clinical Research Unit (CRU), Burhanpur	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme
	  ○ Mobile Clinical Research Programme
	• School Health Programme
	• Mobile Healthcare Program under Tribal Sub Plan

Clinical Research Unit (CRU), Edathala	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme

Clinical Research Unit (CRU), Kurnool	• Clinical Research Programme
	  ○ Validation of Unani Pharmacopoeial Drugs
	  ○ Validation of Unani Pharmacopoeial Fast-acting Drugs
	• Research-oriented Healthcare
	  ○ General Outpatient Department (GOPD) Programme

CENTRE	ACTIVITIES
	• Mobile Healthcare Program under Tribal Sub Plan
Drug Standardization Research Unit (DSRU), New Delhi	• Drug Standardization Research Programme
Drug Standardization Research Institute (DSRI), Ghaziabad	• Drug Standardization Research Programme
Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine (HAKILHRUM), New Delhi	• Literary Research Programme • Research-oriented Healthcare ○ General Outpatient Department (GOPD) Programme
Chemical Research Unit (CRU) (Grant-in-aid), Aligarh	• Chemical Investigation of Unani Medicinal Plants

3.1.2. Programme-wise Activities

3.1.2.1. Survey and Cultivation of Medicinal Plants Programme

The Council has a programme for extensive survey of medicinal plants in different parts of the country, primarily with a view to collect and identify medicinal plants and record 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 herb garden;
- To document folk knowledge on medicinal uses of plants;
- To collect samples of genuine drugs from the forests for pharmacopoeial standardization; and
- To develop nurseries of medicinal plants for demonstration purpose with a view to popularize them among masses.

This programme is carried out at the following research centres:

- National Research Institute of Unani Medicine for Skin Disorders, 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 Survey

Under this programme, the Council undertook ethno-pharmacological surveys in different forest divisions/areas during the period under report. These include Kalakad Mundanthurai Tiger Reserve and Salem Forest Division of Tamil Nadu; Tons Forest Division of Uttarakhand; Athgarh Forest Division of Odisha; Hyderabad, Medak, Chittoor, Paderu and Palwancha Forest Divisions of Telangana and Andhra Pradesh; and Gurez, Drass and Kargil Forest Divisions of Jammu & Kashmir. As a result of the survey tours conducted, 3,588 botanical specimens were collected and 970 plant species identified.

Herbarium

The plant specimens collected from the study areas, including previous collection, were mounted on herbarium sheets. During the reporting period, 1237 such herbarium sheets were prepared and information pertaining to the botanical name, family, local name, Unani name (wherever available), date of collection, brief morphological features and medicinal / other uses of the plants were recorded on each herbarium sheet. Besides, 183 new index cards were compiled.

The survey team members collected 645 saplings of important medicinal species for plantation in the nurseries attached to the institutes.

The survey teams also collected 176.5 kg of raw drugs and sent them to the pharmacy section of NRIUMSD, Hyderabad for preparation of Unani formulations.

Digitization of Herbarium Specimens

Under this activity, 376 herbarium sheets were digitized by the Council's research centres at Hyderabad, Chennai and Aligarh.

Folk Claims

The surveyors enquired from the local communities about traditional uses of plants after obtaining oral informed consent. The information was systematized taxonomically and efforts were made to develop a database for comparative analysis of the information recorded. As a result, 467 folk medicinal claims were recorded from the tribal inhabitants and other rural folks of the study areas. The Council publishes the information in the form of books providing details comprising botanical name and family, synonym, 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 cultivates some important medicinal plants used in Unani medicines. These include *Atrilāl* (*Ammi majus* L.), *Afsantīn* (*Artimisia absinthium* L.), *Bābchī* (*Psoralea corylifolia* L.), *Gulnār Fārsī* (*Punica granatum* L. abortive var.), *Gurmārbūti (Gymnema sylvestre* (Retz.) R Br. ex Sm.), *Khaṭmī* (*Althaea officinalis* L.), *Unṣul* (*Urgenia indica* Kunth.), *Suddāb* (*Ruta graveolens* L.), *Nagdon* (*Artemisia nilagirica* (Clarke) Pamp), *Dirmānā Turkī* (*Artemisia maritima* L.), *Asgandh* (*Withania somnifera* (L). Dunal), *Ajwāyin Khurāsāni* (*Hyoscyamus niger* L.), etc. As a result of the field-scale cultivation, 143.6 kg of raw drugs were obtained and supplied to the pharmacy section of NRIUMSD, Hyderabad from Chennai and Srinagar for preparation of Unani formulations.

Herbal Garden and Nursery of Medicinal Plants

With a view to popularize medicinal plants among the masses, the Council maintained about 160 common species in its *Ibn al-Bayṭar* Herbal Garden at NRIUMSD, Hyderabad and nurseries developed at Aligarh, Chennai and Srinagar. Some of the important and interesting species grown under this activity include: *Āmla* (*Phyllanthus emblica* L.), *Anār* (*Punica granatum* L.), *Ashok* (*Saraca asoca* (Roxb.) Willd.), *Atrilāl* (*Ammi majus* L.), *Afsantīn* (*Artemisia absinthium* L.), *Arūsā* (*Justicia adhatoda* L.), *Aspaghol* (*Plantago ovata* Forsk.), *Aṣl al-Sūs* (*Glycyrrhiza glabra* L.), *Asrol* (*Rauvolfia serpentina* (L.) Benth. ex Kurz.), *Bijāsar* (*Pterocarpus marsupium* Roxb.), *Belgirī* (*Aegle marmelos* (L.) Correa.), *Bābchī* (*Psoralea corylifolia* L.), *Banafshā* (*Viola odorata* L.), *Bhāngrā* (*Eclipta prostrata* (L) L.), *Brinjāsif* (*Achillea millefolium* L.), *Fūfal* (*Areca catechu* (L.f) Willd, *Ghīkawār* (*Aloe vera* (L.) Burm.f.), *Gulnār Fārsī* (*Punica granatum* L. abortive var.), *Gurmārbūtī* (*Gymnema sylvestre* (Retz.) R. Br.ex Sm.), *Ḥinā* (*Lawsonia inermis* L.), *Irsā* (*Iris ensata* Thunb), *Jadwār* (*Delphinium denudatum* Wall. ex Hook.f. & Thoms.), *Keorā* (*Pandanus tectorious* Soland. ex Parkinson.), *Kājū* (*Anacardium occidentale* L.), *Khulanjān* (*Alpinia galanga* Willd.), *Konch* (*Mucuna pruriens* L.), *Mako* (*Solanum nigrum* L.), *Marorphalī* (*Helicteres isora* L.), *Muqil* (*Commiphora mukul* (Hook ex Stocks) Engl.), *Pālas* (*Butea monosperma* (Lam.) Taub.), *Qinnāb* (*Cannabis sativa* L.), *Qurṭūm* (*Carthamus tinctorius* L.), *Rasan (Inula racemosa* C.B. Clarke), *Sadābahār* (*Catharanthus roseus* (L.) G. Don), *Ṣandal Surkh* (*Pterocarpus santalinus* L. f.), *Satāwar* (*Asparagus racemosus* Willd.), *Suddāb (Ruta graveolens* L.), *Raiḥān* (*Ocimum sanctum* L.), *Turbud* (*Ipomoea turpethum* R. Br.), *Waj* (*Acorus calamus* L.), etc.

3.1.2.2. Drug Standardization Research Programme

The Drug Standardization 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* (NFUM) and *Essential Drugs List* for their incorporation in *Unani Pharmacopoeia of India (UPI)*. The work on compound formulations includes development of standard operating procedures (SOPs) for their manufacture followed by the development of their pharmacopoeial standards. Besides, standardization 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 undertaken as a part of this programme. Chemical investigations of Unani medicinal plants are also carried out under this programme. The standardization work is carried out in accordance with the format approved by the Unani Pharmacopoeia Committee of the Government of India through the following research centres:

- Drug Standardization Research Institute (DSRI), Ghaziabad
- National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), 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 Standardization Research Unit (DSRU), New Delhi

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

Development of SOPs for Manufacture of Unani Formulations and their Pharmacopoeial Standards

Under this programme, SOPs for manufacture of the following 40 Unani formulations were developed and their pharmacopoeial standards were evaluated:

S. N.	Formulation	S. N.	Formulation
1	*Ḥabb-i-Rasawt*	21	*Ḥalwa-i-Gājar*
2	*Ḥabb-i-Shabyār*	22	*Rawghan Surkh*
3	*Iṭrīfal Kishnīzī*	23	*Sharbat-i-ʿUnnāb*
4	*Ḥabb-i-Sūranjān*	24	*Iṭrīfal Shāhitara*
5	*Ḥabb-i-Surkhbāda*	25	*Ḥabb-i-Bawāsīr Dāmiya*
6	*Dawāʾ al-Misk Muʿtadil Sāda*	26	*Ḥabb Mushil Dimāgī*
7	*Dawāʾ al-Misk Muʿtadil Jawāhar Wālī*	27	*Ḥabb-i-Papīta Wilāyatī*
8	*Ḥabb Tursh Mushtahī*	28	*Iṭrīfal Aftīmūn*
9	*Ḥabb-i-Zahr-i-Mohra*	29	*Ḥabb-i-Pechish*
10	*Jawārish Shāhī*	30	*Ḥalwa-i-Ghīkwār*
11	*Safūf-i-Sayalān*	31	*Maʿjūn-i-Sūranjān*
12	*Sharbat-i-Dīnār*	32	*Jawārish-i-Pūdīna*
13	*Sharbat-i-Belgirī*	33	*Jawārish-i-Buqrāṭ*
14	*Ḥabb-i-Banafsha*	34	*ʿAraq-i-Mundī*
15	*Ḥabb-i-Khabath al-Ḥadīd*	35	*Sharbat-i-Anjibār*
16	*Sharbat-i-Ṣadr*	36	*Banādiq al-Budhūr**
17	*Qurṣ-i-Dīdān**	37	*Qurṣ-i-Kāfūr**
18	*Qurṣ-i-Anjibār**	38	*Qurṣ-i-Gulnār**
19	*Ḥabb-i-Ṭabāshīr**	39	*Ḥabb Hindī Muḥallil**
20	*Ḥabb-i-Tap Balghamī**	40	*Ḥabb-i-Bukhār**

*Formulations were re-allotted for compliance of PCIM&H format.

Development of Pharmacopoeial Standards of Single Drugs

Under the programme, pharmacopoeial standards of the following 9 single drugs were developed:

S. N.	Drug	Botanical / English Name	Part Studied
1.	*Aqāqiyā*	*Acacia Arabica* Willd	Leaf
2.	*Qinnab*	*Cannabis sativa* L.	Seed
3.	*Suranjān Talkh*	*Colchicum luteum* Baker	Root
4.	*Dhatūra*	*Datura alba* Nees.	Root

S. N.	Drug	Botanical / English Name	Part Studied
5.	*Afsantīn*	*Artemisia absinthium* L.	Leaf
6.	*Karafs*	*Apium graveolens* L.	Leaf
7.	*Kāshim*	*Alstonia scholaris* R. Br.	Root
8.	*Aṛūsa*	*Adhatoda vasica* Nees.	Stem bark
9.	*Kachnāl*	*Bauhinia racemosa* Lam.	Fruit

Revision of NFUM and UPI

The Council as the Secretariat for the Unani Pharmacopoeia Committee (UPC) organized meetings of the UPC. During the reporting period, the Council finalized Unani Pharmacopoeia of India (UPI), Part-I, Vol. VII consisting of monographs on 40 single drugs and submitted it to the the Pharmacopoeia Commission of Indian Medicine and Homoeopathy (PCIM&H) for publication. The revision of NFUM, Part-I to VI and UPI, Part-I, Vol. I to VI in accordance with the format provided by the PCIM&H continued. At the end of the reporting period, revised NFUM, Part-IV comprising 166 formulations was vetted by experts, whereas 45 monographs of UPI, Part-I, Vol. I and 40 monographs of UPI, Part-I, Vol. III were revised. Approval of UPC for publication of the revised documents was under consideration.

Analysis of ASU Drugs

The drug testing laboratory at the RRIUM, Chennai analysed the following 31 ASU drug samples received from different organizations:

S. N.	Sample	Source	Parameters Analyzed
1.	Coded sample A & M	Sree Balaji Medical College And Hospital, Chennai	HPTLC analysis
2.	*Sargassum spp.*	Bharathi Women's College, Chennai	HPTLC parameters
3.	*Ehretia pubescens* Royle.	Sree Balaji Medical College And Hospital, Chennai	HPTLC
4.	Thulasi Ennai	Govt. Siddha Medical College, Chennai	Anti-microbial Activity
5.	*Maʿjūn-i-Sarakhs*	National Institute of Unani Medicine, Bangalore	Microbial load, Heavy metals, HPTLC, Physico-chemical analysis
6.	Chirattai thailam	Dr. D. Jayashree, Nerkundrum, Chennai	Antifungal activity studies
7.	Uraimathirai	Govt. Siddha Medical College, Chennai	Microbial Load detection, Aflatoxin detection and Antimicrobial activity studies
8.	*Spirullina platensis*	International Institute of Biotechnology & Toxicology, Padappai	HPTLC Studies
9.	Repellent H03	Muktha Laboratories, Chennai	Microbial load

S. N.	Sample	Source	Parameters Analyzed
10.	Repellent I01	Muktha Laboratories, Chennai	Microbial load
11.	Repellent A01	Muktha Laboratories, Chennai	Microbial load, HPTLC, Aflatoxin detection
12.	Repellant & Trapellent	Muktha Laboratories, Chennai	AYUSH protocol
13.	Catche Insta Repellent	Muktha Laboratories, Chennai	HPTLC analysis and Aflatoxin detection studies and Microbial load contamination
14.	Catche Trapellent	Muktha Laboratories, Chennai	HPTLC analysis and Aflatoxin detection studies and Microbial load contamination
15.	Kandamalaga Legiym	National Institute of Siddha, Chennai	HPTLC analysis and Aflatoxin detection studies
16.	Pereechangai Nei	National Institute of Siddha, Chennai	HPTLC analysis, Microbial load contamination and Afaltoxin detection studies
17.	Pancha Lavanya Dravagam (PLD)	National Institute of Siddha, Chennai	pH, Volatile matter, specific gravity, refractive index, HPTLC, microbial load and test for specific pathogens
18.	Koraikihangu Kudineer	National Institute of Siddha, Chennai	Physicochemical, HPTLC, Antimicrobial activity and Microbial load
19.	Kukilathi Urundai	National Institute of Siddha, Chennai	HPTLC, Microbial load, Aflatoxin detection
20.	Swasakarasak Kudori	National Institute of Siddha, Chennai	pH, HPTLC, Microbial contamination, Aflatoxin detection
21.	Gandaga Chooranam	National Institute of Siddha, Chennai	pH, HPTLC, Microbial contamination, Aflatoxin detection
22.	Vitex negundo	Presidency College, Chennai	HPTLC analysis, Preliminary phytochemical analysis and Antimicrobial activity studies
23.	*Syzygium cumini* (Coded sample A, B & C)	Queen Mary's College, Chennai	HPTLC studies
24.	Coded sample – PPE	SRM, Chennai	HPTLC analysis
25.	*Desmodium gangeticum* L.	Tamil Nadu Veterinary & Animal Sciences University, Chennai	Pharmacognosy Work
26.	CuNPS	University of Madras, Chennai	Antimicrobial Studies
27.	Code VN	University of Madras, Chennai	HPTLC Studies
28.	Coded sample AKNOO36	Vels University, Pallavaram, Chennai	Alcohol extraction

S. N.	Sample	Source	Parameters Analyzed
29.	Coded sample CG	Vels University, Pallavaram, Chennai	Physicochemical Parameters, Extraction, Preliminary Phytochemical analysis and HPTLC studies
30.	Orange peel extract	Vels University, Pallavaram, Chennai	HPTLC analysis
31.	Lemon peel extract	Vels University, Pallavaram, Chennai	HPTLC analysis

3.1.2.3. Clinical Research Programme

Preclinical Studies

Preclinical safety and pharmacological studies on Unani formulations were carried out after prior approval from Institutional Animals Ethics Committee at the National Research Institute of Unani Medicine for Skin Disorders, Hyderabad. Summary of the studies undertaken is as under:

Preclinical Safety Evaluation of *Qurṣ-i-Dīdān*

(a) Acute oral toxicity study in rats

The study was designed to evaluate oral toxicity potential of *Qurṣ-i-Dīdān* (QD) in Wistar rats. Acute oral toxicity study was conducted as per OECD Test Guideline 425 at a limit dose of 2000 mg/kg body weight, considering the low acute toxicity potential. Female Wistar rats were administered with single dose of the formulation followed by observation for two weeks. Animals were regularly observed for body weight, feed intake, mortality and toxic signs and symptoms for 14 days post-treatment. As no lethality was observed following treatment with QD in 3 consecutive animals, dosing to further animals was not initiated. All the three animals were sacrificed on day 15 and necropsy was performed.

Based on the findings of the study, no toxic signs and symptoms or mortality was observed at the dose of 2000 mg/kg bw. No treatment related gross pathological abnormality was observed during necropsy. Therefore, oral LD50 of QD in female Wistar rats was estimated to be greater than 2,000 mg/kg body weight.

(b) Repeated dose 28-days oral toxicity study in rats

The study was designed to evaluate 28-day repeated dose oral toxicity of *Qurṣ-i-Dīdān* (QD) in rats. The study was carried out in male and female Wistar rats as per OECD Test Guideline 407. Animals were divided into three groups (n=05 per sex per group). QD was administered at the dose of 50, 250 and 500 mg/kg bw/day (i.e., 1X, 5X and 10X of therapeutically equivalent dose, respectively) p.o. for 28 days. Control animals were administered with vehicle only. Body weight and feed intake for all animals were measured weekly throughout the study duration. Detailed clinical observations were made periodically to detect signs of toxicity. After completion of 28 days, blood samples were collected for hematological and biochemical analysis and animals were sacrificed, organs were harvested for weight determination and histopathological evaluation.

The study findings of repeated dose 28-day toxicity study in rats did not indicate any toxicologically significant observation in terms of body weight, feed intake, behavioural pattern, haematology, clinical chemistry, organ weight in QD treated animals at all tested

dose levels as compared to control animals. The conclusive statement regarding safety of QD could possibly be made based on histopathological investigation.

Preclinical Safety Evaluation of *Iṭrīfal Muqawwī-i-Dimāgh*

(a) Acute oral toxicity study in rats

The study was designed to evaluate oral toxicity potential of *Iṭrīfal Muqawwī-i-Dimāgh* (IMD) in Wistar rats. Acute oral toxicity study was conducted as per OECD Test Guideline 425 at a limit dose of 5000 mg/kg body weight, considering the low acute toxicity potential. Female Wistar rats were administered with single dose of the formulation followed by observation for two weeks. Animals were regularly observed for body weight, feed consumption, mortality and toxic signs and symptoms for 14 days post-treatment. As no lethality was observed following treatment with IMD in 3 consecutive animals, dosing to further animals was stopped. All the three animals were sacrificed on day 15 and necropsy was performed. Based on the findings of the study, no toxic signs and symptoms or mortality was observed at the dose of 5000 mg/kg body weight. No treatment related gross pathological abnormality was observed during necropsy. Therefore, oral LD50 of IMD in female Wistar rats was estimated to be greater than 5,000 mg/kg body weight.

(b) Chronic toxicity study (180-days repeated dose oral toxicity) in rats

Chronic toxicity study on *Iṭrīfal Muqawwī-i-Dimāgh* (IMD) was conducted in rats as per OECD Test Guideline 452 and ICH Guideline. 15 male and 15 female rats per group were orally treated with vehicle or IMD (2000 mg/kg bw) as an aqueous suspension in water at the maximum volume of 2mL/100 gm body weight, once daily. The control animals were administered with equal amount of vehicle (water) only. Rats were observed for clinical signs, morbidity and mortality twice daily. Detailed clinical observations were made, once before the first exposure and at regular intervals during the course of treatment. Body weight and feed consumption were recorded throughout the course of study. Six-month duration of drug administration was completed in March 2020 and animals were sacrificed. Haematological and clinical chemistry parameters were performed from the blood samples collected from retro-orbital sinus under anaesthesia. All rats were subjected to gross necropsy and internal vital organs were stored in formalin. Tissue samples will be submitted for histopathological investigation and data will be compiled and analysed.

Preclinical Safety Evaluation of *Jawārish Anārayn*

(a) Acute oral toxicity study in rats

Acute oral toxicity study of *Jawārish Anārayn* was performed in Wistar rats. Considering the low acute toxicity potential, the limit test as per OECD Test Guideline 425 was conducted at the dose of 5000 mg/kg body weight. Animals were weighed, observed for mortality and toxic signs & symptoms for 14 days post-treatment. As no mortality was observed following treatment with *Jawārish Anārayn* in three consecutive animals, dosing to further animals was stopped. All the three animals were sacrificed on day 15 and necropsy was performed. No treatment related gross pathological abnormality was observed. Under the given conditions, no toxic signs and symptoms or mortality was observed at the dose of 5000 mg/kg body weight. Therefore, oral LD50 of *Jawārish Anārayn* in female Wistar strain rat was estimated to be greater than 5,000 mg/kg body weight.

(b) Repeated dose 28-day oral toxicity study in rats

The study was designed to evaluate 28-day repeated dose oral toxicity in Wistar rats as per OECD Test Guideline 407. Animals were divided into three groups (n=05 per sex per

group). *Jawārish Anārayn* was administered at the dose of 1000 and 2000 mg/kg body weight per day (i.e., 1X, 2X of therapeutically equivalent dose, respectively) p.o. for 28 days. Control animals were administered with vehicle i.e., water. Body weight and feed intake for all animals were measured weekly throughout the study duration. Detailed clinical observations were made periodically to detect signs of toxicity. After completion of 28 days, blood samples were collected for haematological and biochemical analysis and animals were sacrificed, organs were harvested for weight determination and histopathological evaluation.

The study findings of repeated dose 28-day toxicity study in rats did not indicate any toxicological significant observation in terms of body weight, feed intake, behavioural pattern, haematology, clinical chemistry, organ weight in *Jawārish Anārayn* treated group at both 1000 and 2000 mg/kg body weight dose levels as compared to control animals. The conclusive statement regarding safety of *Jawārish Anārayn* could possibly be made once the analysis of histopathological findings is completed.

Preclinical Safety Evaluation of *Iṭrīfal Zamānī*

(a) Acute oral toxicity study in rats

Considering the low acute toxicity potential, the limit test as per OECD Test Guideline 425 was conducted at the dose of 5000 mg/kg body weight. Animals were weighed, observed for lethality and toxic signs & symptoms for 14 days post-treatment. As no lethality was observed following treatment with *Iṭrīfal Zamānī* in 3 consecutive animals respectively, dosing to further animals was stopped. All the three animals were sacrificed on day 15 and necropsy was performed. No treatment related gross pathological abnormality was observed. Under the given conditions, no toxic signs and symptoms or mortality was observed at the dose of 5000 mg/kg body weight. Therefore, oral LD50 of *Iṭrīfal Zamānī* in female Wistar strain rat was estimated to be greater than 5,000 mg/kg body weight.

(b) Repeated dose 28-day oral toxicity study in rats

The study was designed to evaluate 28-day repeated dose oral toxicity of *Iṭrīfal Zamānī* in Wistar rats as per OECD Test Guideline 407. Animals were divided into three groups (n=05 per sex per group). *Iṭrīfal Zamānī* was administered at the dose of 1000 and 2000 mg/kg body weight / day (i.e., 1X, 2X of therapeutically equivalent dose, respectively) p.o. for 28 days. Control animals were administered with vehicle. Body weight and feed intake for all animals were measured weekly throughout the study duration. Detailed clinical observations were made periodically to detect signs of toxicity. After completion of 28 days, blood samples were collected for haematological and biochemical analysis and animals were sacrificed, organs were harvested for weight determination and histopathological evaluation.

The study findings did not indicate any toxicologically significant observation in terms of body weight, feed intake, behavioural pattern, haematology, clinical chemistry, organ weight in *Iṭrīfal Zamānī* treated group at both 1000 and 2000 mg/kg bw dose levels as compared to control animals. The conclusive statement regarding safety of *Iṭrīfal Zamānī* could possibly be made once the analysis of histopathological findings is completed.

Preclinical Safety and Efficacy Evaluation of *Maʿjūn Māsik al-Bawl* and its Hydroalcoholic Extract

(a) Effect of *Maʿjūn Māsik al-Bawl* (MMB) and *Maʿjūn Māsik al-Bawl* Extract (MMBE) on urine output

The study was undertaken to evaluate the effect of classical formulation *Maʿjūn Māsik al-Bawl* (MMB) and its 50% hydroethanolic extract (MMBE) on urine output, saluresis, and natriuresis in rats. Sprague-Dawley rats were randomly distributed in six groups with six animals in each. One group served as the control and one received furosemide (10 mg/kg, p.o.) and served as diuretic control. Remaining four groups received two doses of classical formulation (1000 and 2000 mg/kg MMB) or equivalent doses of hydroethanolic extract (50 and 100 mg/kg MMBE). Cumulative urine output after 5 h, urinary electrolytes, saluretic and natriuretic activity of all groups were estimated and then compared with control groups.

There was statistically significant difference ($p<0.001$) in the urinary output between all treatment groups at 5 h. Diuretic index for standard furosemide was 12.61 whereas diuretic indices for MMB 1000, 2000 mg/kg were 0.22, 0.14 and for MMBE 50 and 100 mg/kg were 0.26, 0.25, respectively. Classical MMB showed significant dose dependent reduction in urine output and both doses resulted around 22% and 13.5% urine volume excretion, respectively, compared to control. Both doses of 50% hydroethanolic extract resulted about 25% urine excretion compared to control and no dose dependent activity was observed in case of extract. No significant changes were observed in saluretic and natriuretic activity in any test group while, as expected, furosemide significantly induced saluresis and natriuresis.

MMB and MMBE reduced urine output in rats without significantly altering saluresis and natriuresis. This is an important and therapeutically useful finding which provides scientific evidence in favour of its traditional claims and widespread usage in urinary incontinence and nocturnal enuresis.

(b) Nephroprotective effect of *Maʿjūn Māsik al-Bawl* (MMB) and *Maʿjūn Māsik al-Bawl* extract (MMBE)

Maʿjūn Māsik al-Bawl (MMB) and its 50% hydroethanolic extract (MMBE) were evaluated in rats for nephroprotective activity. The renal toxicity was induced by administering Cisplatin 7 mg/kg bw, i.p. in rats. A total of 48 male rats were randomly assigned into 06 groups including control and experimental groups of 08 rats in each group. There were two treatment groups for each MMB (1000 and 2000 mg/kg bw) and MMBE (50 and 100 mg/kg bw).

Biochemical analysis was conducted on blood samples collected from retro-orbital plexus under isoflurane anaesthesia. Blood urea, serum creatinine and uric acid were estimated by commercially available biochemical kits using automatic clinical chemistry analyser. Animals were euthanized under CO2 at the end of experimental period. Kidneys and livers were excised out and samples were submitted for histopathological investigations. Statistical analysis, interpretation of biochemistry data and compilation of report were in progress.

Preclinical Safety and Efficacy Studies on *Qurṣ Damwī* and its Hydroalcoholic Extract in Rats

(a) Haematopoietic activity of *Qurṣ Damwī* (DM) and *Qurṣ Damwī* Extract (DME)

The study was conducted to validate the use of DM and its 50% hydroethanolic extract (DME) in cyclophosphamide induced haemotoxicity in rats for the assessment of erythropoietic activity. DM was prepared as per classical methodology. Extract (DME) was obtained from crude formulation (DM) using extraction with ethanol and water (1:1; v/v). Haemotoxicity was induced by intraperitoneal administration of cyclophosphamide 3 mg/kg

bw in rats for seven consecutive days. Drug treatment was started from day 8 and continued till day 22. Blood samples were analysed on day 7 and day 22 using haematology analyser.

Treatment with DM at 25 and 50 mg/kg bw significantly reversed haemotoxicity induced by cyclophosphamide. Haematological parameters of the treated groups were comparable to vehicle control except a significant decrease ($p<0.01$) in WBC count at DM 25 mg/kg bw group. DME 10 mg/kg treatment normalised Hb and PLT count, however, RBC, WBC and HCT values were still significantly lower ($p<0.05$) compared to vehicle control. DME 20 mg/kg treatment restored all haematology parameters except a significant decrease ($p<0.001$) in WBC count was persisted on day 22.

Treatment with DM at 25 and 50 mg/kg bw restored the haematological parameters in rats induced by cyclophosphamide. DME effectively restored haematological parameters only at the dose of 20 mg/kg bw. Observed effect may be exerted by the presence of iron and other constituents of DM such as ginger (*Zingiber officinale*). Present findings validate the indication of this traditional Unani formulation in the management of iron deficiency conditions like anaemia.

Preclinical Safety and Efficacy Evaluation of *Khamīra Gaʾuzabāṉ ʿAmbarī Jadwār ʿŪd Ṣalīb Wālā*

(a) Chronic toxicity study (180-day repeated dose oral toxicity) in rats

Chronic toxicity study on *Khamīra Gaʾuzabāṉ ʿAmbarī Jadwār ʿŪd Ṣalīb Wālā* (KGAJOS) was conducted in rats as per limit test method of OECD Test Guideline 452 and ICH Guideline. 15 male and 15 female rats per group were orally treated with vehicle or KGAJOS (2000 mg/kg bw) as an aqueous suspension in water at the maximum volume of 2mL/100 gm bw, once daily. The control animals were administered with equal amount of vehicle (water) only. Rats were observed for clinical signs, morbidity and mortality twice daily. Detailed clinical observations were made, once before the first exposure and at regular intervals during the course of treatment. Body weight and feed consumption were recorded throughout the course of study. Six-month duration of drug administration was completed in March 2020 and animals were sacrificed. Haematological and clinical chemistry parameters were performed from the blood samples collected from retro-orbital sinus under anaesthesia. All rats were subjected to gross necropsy and internal vital organs were stored in formalin. Tissue samples will be submitted for histopathological investigation and data will be compiled and analysed.

(b) Efficacy of KGAJOS on learning and memory in mice (Morris water maze test)

Khamīra Gaʾuzabāṉ ʿAmbarī Jadwār ʿŪd Ṣalīb Wālā (KGAJOS) was evaluated for cognitive function improvement activity using Morris water maze test in C57BL/6 mice. The study was performed at three dose levels of KGAJOS i.e., 500, 1,000 and 1,500 mg/kg bw/day. Piracetam was used as positive control for comparison. Anymaze® video tracking software was used for tracking the path of mice in pool as per standard protocol. Mice were trained for five consecutive days, and each mouse was subjected to five trials per day, followed by a probe test on day 6.

During the probe trial in Morris water maze test, a significant increase in time spent in platform quadrant was observed at 1000 and 1500 mg/kg bw of KGAJOS ($p<0.01$ and 0.001, respectively) as well as in Piracetam group ($p<0.01$) compared to vehicle control. Latency to reach the platform quadrant (escape latency) was significantly reduced

($p<0.001$) in Piracetam and KGAJOS groups at 1000 and 1500 mg/kg bw compared to vehicle control. No change in time spent in platform quadrant and escape latency was observed at 500 mg/kg bw of KGAJOS.

Morris water maze experiment conducted in mice revealed improved learning and memory function of KGAJOS at the dose levels of 1000 and 1500 mg/kg bw whereas 500 mg/kg bw was not found to be effective. Observed efficacy of KGAJOS confirmed the traditional claims and usage of this formulation in conditions associated with cognition and memory.

Evaluation of Cognitive Effect of *Maʿjūn IQ*

(a) Efficacy of *Maʿjūn IQ* on learning and memory in mice (Morris water maze test)

Maʿjūn IQ (MIQ) was evaluated for cognitive function improvement activity using Morris water maze test in C57BL/6 mice. The study was performed at three dose levels of MIQ i.e., 500, 1,000 and 1,500 mg/kg bw/day. Piracetam was used as positive control for comparison. Anymaze® video tracking software was used for tracking the path of mice in pool as per standard protocol. Mice were trained for five consecutive days, and each mouse was subjected to five trials per day, followed by a probe test on day 6.

During the probe trial in Morris water maze test, a significant increase in time spent in platform quadrant was observed at MIQ 1500 mg/kg bw ($p<0.05$) as well as in Piracetam 400 mg/kg bw group ($p<0.01$) compared to vehicle control. There was no difference in latency to reach the platform quadrant (escape latency) or distance travelled in platform quadrant in any MIQ treated group compared to vehicle. Piracetam treatment lead to significant reduction ($p<0.05$) in escape latency and significant increase ($p<0.001$) in distance travelled in platform quadrant compared to vehicle control.

Morris water maze experiment conducted in mice revealed no significant improvement in learning and memory function by MIQ except a mild effect only at 1500 mg/kg bw. Further studies are warranted using other model(s) of cognitive dysfunction to explore the potential benefits of this formulation in learning and memory.

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 conducted. Clinical validation of Unani pharmacopoeial fast-acting drugs in different diseases was also undertaken. The programme continued at the following centres:

- National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), 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
- 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	Diseases
National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad	*Ḥaṣāt al-Kulya* (nephrolithiasis), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Ḍīq al-Nafas* (bronchial asthma), *Litha Dāmiya* (bleeding gums), *Ḍu'f al-Ishtihā'* (anorexia), *Su'āl Yābis* (dry cough), *Ḍu'f al-Mi'da* (functional dyspepsia), *Iḥtibās al-Ṭamth* (amenorrhoea), *Mālankhūliyā* (mixed anxiety depressive disorder), *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type-2), *Sū' al-Qinya* (anaemia) and *Ḥummā* (fever)
Central Research Institute of Unani Medicine (CRIUM), Lucknow	*Siman Mufriṭ* (central obesity), *Sū' al-Qinya* (anaemia), *Sayalān al-Raḥim* (leucorrhoea), *Ḍīq al-Nafas* (bronchial asthma), *Nazla Ḥārr* (common cold), *Ḍu'f al- Dimāgh (*cerebrasthenia), *Ḥummā* (fever), *Iḥtibās al-Ṭamth* (amenorrhoea), *Ḍu'f al-Ishtihā'* (anorexia), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Su' al-Haḍm* (dyspepsia), *Waja' al-Mafāṣil* (rheumatoid arthritis) and *Ḍu'f al-Mi'da* (dyspepsia)
Regional Research Institute of Unani Medicine (RRIUM), Chennai	*Ṣudā'* (headache), *Ḥaṣāt al-Kulya* (nephrolithiasis), *Khafaqān* (palpitation), *Bawāsīr 'Umya* (non-bleeding piles), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Ḥummā* (fever), *Qubā'* (dermatophytosis), *Mālankhūliyā* (mixed anxiety depressive disorder), *Ḍīq al-Nafas* (bronchial asthma), *Ḍu'f al-Dimāgh* (cerebrosthenia), *Sahar* (insomnia) and *Waja' al-Mafāṣil* (rheumatoid arthritis)
Regional Research Institute of Unani Medicine (RRIUM), Bhadrak	*Buthūr al-Jild* (macules / pustules), *Ḍu'f al-Ishtihā'* (anorexia), *Zaḥīr* (dysentery), *Waja' al-Mafāṣil*

Centre	Diseases
	(rheumatoid arthritis), *Ḍu'f al-Mi'da* (functional dyspepsia), *Sur'at al-Inzāl* (premature ejaculation) *Khafaqān* (palpitation), *Jarab* (scabies) and *Ḍīq al-Nafas* (bronchial asthma)
Regional Research Institute of Unani Medicine (RRIUM), Patna	*Nazla* (common cold), *Khafaqān* (palpitation), *Ḍīq al-Nafas* (bronchial asthma), *Sū' al-Qinya* (anaemia), *Nazla Muzmin* (chronic rhinosinusitis), *Qūbā* (dermatophytosis), *Niqris* (gout), *Waja' al-Mafāṣil* (rheumatoid arthritis) and *Ḍu'f al-Mi'da* (dyspepsia)
Regional Research Institute of Unani Medicine (RRIUM), Aligarh	*Ḍu'f al-Ishtihā'* (anorexia), *Nazla Muzmin* (chronic rhinosinusitis), *Siman Mufriṭ* (obesity), *Litha Dāmiya* (bleeding gums), *Kathrat al- Ṭamth* (heavy menstrual bleeding), *Su'āl Yābis* (dry cough), *Sahar* (insomnia), *Ghathayān* (nausea), *Ḍīq al-Nafas* (bronchial asthma), *Ḍu'f al-Mi'da* (functional dyspepsia), *Ḥummā Ajāmiyya* (malaria), *Sayalān al-Raḥim* (leucorrhoea), *Ḍu'f al-Dimāgh* (cerebrosthenia), *Qulā'* (stomatitis), *Niqris* (Gout), *Ḥumūḍat al-Mi'da* (hyperacidity) and *Jildī Qurūḥ* (cutaneous ulcers)
Regional Research Institute of Unani Medicine (RRIUM), Mumbai	*Bawāsīr 'Umya* (non-bleeding piles), *Siman Mufriṭ* (obesity), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Ḥaṣāt al-Kulya* (nephrolithiasis), *Sū' al-Qinya* (anaemia), *Iḥtibās al-Ṭamth* (amenorrhoea), *Niqris* (gout), *Qūbā* (Dermatophytosis), *Khafaqān* (palpitation), *Mālankhūliyā* (mixed anxiety depressive disorder), *Sayalān al-Raḥim* (leucorrhoea), *Nisyān* (amnesia) and *Salas al-Bawl* (stress urinary incontinence)
Regional Research Institute of Unani Medicine (RRIUM), Srinagar	*Ḍīq al-Nafas* (bronchial asthma), *Ḍu'f al-Mi'da* (functional dyspepsia), *Ḥummā* (fever), *Sayalān al-Raḥim* (leucorrhoea), *Mālankhūliya* (mixed anxiety depressive disorder), *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type-2), *Daghṭ al-Dam Qawī* (hypertension) and *Kathrat al-Ṭamth* (heavy menstrual bleeding)
Regional Research Institute of Unani Medicine (RRIUM), Kolkata	*Nazla Muzmin* (chronic rhinosinusitis), *Su'āl* (cough), *Ḍu'f al-Ishtihā'* (anorexia) and *Sū' al-Qinya* (anaemia)
Regional Research Institute of Unani Medicine (RRIUM), New Delhi	*Su'āl Yābis* (dry cough), *Sayalān al-Raḥīm* (leucorrhoea), *Buthūr al-Jild* (skin eruptions), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Sū' al-Qinya* (anaemia), *Khafaqān* (palpitation), *Sū' al-Haḍm* (dyspepsia), *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type-2) and *'Irq al-Nasā* (sciatica)

Centre	Diseases
Regional Research Centre (RRC), Allahabad	*Khafaqān* (palpitation), *Bawāsīr 'Umya* (non-bleeding piles), *Zaḥīr* (dysentery), *Su'āl* (cough), *Nazla Ḥārr* (common cold), *Niqris* (gout), *Sū' al-Qinya* (anaemia), *Waja' al-Mafāṣil* (rheumatoid arthritis), *Su'āl Yābis* (dry cough) and *Sahar* (insomnia)
Regional Research Centre (RRC), Silchar	*Nazla Ḥārr* (common cold), *Waja' al-Mafāṣil* (rheumatoid arthritis), *Su'āl* (cough), *Ghathayān* (nausea), *Buthūr al-Jild* (skin eruptions), *Waja' al-Asnān* (toothache), *Sū' al- Qinya* (anaemia) and *Sahar* (insomnia)
Clinical Research Unit (CRU), Bengaluru	*Sū' al-Qinya* (anaemia), *Ḍu'f al-Ishtihā'* (anorexia), *Waram al-Kabid* (hepatitis), *Nazla Ḥārr* (common cold) and *Waja' al-Asnān* (toothache)
Clinical Research Unit (CRU), Meerut	*Ḍu'f al-Ishtihā'* (anorexia), *Ḍīq al-Nafas* (bronchial asthma), *Nazla Muzmin* (chronic rhinosinusitis), *Sayalān al-Raḥim* (leucorrhoea), *Sū' al-Haḍm* (dyspepsia), *Su'āl Yābis* (dry cough) and *Salas al-Bawl* (stress urinary incontinence)
Clinical Research Unit (CRU), Bhopal	*Sahar* (insomnia), *Su'āl* (cough), *Ṣudā'* (headache), *Ḍu'f al-Ishtihā'* (anorexia) *Nazla Ḥārr* (common cold) and *Sayalān al-Raḥīm* (leucorrhoea) and *Sū' al-Qinya* (anaemia)
Clinical Research Unit (CRU), Burhanpur	*Sū' al-Qinya* (Anaemia)
Clinical Research Unit (CRU), Kerala	*Sahar* (insomnia), *Nazla* (common cold) and *Sur'at al-Inzāl* (premature ejaculation)
Clinical Research Unit (CRU), Kurnool	*Sayalān al-Raḥim* (leucorrhoea), *Zaḥīr* (dysentery), *Waram al-Kabid* (hepatitis), *Waja' al-Asnān* (toothache), *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type-2) and *Qulā'* (stomatitis)

Clinical Studies on *Baraṣ* (Vitiligo)

Clinical studies on *Baraṣ* (vitiligo) continued at the National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), 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 *Baraṣ* (vitiligo) patients

Therapeutic efficacy of a combination of two coded Unani drugs, UNIM-001 and UNIM-003, was evaluated in 1,011 patients of *Baraṣ* (vitiligo). The drug UNIM-001 was given in the dose of two tablets (500 mg each) with water one hour after meal twice daily. Besides, paste of UNIM-003 was applied locally on the affected parts early in the morning followed

by sun exposure for 10-15 minutes. The paste was washed off after 30 minutes of the application. The treatment was given for a period of 24 months.

During the reporting period, 11 new patients were registered, whereas 689 continued from the previous year bringing the total patients studied to 700. Out of them, 100 patients completed the study. Out of the completed patients, 5 (5%) patients got 100% repigmentation, 13 (13%) patients got 71-90% repigmentation, 6 (6%) patients got 51-70% repigmentation, 3 (3%) patients got 41-50% repigmentation, 66 (66%) patients got ≤40% repigmentation, and remaining 7 (7%) patients showed no response to treatment. There were 404 patients under study and 196 patients dropped out of the study. So far, 3,487 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 *Baraṣ* (vitiligo) patients

Therapeutic efficacy of a combination of two coded Unani drugs, UNIM-004 and UNIM-005, was evaluated in 4,371 patients of *Baraṣ* (vitiligo). The drug UNIM-004 was given in the dose of two tablets (500 mg each) with water one hour after meal twice daily. Besides, paste of UNIM-005 (powder) prepared by mixing one part of the drug with five parts of water 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. The treatment was given for a period of 24 months.

During the reporting period, 150 patients were registered and 1,962 follow-up cases continued from the previous year bringing the total cases studied to 2,112. Out of them, 327 patients completed the study, 1,369 dropped out of the study and 416 patients were under study. Out of 327 completed patients, 3 (0.9%) patients got 100% repigmentation, 5 (1.5%) patients got 91-99% repigmentation, 12 (3.7%) patients got 71-90% repigmentation, 21 (6.4%) patients got 51-70% repigmentation, 21 (6.4%) patients got 41-50% repigmentation, 221 (67.6%) patients had ≤40% repigmentation, whereas 44 (13.5%) patients showed no response to the treatment. So far, 6,588 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. It was managed by diluting the concentration of the paste and applying coconut oil on the affected parts.

Evaluation of therapeutic efficacy of *Munḍij-Mushil* drugs (UNIM-040 + UNIM-041 + UNIM-042) in *Baraṣ* (vitiligo) patients

Therapeutic efficacy of *Munḍij-Mushil* drugs (UNIM-040 + UNIM-041 + UNIM-042) was evaluated in the patients of *Baraṣ* (vitiligo). The *Munḍij* drugs were given till the appearance of *Nuḍj* in urine followed by *Mushil* and *Tabrīd* drugs for six days alternately.

During the reporting period, 166 new patients were registered, whereas 6 patients continued from the previous year bringing the total patients studied to 172. Out of 166 completed cases,137 (82.5%) had initiation of repigmentation and 29 (17.5%) cases did not respond to the treatment. Six cases dropped out of the study. The results were being documented and subjected to statistical evaluation. No drug intolerance / side effect was

reported. After the completion of *Munḍij-Mushil* therapy, the patients were given oral and local drugs.

Multi-centric Randomized Controlled Trials

The following studies under multi-centric randomized controlled trials were allotted / initiated during the reporting period:

- A muticentric, single blind, randomized, parallel group study to compare efficacy and safety of coded Unani formulation K2019 with Ferrous sulphate in patients with *Faqr al-Dam* (iron deficiency anaemia)
- A muticentric, single blind, randomized, parallel group study to compare efficacy and safety of Unani formulation *Qurṣ-i-Mafāṣil* with Paracetamol in patients with *Taḥajjur al-Mafāṣil* (osteoarthritis)
- A muticentric, single blind, randomized, parallel group study to compare efficacy and safety of Unani formulation *Safūf-i-Dama Haldīwālā* with Salbutamol in patients with *Ḍīq al-Nafas* (bronchial asthma)
- A muticentric, single blind, randomized, parallel group study to compare efficacy and safety of coded Unani formulation UNIM D 2000 with Metformin in patients with *Dhayābīṭus Sukkarī Qism Thānī* (diabetes mellitus type II)
- A muticentric, single blind, randomized, parallel group study to compare efficacy and safety of Unani formulation *Cap. Shaqīqa* with Acetaminophen in patients with *Shaqīqa* (migraine)

Validation of Unani Pharmacopoeial Drugs

Clinical validation of a Unani pharmacopoeial formulation *Ma'jūn Chobchīnī* in *Jarab* (scabies)

A study on validation of a Unani pharmacopoeial formulation *Ma'jūn Chobchīnī* in the patients of *Jarab* (scabies) was carried out at RRIUMs, Bhadrak and Patna; and RRC, Allahabad. The patients received *Ma'jūn Chobchīnī* in the dose of five gm orally twice daily after meal for four weeks.

During the reporting period, 53 patients were studied; of which 23 patients completed the study. Out of the completed cases, 11 (48%) were relieved, 10 (43%) partially relieved and two (9%) showed no response. A total of 30 patients dropped out of the study and no patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Damwī* in *Sū' al-Qinya* (anaemia)

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

During the reporting period, 83 patients were studied, of which 24 completed the study. Out of the completed cases, three (12%) were relieved, 16 (67%) partially relieved and five (21%) showed no response. A total of 46 patients were under study and 13 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Muqawwī-i-Dimāgh* in *Nisyān* (amnesia)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Muqawwī-i-Dimāgh* in the patients of *Nisyān* (amnesia) was carried out at NRIUMSD, Hyderabad; CRIUM, Lucknow; and RRIUM, Mumbai. The patients received *Iṭrīfal Muqawwī-i-Dimāgh* five gm orally twice daily for eight weeks.

During the reporting period, 21 patients were studied; of which 19 completed the study. All the completed cases (100%) were partially relieved. Two patients dropped out of the study and no patients were under study at the end of the reporting period. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Asgand* in *Waja' al-Mafāṣil* (rheumatoid arthritis)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Asgand* in *Waja' al-Mafāṣil* (rheumatoid arthritis) was carried out at RRIUMs, New Delhi, Mumbai and Aligarh; and CRU, Bengaluru. The patients received *Ḥabb-i-Asgand* one pill twice daily for six weeks.

During the reporting period, 61 patients were studied, of which 37 completed the study. Out of the completed cases, 20 (54%) were relieved, 15 (41%) partially relieved and two (5%) showed no response. A total of 18 patients were under study and six dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Bawāsīr Dāmiya* in *Bawāsīr* (piles)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Bawāsīr Dāmiya* in the patients of *Bawāsīr* (piles) was carried out at RRIUMs, Bhadrak and Kolkata; and CRU, Kurnool. The patients received *Ḥabb-i-Bawāsīr Dāmiya* one pill twice daily for two weeks.

During the reporting period, 14 patients were studied, of which nine completed the study. Out of the completed cases, six (67%) patients were relieved and 3 (33%) were partially relieved. One patient was under study and four dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Safūf Ḥābis al-Dam* in *Kathrat al-Ṭamth* (heavy menstrual bleeding)

A study on validation of a Unani pharmacopoeial formulation *Safūf Ḥābis al-Dam* in *Kathrat al-Ṭamth* (heavy menstrual bleeding) was carried out at NRIUMSD, Hyderabad; and RRIUMs, Aligarh, Chennai and Srinagar. The patients received *Safūf Ḥābis al-Dam* 2.5 gm twice daily for ten days in a month starting from the 1st day of the menstrual cycle for three consecutive months.

During the reporting period, 25 patients were studied, of which five completed the study. Out of the completed cases, four (80%) were relieved and one (20%) partially relieved. Total 16 patients were under study and four dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawārish Shāhī* in *Khafaqān* (palpitation)

A study on validation of a Unani pharmacopoeial formulation *Jawārish Shāhī* in *Khafaqān* (palpitation) was carried out at CRIUM, Lucknow; and RRIUMs, Aligarh and Srinagar. The patients received *Jawārish Shāhī* five gm orally twice daily for two weeks.

During the reporting period, 72 patients were studied, of which 38 completed the study. Out of the completed cases, 14 (37%) were relieved, 23 (61%) partially relieved and one (2%) showed no response. A total of 34 patients dropped out of the study while no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Khamīra Ṣandal Sāda* in *Khafaqān* (palpitation)

A study on validation of a Unani pharmacopoeial formulation *Khamīra Ṣandal Sāda* in the patients of *Khafaqān* (palpitation) was carried out at NRIUMSD, Hyderabad; RRIUM, New Delhi; and CRU, Meerut. The patients received *Khamīra Ṣandal Sāda* five gm twice daily for two weeks.

During the reporting period, 90 patients were studied, of which 37 completed the study. Out of the completed cases, 32 (86%) patients were relieved and five (14%) partially relieved. A total of 20 patients dropped out of the study and 33 were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Usṭūkhūdūs* in *Nazla Muzmin* (chronic rhinosinusitis)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Usṭūkhūdūs* in the patients of *Nazla Muzmin* (chronic rhinosinusitis) was carried out at NRIUMSD, Hyderabad; CRIUM, Lucknow; and RRIUM, Srinagar. The patients received *Iṭrīfal Usṭūkhūdūs* seven gm twice daily for six weeks.

During the reporting period, 45 patients were studied, of which 15 completed the study. Out of the completed cases, nine (60%) patients were relieved and six (40%) partially relieved. Two patients were under study and 28 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Laʻūq-i-Katāṉ* in *Ḍīq al-Nafas* (bronchial asthma)

A study on validation of a Unani pharmacopoeial formulation *Laʻūq-i-Katāṉ* in the patients of *Ḍīq al-Nafas* (bronchial asthma) was carried out at CRIUM, Lucknow; RRC, Allahabad; and CRU, Meerut. The patients received *Laʻūq-i-Katāṉ* five gm twice daily for two weeks.

During the reporting period, 62 patients were studied, of which 51 completed the study. Out of the completed cases, two (4%) patients were relieved, 29 (57%) partially relieved and 20 (39%) showed no response. A total of 11 patients dropped out of the study and no patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Khamīra Gāʼuzabāṉ Sāda* in *Ḍuʻf al-Dimāgh* (cerebrasthenia)

A study on validation of a Unani pharmacopoeial formulation *Khamīra Gāʼuzabāṉ Sāda* in the patients of *Ḍuʻf al-Dimāgh* (cerebrasthenia) was carried out at NRIUMSD, Hyderabad;

CRIUM, Lucknow; and RRIUM, Mumbai. The patients received *Khamīra Gā'uzabāṉ Sāda* five gm twice daily for six weeks.

During the reporting period, 75 patients were studied, of which 39 completed the study. Out of the completed cases, no patient was relieved, 25 (64%) patients were partially relieved and 14 (36%) showed no response. A total of 15 patients were under study and 21 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Hiltīt* in *Ḍu'f al-Ishtihā'* (anorexia)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Hiltīt* in the patients of *Ḍu'f al-Ishtihā'* (anorexia) was carried out at RRIUMs, Chennai, Patna and New Delhi. The patients received *Ḥabb-i-Hiltīt* one pill twice daily for two weeks.

During the reporting period, 28 patients were studied. Of them, 19 (68%) patients were relieved, eight (29%) partially relieved and one (3%) showed no response. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Fawlādī* in *Sū' al-Qinya* (anaemia)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Fawlādī* in the patients of *Sū' al-Qinya* (anaemia) was carried out at RRIUM, Patna; and CRUs, Meerut and Bangalore. The patients received *Iṭrīfal Fawlādī* seven grams twice daily for six weeks.

During the reporting period, 59 patients were studied, of which 55 completed the study. Out of the completed cases, 34 (62%) patients were relieved, 16 (29%) partially relieved and five (9%) showed no response. Four cases dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Tinkār* in *Ḍu'f al-Ishtihā'* (anorexia)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Tinkār* in the patients of *Ḍu'f al-Ishtihā'* (anorexia) was carried out at NRIUMSD, Hyderabad; CRIUM, Lucknow; and CRU, Bengaluru. The patients received *Ḥabb-i-Tinkār* two pills (250 mg each) twice daily for two weeks.

During the reporting period, 105 patients were studied, of which 85 completed the study. Out of the completed cases, 68 (80%) patients were relieved, 16 (19%) partially relieved and one (1%) showed no response. Twenty patients dropped out of the study and no cases were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Sūranjān* in *Waja' al-Mafāṣil* (rheumatoid arthritis)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Sūranjān* in the patients of *Waja' al-Mafāṣil* (rheumatoid arthritis) was carried out at RRIUMs, Srinagar and Bhadrak; and RRC, Silchar. The patients received *Ḥabb-i-Suranjān* one pill (360 mg each) twice daily for six weeks.

During the reporting period, 64 patients were studied, of which 35 completed the study. Out of the completed cases, 13 (37%) were relieved, 20 (57%) partially relieved and two (6%)

showed no response. A total of 29 patients dropped out of the study while no patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Mulayyin* in *Ṣudā' Muzmin* (chronic headache)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Mulayyin* in the patients of *Ṣudā' Muzmin* (chronic headache) was carried out at RRIUM, Chennai; and CRUs, Bhopal and Burhanpur. The patients received *Iṭrīfal Mulayyin* seven grams once a day at bed time for seven days.

During the reporting period, 69 patients were studied, of which 60 completed the study. Out of the completed cases, 28 (47%) patients were relieved, 20 (33%) partially relieved and 12 (20%) showed no response. A total of nine cases dropped out of the study while no patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Bawāsīr 'Umya* in *Bawāsīr 'Umya* (non-bleeding piles)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb-i-Bawāsīr 'Umya* in the patients of *Bawāsīr 'Umya* (non-bleeding piles) was carried out at RRIUMs, New Delhi and Mumbai; and RRC, Allahabad. The patients received *Ḥabb-i-Bawāsīr 'Umya* one pill (250 mg) twice daily for two weeks.

During the reporting period, 1,484 patients were studied, of which 1,125 completed the study. Out of the completed cases, 669 (59%) patients were relieved, 349 (31%) partially relieved and 107 (10%) showed no response. A total of 84 cases were under study and 275 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Safūf-i-Tīn* in *Zaḥīr* (dysentery)

A study on validation of a Unani pharmacopoeial formulation *Safūf-i-Tīn* in the patients of *Zaḥīr* (dysentery) was carried out at RRIUM, Bhadrak; CRU, Kurnool; and RRC, Allahabad. The patients received *Safūf-i-Tīn* seven grams twice daily for six weeks.

During the reporting period, 74 patients were studied, of which 47 completed the study. Out of the completed cases, 25 (53%) were relieved, 18 (38%) partially relieved and four (9%) showed no response. Four patients were under study and 23 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Qurṣ Ḥābis* in *Kathrat al-Ṭamth* (menorrhagia)

A study on validation of a Unani pharmacopoeial formulation *Qurṣ Ḥābis* in the patients of *Kathrat al-Ṭamth* (menorrhagia) was carried out at NRIUMSD, Hyderabad; and RRIUMs, Mumbai and Chennai. The patients received *Qurṣ Ḥābis* (250 mg) twice daily for nine days a month starting from the 1st day of the menstrual cycle for three consecutive months.

During the reporting period, 123 patients were studied, of which 57 completed the study. Out of the completed cases, 46 (81%) patients were relieved, 10 (17%) partially relieved and one (2%) showed no response. A total of 54 patients were under study and 12 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawārish Bisbāsa* in *Siman Mufriṭ* (central obesity)

A study on validation of a Unani pharmacopoeial formulation *Jawārish Bisbāsa* in the patients of *Siman Mufriṭ* (central obesity) was carried out at CRIUM, Lucknow; and RRIUMs, Aligarh and Mumbai. The patients received *Jawārish Bisbāsa* 7 gm twice daily for eight weeks.

During the reporting period, 135 patients were studied, of which 81 completed the study. Out of the completed cases, 23 (28%) patients were relieved, 46 (57%) partially relieved and 12 (15%) showed no response. A total of eight patients were under study and 46 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Maʻjūn-i-Piyāz* in *Surʻat al-Inzāl* (premature ejaculation)

A study on validation of a Unani pharmacopoeial formulation *Maʻjūn-i-Piyāz* in the patients of *Surʻat al-Inzāl* (premature ejaculation) was carried out at CRIUM, Lucknow; and CRUs, Meerut and Burhanpur. The patients received *Maʻjūn-i-Piyāz* 7 grams twice daily for two weeks.

During the reporting period, 114 patients were studied, of which 103 completed the study. Out of the completed cases, 39 (38%) were relieved, 42 (41%) partially relieved and 22 (21%) showed no response. A total of 11 patients dropped out of the study and no case was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Khamīra Ābresham Sāda* in *Khafaqān* (palpitation)

A study on validation of a Unani pharmacopoeial formulation *Khamīra Ābresham Sāda* in the patients *Khafaqān* (palpitation) was carried out at RRIUMs, Patna and Chennai; and RRC, Allahabad. The patients received *Khamīra Ābresham Sāda* 5 grams twice daily for two weeks.

During the reporting period, 127 patients were studied, of which 117 completed the study. Out of the completed cases, 99 (85%) patients were relieved and 18 (15%) partially relieved. Nine patients dropped out of the study and one patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawārish Anārayn* in *Ghathayān* (nausea)

A study on validation of a Unani pharmacopoeial formulation *Jawārish Anārayn* in the patients of *Ghathayān* (nausea) was carried out at RRIUM, Aligarh; RRC, Silchar; and CRU, Kurnool. The patients received *Jawārish Anārayn* 7 grams twice daily for one week.

During the reporting period, 77 patients were studied, of which 64 completed the study. Out of the completed cases, 54 (84%) patients were relieved, nine (14%) partially relieved and one (2%) showed no response. A total of 13 cases dropped out of the study, and no patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawārish Zanjabīl* in *Ḍu'f al-Ishtihā'* (anorexia)

A study on validation of a Unani pharmacopoeial formulation *Jawārish Zanjabīl* in the patients of *Ḍu'f al-Ishtihā'* (anorexia) was carried out at RRIUMs, Aligarh and Bhadrak; and CRU, Burhanpur. The patients received *Jawārish Zanjabīl* 7 grams twice daily for two weeks.

During the reporting period, 87 patients were studied, of which 70 completed the study. Out of the completed cases, 23 (33%) patients were relieved and 34 (49%) partially relieved, whereas 13 (18%) showed no response. A total of 17 cases dropped out of the study, and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Zamānī* in *Nazla Muzmin* (chronic rhinosinusitis)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Zamānī* in the patients of *Nazla Muzmin* (chronic rhinosinusitis) was carried out at RRIUMs, Aligarh, New Delhi and Kolkata; and CRU, Meerut. The patients received *Iṭrīfal Zamānī* 7 grams at bed time for six weeks.

During the reporting period, 69 patients were studied, of which 47 completed the study. Out of the completed cases, 29 (62%) patients were relieved and 17 (36%) partially relieved, whereas one (2%) showed no response. A total of 17 dropped out of the study and five patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb Mudirr* in the patients of *Iḥtibās al-Ṭamth* (amenorrhoea)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb Mudirr* was conducted in the patients of *Iḥtibās al-Ṭamth* (amenorrhoea) at NRIUMSD, Hyderabad; CRIUM, Lucknow; and RRIUM, Mumbai. The study drug *Ḥabb Mudirr* was given 2 pills (500mg) thrice daily for 5 days each month for three consecutive months.

During the reporting period, 187 patients were studied, of which 79 completed the study. Out of the completed cases, 37 (47%) patients were relieved and 20 (25%) partially relieved, whereas 22 (28%) showed no response. A total of 50 patients dropped out of the study and 58 patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Sharbat-i-Khāksī* in *Ḥummā* (fever)

A study on validation of a Unani pharmacopoeial formulation *Sharbat-i-Khāksī* in the patients of *Ḥummā* (fever) was carried out at CRIUM, Lucknow; and RRIUMs, Srinagar and Chennai. The patients received *Sharbat-i-Khāksī* 15 ml four times a day.

During the reporting period, 27 patients were studied and all of them completed the study. Out of them, 16 (59%) patients were relieved and 10 (37%) partially relieved, whereas one (4%) showed no response. No patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb Muṣaffī-i-Khūn* in *Buthūr al-Jild* (skin eruptions)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb Muṣaffī-i-Khūn* in the patients of *Buthūr al-Jild* (skin eruptions) was carried out at RRIUMs, New Delhi and Bhadrak; and RRC, Silchar. The patients received *Ḥabb Muṣaffī-i-Khūn* one pill (250 mg) twice daily for two weeks.

During the reporting period, 81 patients were studied, of which 36 completed the study. Out of the completed cases, 17 (47%) patients relieved and 18 (50%) partially relieved, whereas one (3%) showed no response. A total of 18 patients dropped out of the study and 27 patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Iṭrīfal Kishnīzī* in *Nazla Muzmin* (chronic rhinosinusitis)

A study on validation of a Unani pharmacopoeial formulation *Iṭrīfal Kishnīzī* in the patients of *Nazla Muzmin* (chronic rhinosinusitis) was carried out at RRIUMs, Kolkata and Patna; and CRU, Meerut. The patients received *Iṭrīfal Kishnīzī* 10 gm twice daily for four weeks.

During the reporting period, 57 patients were studied, of which 37 completed the study. Out of the completed cases, 15 (41%) patients were relieved and 22 (65%) partially relieved. Four patients dropped out of the study and 16 patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Jawārish Pudīna* in *Ḍu'f al-Ishtihā'* (anorexia)

A study on validation of a Unani pharmacopoeial formulation *Jawārish Pudīna* in the patients of *Ḍu'f al-Ishtihā'* (anorexia) was carried out at RRIUM, Kolkata; and CRUs, Meerut, Kurnool and Bhopal. The patients received *Jawārish Pudīna* 5 grams twice daily for two weeks.

During the reporting period, 110 patients were studied, of which 92 completed the study. Out of the completed cases, 42 (46%) patients were relieved and 41 (44%) partially relieved, whereas nine (10%) showed no response. A total of 15 patients dropped out of the study and three patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Safūf-i-Chobchīnī* in *Niqris* (gout)

A study on validation of a Unani pharmacopoeial formulation *Safūf-i-Chobchīnī* in the patients of *Niqris* (gout) was carried out at RRIUMs, Mumbai and Patna, and RRC, Allahabad. The patients received *Safūf-i-Chobchīnī* 5 grams twice daily for six weeks.

During the reporting period, 146 patients were studied, of which 91 completed the study. Out of the completed cases, 65 (71%) patients were relieved and 19 (21%) partially relieved, whereas seven (8%) showed no response. A total of 37 cases dropped out of the study and 18 patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of Unani pharmacopoeial formulations *Maʿjūn-i-ʿUshba* and *Marham-i-Qūbā* in *Qūbā* (dermatophytosis)

A study on validation of Unani pharmacopoeial formulations *Maʿjūn-i-ʿUshba* and *Marham-i- Qūbā* in the patients of *Qūbā* (dermatophytosis) was carried out at RRIUMs, Mumbai,

Chennai and Patna. The patients received *Maʿjūn-i-ʿUshba* 5 gm oral and *Maʿjūn-i-ʿUshba* and *Marham-i- Qūbā* topical twice daily for five weeks.

During the reporting period, 186 patients were studied, of which 79 completed the study. Out of the completed cases, 43 (54%) patients were relieved and 12 (15%) partially relieved, whereas 24 (30%) showed no response. A total of 80 cases dropped out of the study and 27 were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Maʿjūn Ḥajr al-Yahūd* in *Ḥaṣāt al-Kulya* (nephrolithiasis)

A study on validation of a Unani pharmacopoeial formulation *Maʿjūn Ḥajr al-Yahūd* in the patients of *Ḥaṣāt al-Kulya* (nephrolithiasis) was carried out at NRIUMSD, Hyderabad; and RRIUMs, Mumbai and Chennai. The patients received *Maʿjūn Ḥajr al-Yahūd* 5 gm twice daily for 8 weeks.

During the reporting period, 53 patients were studied, of which 23 completed the study. Out of the completed cases, 11 (48%) patients were relieved and five (22%) partially relieved, whereas seven (30%) showed no response. A total of 22 cases dropped out of the study and eight were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Qurṣ-i-Anjibār* in *Kathrat al-Ṭamth* (heavy menstrual bleeding)

A study on validation of a Unani pharmacopoeial formulation *Qurṣ-i-Anjibār* in the patients of *Kathrat al-Ṭamth* (heavy menstrual bleeding) was carried out at NRIUMSD, Hyderabad; CRIUM, Lucknow; and RRIUM, New Delhi. The patients received *Qurṣ-i-Anjibār* 2 tablets (500 mg) thrice daily for 12 weeks.

During the reporting period, 86 patients were studied, of which 30 completed the study. Out of the completed cases, 20 (67%) patients were relieved and seven (23%) partially relieved, whereas three (10%) showed no response. A total of 37 cases dropped out of the study and 19 were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Laʿūq-i-Shamūn* in *Nazla Ḥārr* (common cold)

A study on validation of a Unani pharmacopoeial formulation *Laʿūq-i-Shamūn* in the patients of *Nazla Ḥārr* (common cold) was carried out at RRC, Allahabad; and CRUs, Burhanpur, Bengaluru and Kerala. The patients received *Laʿūq-i-Shamūn* 5 gm twice daily for seven days.

During the reporting period, 98 patients were studied, of which 90 completed the study. Out of the completed cases, 48 (53%) patients were relieved and 29 (32%) partially relieved, whereas 13 (14%) showed no response. Eight cases dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Maʿjūn-i-Suhāg Sonth* in *Sayalān al-Raḥim* (excessive abnormal vaginal discharge)

A study on validation of a Unani pharmacopoeial formulation *Maʿjūn-i-Suhāg Sonth* in the patients of *Sayalān al-Raḥim* (excessive abnormal vaginal discharge) was carried out at

CRIUM, Lucknow; RRIUM, Srinagar; and CRU, Meerut. The patients received *Maʿjūn-i-Suhāg Sonth* 5 gm twice daily for four weeks.

During the reporting period, 97 patients were studied, of which 54 completed the study. Out of the completed cases, 21 (39%) patients were relieved and 27 (50%) partially relieved, whereas six (11%) showed no response. A total of 39 cases dropped out of the study and four were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb Khabath al-Ḥadīd* in *Sūʾ al-Qinya* (anaemia)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb Khabath al-Ḥadīd* in the patients of *Sūʾ al-Qinya* (anaemia) was carried out at CRIUM, Lucknow; and RRIUMs, New Delhi and Mumbai. The patients received *Ḥabb Khabath al-Ḥadīd* 1 pill twice daily for 12 weeks.

During the reporting period, 71 patients were studied, of which 35 completed the study. Out of the completed cases, 16 (46%) patients were relieved and 17 (48%) partially relieved, whereas two (06%) showed no response. A total of 14 cases dropped out of the study and 22 were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Maʿjūn-i-Ispand Sokhtānī* in *Surʿa al-Inzāl* (premature ejaculation)

A study on validation of a Unani pharmacopoeial formulation *Maʿjūn-i-Ispand Sokhtānī* in the patients of *Surʿat al-Inzāl* (premature ejaculation) was carried out at RRIUM, Bhadrak; and CRUs, Kerala and Burhanpur. The patients received *Maʿjūn-i-Ispand Sokhtānī* 5 gm twice daily for two weeks.

During the reporting period, 97 patients were studied, of which 88 completed the study. Out of the completed cases, 37 (42%) patients were relieved and 27 (31%) partially relieved, whereas 24 (27%) showed no response. Nine patients dropped out of the study and none was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Rawghan-i-Qaranful* in *Wajaʿ al-Asnān* (toothache)

A study on validation of a Unani pharmacopoeial formulation *Rawghan-i-Qaranful* in the patients of *Wajaʿ al-Asnān* (toothache) was carried out at CRUs, Kurnool and Bengaluru; and RRC, Silchar. The patients received *Rawghan-i-Qaranful* for local application twice daily for 3 days.

During the reporting period, 67 patients were studied, of which 65 completed the study. Out of the completed cases, 32 (49%) patients were relieved and 33 (51%) partially relieved. Two patients dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb Hindī Ḍīqī* in *Ḍīq al-Nafas* (bronchial asthma)

A study on validation of a Unani pharmacopoeial formulation *Ḥabb Hindī Ḍīqī* in the patients of *Ḍīq al-Nafas* (bronchial asthma) was carried out at RRIUMs, Srinagar, Aligarh and Patna. The patients received *Ḥabb Hindī Ḍīqī* one pill (125 mg) twice daily for four weeks.

During the reporting period, 14 patients were studied, of which three completed the study. All the completed cases were relieved. Eleven patients dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Maʿjūn Sangdāna Murgh* in *Ḍuʿf al-Miʿda* (functional dyspepsia)

A study on validation of a Unani pharmacopoeial formulation *Maʿjūn Sangdāna Murgh* in the patients of *Ḍuʿf al-Miʿda* (functional dyspepsia) was carried out at NRIUMSD, Hyderabad; and RRIUMs, Bhadrak, Srinagar and Aligarh. The patients received *Maʿjūn Sangdāna Murgh* 5 gm twice daily for six weeks.

During the reporting period, 47 patients were studied, of which 21 completed the study. Out of the completed cases, seven (33%) patients were relieved and 10 (48%) partially relieved, whereas four (19%) showed no response. Six patients were under study and 20 dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

New Studies

In addition to the above, the following studies under validation of Unani pharmacopoeial drugs were allotted/initiated during the reporting period:

- Clinical validation of Unani pharmacopoeial formulation *Jawārish Pūdīna Wilāyatī* in *Sūʿ al-Haḍm* (dyspepsia)
- Clinical validation of Unani pharmacopoeial formulation *Laʿūq Ḍīq al-Nafas* in *Ḍīq al-Nafas* (bronchial asthma)
- Clinical validation of Unani pharmacopoeial formulation *Sayalānī* in *Sayalān al-Raḥim* (leucorrhoea)
- Clinical validation of Unani pharmacopoeial formulation *Maʿjūn Najāḥ* in *Mālakhūliyā* (mixed anxiety depressive disorder)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb ʿIrq al-Nasā* in *Wajaʿ al-Mafāṣil* (rheumatoid arthritis)
- Clinical validation of Unani pharmacopoeial formulation *Safūf-i-Dhayābīṭus Dūlābī* in *Dhayābīṭus Sukkarī* (diabetus mellitus)
- Clinical validation of Unani pharmacopoeial formulation *Maʿjūn Khabath al-Ḥadīd* in *Sūʾ al-Qinya* (anaemia)
- Clinical validation of Unani pharmacopoeial formulation *Khamīra Ābresham Shīra ʿUnnāb Wālā* in *Khafaqān* (palpitation)
- Clinical validation of Unani pharmacopoeial formulation *Malerian* in *Ḥummā Ajāmiyya* (malaria)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb-i-Jadwār Kuchak* in *Ḍuʿf al-Dimāgh* (cerebrasthenia)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb Luʿāb-i-Behidāna* in *Suʿāl Yābis* (dry cough)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb-i-Qulāʿ* in *Qulāʿ* (stomatitis)

- Clinical Validation of Unani pharmacopoeial formulation *Qurṣ-i-Zarishk* in *Sūʾ al-Qinya* (anaemia)
- Clinical validation of Unani pharmacopoeial formulations *Rawghan-i-Nārjīl* and *Qurṣ Aṣfar* in *Qūbā* (dermatophytosis)
- Clinical validation of Unani pharmacopoeial formulations *Rawghan Nafaʿ-i-Waram-i-Niqris* and *Maʿjūn-i-Yaḥyā bin Khālid* in *Niqris* (gout)
- Clinical validation of Unani pharmacopoeial formulation *Kushta Bayḍa-i-Murgh* in *Sayalān al-Raḥim* (leucorrhoea)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb-i-Karanjwā* in *Ḥummā* (fever)
- Clinical validation of Unani pharmacopoeial formulation *Qurṣ Dawāʾ al-Shifāʾ* in *Ḍaghṭ al-Dam Qawī* (hypertension)
- Clinical validation of Unani pharmacopoeial formulation *Laʿūq-i-Ḥulba* in *Ḍīq al-Nafas* (bronchial asthma)
- Clinical validation of Unani pharmacopoeial formulation *Qurṣ-i-ʿAtash* in *Ḥumūḍat al-Miʿda* (hyperacidity)
- Clinical validation of Unani pharmacopoeial formulations *Maʿjūn-i-Adhārāqī* and *Rawghan Surkh* in *Wajaʿ al-Mafāṣil* (rheumatoid arthritis)
- Clinical validation of Unani pharmacopoeial formulation *Maʿjūn Boolis* in *Nisyān* (amnesia)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb ʿIrq al-Nasā* in *ʿIrq al-Nasā* (sciatica)
- Clinical validation of Unani pharmacopoeial formulation *Ḥabb-i-Banafsha in Ḍīq al-Nafas Riʾwī* (bronchial asthma)
- Clinical validation of Unani pharmacopoeial formulation *Kundurī* in *Salas al-Bawl* (stress urinary incontinence)
- Clinical validation of Unani pharmacopoeial formulation *Maʿjūn-i-Zanjabīl* in *Kathrat al-Ṭamth* (menorrhagia)
- Clinical validation of Unani pharmacopoeial formulation *Jawarish-i-Dārchīnī Qawī* in *Ḍuʿf al-Mīʿda* (dyspepsia)
- Clinical validation of Unani pharmacopoeial formulation *Marham Gulābī* in *Jildī Qurūḥ* (cutaneous ulcers)
- Clinical validation of Unani pharmacopoeial formulation *Rawghan-i-Banafsha* in *Sahar* (insomnia)
- Clinical validation of Unani pharmacopoeial formulations *Iṭrīfal Mundī* and *Marham-i-Raskapūr* in *Jarab* (scabies)

Validation of Unani Pharmacopoeial Fast-Acting Drugs

The Council continued the programme of validating the efficacy and safety of some Unani pharmacopoeial fast-acting drugs in different disease conditions at its various clinical centres.

During the reporting period, clinical validation of seven Unani pharmacopoeial drugs was carried out in five disease conditions. The summary of the studies is as follows:

Clinical validation of a Unani pharmacopoeial formulation *Rawghan Labūb Ṣabā* in the patients of *Sahar* (insomnia)

Clinical validation of a Unani pharmacopoeial formulation *Rawghan Labūb Ṣabā* was conducted in the patients of *Sahar* (insomnia) at NRIUMSD, Hyderabad; CRIUM, Lucknow; and RRIUM, New Delhi. The study drug *Rawghan Labūb Ṣabā* was applied locally on scalp at bedtime once a day for seven days.

During the reporting period, 77 patients were studied, of which 55 completed the study. Out of the completed cases, 27 (49%) patients were relieved and 27 (49%) partially relieved, whereas one (2%) showed no response. Twelve patients dropped out of the study and ten patients were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Surfa* in the patients of *Su'āl* (cough)

Clinical validation of a Unani pharmacopoeial formulation *Ḥabb-i-Surfa* was conducted in the patients of *Su'āl* (cough) at RRC, Allahabad; and CRUs, Bhopal and Burhanpur. The study drug *Ḥabb-i-Surfa* one pill (125 mg) was given orally twice daily for seven days.

During the reporting period, 29 patients were studied, of which 27 completed the study. Out of the completed cases, 21 (78%) were relieved and six (22%) partially relieved. Two patients dropped out of the study and none was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *La'ūq-i-Sapistāṉ* in the patients of *Nazla* (common cold)

Clinical validation of a Unani pharmacopoeial formulation *La'ūq-i-Sapistāṉ* in the patients of *Nazla* (common cold) was conducted at CRIUM, Lucknow; CRUs, Bhopal, Kerala and Meerut; and RRC, Silchar. The study drug *La'ūq-i-Sapistāṉ* was given orally in the dose of five gm twice daily for seven days.

During the reporting period, 19 patients were studied, of which 14 completed the study. All the completed cases were relieved. Five patients dropped out of the study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Rawghan-i-Kāhū* in *Sahar* (insomnia)

Clinical validation of a Unani pharmacopoeial formulation *Rawghan-i-Kāhū* in the patients of *Sahar* (insomnia) was conducted at RRIUM, Aligarh; and CRUs, Bhopal and Kerala. The study drug *Rawghan-i-Kāhū* was applied locally on scalp at bedtime once a day for seven days.

During the reporting period, 38 patients were studied, of which 33 completed the study. Out of the completed cases, 23 (70%) were relieved and six (18%) partially relieved, whereas four (12%) showed no response. Five patients dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Khamīra Banafsha* in *Su'āl Yābis* (dry cough)

Clinical validation of a Unani pharmacopoeial formulation *Khamīra Banafsha* was conducted in the patients of *Su'āl Yābis* (dry cough) at NRIUMSD, Hyderabad; and

RRIUMs, Aligarh and New Delhi. The study drug *Khamīra Banafsha* was given orally in the dose of seven grams twice daily for seven days.

During the reporting period, 136 patients were studied, of which 98 completed the study. Out of the completed cases, 60 (61%) were relieved and 31 (32%) were partially relieved, whereas seven (7%) showed no response. A total of 27 patients dropped out of the study and 11 were under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *Sanūn Mukhrij-i-Ruṭūbat* in *Litha Dāmiya* (bleeding gums)

Clinical validation of a Unani pharmacopoeial formulation *Sanūn Mukhrij-i-Ruṭūbat* was conducted in the patients of *Litha Dāmiya* (bleeding gums) at NRIUMSD, Hyderabad; RRIUM, Aligarh; and CRU, Kurnool. The study drug *Sanūn Mukhrij-i-Ruṭūbat* in the dose of one gram was applied locally on the gums twice a day for seven days.

During the reporting period, 61 patients were studied, of which 49 completed the study. Out of the completed cases, 25 (51%) patients were relieved and 22 (45%) partially relieved, whereas two (4%) patients showed no response. Twelve patients dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Clinical validation of a Unani pharmacopoeial formulation *La'ūq-i-Khiyarshambar* in *Nazla* (common cold)

Clinical validation of a Unani pharmacopoeial formulation *La'ūq-i-Khiyarshambar* was conducted in the patients of *Nazla* (common cold) at CRIUM, Lucknow; RRIUM, Patna; and CRU, Kerala. The study drug *La'ūq-i-Khiyarshambar* in the dose of 10 grams was given twice daily for seven days.

During the reporting period, 44 patients were studied, of which 33 completed the study. Out of the completed cases, 27 (82%) were relieved and five (15%) partially relieved, whereas one (3%) showed no response. Eleven patients dropped out of the study and no patient was under study. The test drug was found well-tolerated and no adverse effect was observed.

Validation of Regimen Therapies

Besides pharmacotherapy, Unani Medicine offers *'Ilāj bi'l-Tadbīr* (regimen therapy), such as *Ḥijāma* (cupping), *Ta'līq al-'Alaq* (leeching), *Dalk* (massage), *Ḥammām Yābis* (sauna), *Ḥammām al-Bukhār* (steam bath), etc. for certain disease conditions. During the reporting period, various regimen therapy procedures were performed in a total of 9,586 patients with different diseases. These patients showed significant therapeutic effects in subsiding the signs and symptoms of the diseases.

Ḥijāma bilā-Sharṭ (dry cupping) was performed in 1,611 patients with different diseases including *Taḥajjur al-Mafāṣil* (osteoarthritis), *'Irq al-Nasā* (sciatica), *Taḥajjur Mafāṣil al-'Unuq* (cervical spondylosis), *Taḥajjur Mafāṣil al-Ẓahr* (lumbar spondylosis), *Katif Mujammad* (frozen shoulder), *Waja' al-Ẓahr* (backache), *Waja' al-Katif* (shoulder pain), *Waja' al-'Unuq* (neck pain), *Waja' al-Rukba* (knee pain), *Waja' al-'Aqib* (achillodynia), *Dawālī* (varicose veins), *Kathrat al-Ṭamth* (menorrhagia), *'Usr al-Ṭamth* (dysmenorrhoea), *Ṣudā'* (headache), *Ṣala'* (baldness), *Ḥuzn* (depression), etc. at NRIUMSD, Hyderabad;

CRIUM, Lucknow; RRIUMs, Chennai, Bhadrak, Patna, New Delhi and Srinagar; and HAKILHRUM, New Delhi.

Ḥijāma bi'l-Sharṭ (wet cupping) was performed in 1,904 patients with different diseases including *Nār Fārsī* (eczema), *Buthūr Labaniyya* (acne vulgaris), *Dā' al-Tha'lab* (alopecia), *Bawāsīr* (haemorrhoid), *Ḍaghṭ al-Dam Qawī* (hypertension), *'Uqr* (infertility), *Waja' al-Mafāṣil* (rheumatoid arthritis), *Taḥajjur al-Mafāṣil* (osteoarthritis), *'Irq al-Nasā* (sciatica) and other musculoskeletal disorders at CRIUM, Lucknow; RRIUMs, Chennai, Bhadrak, Mumbai, Patna, New Delhi and Srinagar; and HAKILHRUM, New Delhi.

Ḥijāma bi'l-Nār (fire cupping) was performed in 947 patients with different diseases including *Waja' al-Mafāṣil* (rheumatoid arthritis), *Taḥajjur al-Mafāṣil* (osteoarthritis), *'Irq al-Nasā* (sciatica), *Waja' al-Ẓahr* (backache), *Katif Mujammad* (frozen shoulder), *Waja' al-Katif* (shoulder pain) and *Waja' al-Rukba* (knee pain) at RRIUMs, Srinagar, New Delhi and Chennai.

Ḥijāma Muzliqa (moving cupping) was performed in 2,119 patients with different diseases including *Waja' al-Ẓahr* (backache) and *Katif Mujammad* (frozen shoulder) at RRIUMs, Chennai and Srinagar.

Ḥammām al-Bukhār (steam bath) was performed in 412 patients with different diseases including *Waja' al-Katif* (shoulder pain), *Buthūr al-Jild* (macules / papules / pustules), *Qūbā* (dermatophytosis), *Siman Mufriṭ* (obesity) and *Bafā* (dandruff) at CRIUM, Lucknow; and RRIUMs, Srinagar and New Delhi.

Dalk Mu'tadil (moderate massage) was performed in 870 patients with different diseases including *Waja' al-Mafāṣil* (rheumatoid arthritis), *Taḥajjur al-Mafāṣil* (osteoarthritis), *Taḥajjur Mafāṣil al-'Unuq* (cervical spondylosis), *Katif Mujammad* (frozen shoulder), *Waja' al-Ẓahr* (backache), *Waja' al-Katif* (shoulder pain) and *Waja' al-'Aqib* (achillodynia) at RRIUM, New Delhi.

Ḥammām Yābis (sauna) was performed in 113 patients with different diseases including *Waja' al-Katif* (shoulder pain), *Taḥajjur al-Mafāṣil* (osteoarthritis), *Siman Mufriṭ* (obesity) at RRIUM, New Delhi.

Naṭūl (fomentation) was performed in 35 patients of *Waja' al-Mafāṣil* (rheumatoid arthritis) at RRIUMs, Srinagar and Chennai.

Inkibāb (vaporisation) was performed in 218 patients of *Waja' al-Mafāṣil* (rheumatoid arthritis) and *Waja' al-Katif* (shoulder pain) at CRIUM, Lucknow; and RRIUMs, Chennai, Srinagar and New Delhi.

Munḍij-Mushil therapy was performed in 65 patients of *Baraṣ* (vitiligo) at RRIUMs, New Delhi and Chennai.

Faṣd (venesection) was performed in two patients of *Dawālī* (varicose veins) and *Takhaththur al-Dam* (deep vein thrombosis) at RRIUM, Patna.

Takmīd (fomentation) was performed in 523 patients of *Waja' al-Mafāṣil* (rheumatoid arthritis), *Taḥajjur al-Mafāṣil* (osteoarthritis), *Siman Mufriṭ* (obesity) and *Katif Mujammad* (frozen shoulder) at CRIUM, Lucknow; and RRIUMs, Chennai, Srinagar and New Delhi.

Validation of Fundamentals

Theory of *Akhlāṭ* wa *Mizāj* (Humours and Temperament)

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

Genetic studies on the theory of Humours

Genetic studies on the theory of humours with special reference to diabetes mellitus, essential hypertension, vitiligo, gastritis and psoriasis were carried out; and healthy volunteers served as control. Pharmacogenomic studies of Unani formulations in vitiligo were also conducted.

A total of 1,629 healthy volunteers and patients have completed the studies. The 1st part of the project is an observational study wherein the subjects are being analyzed for dominant temperament according to *Ajnās 'Ashara*. Whereas the healthy volunteers and patients are subjected to genetic marker studies, biochemical, physiological, pathological and pulse wave analysis studies are done in the second part.

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

During the reporting period, technical report compilation of genetic studies on the theory of humours with special reference to diabetes mellitus and essential hypertension was completed. Apart from the above, primers were designed, standardized and polymorphism studies for CYP3 genes (drug metabolizing genes) to see genotype frequency in patients suffering from diabetes mellitus using gene tool software were also carried out on a sample size of 100 diabetic patients. Molecular biology work (polymorphism studies) on CYP3 gene was completed on a sample size of 100 patients and data analysis was done. Compilation of final report was in process.

Genetic studies on theory of humours with special reference to vitiligo

During the reporting period, compilation of technical report on vitiligo was completed and submitted to the CCRUM headquarters. Molecular biology work on CYP3 gene (polymorphism studies) was completed on 100 vitiligo patients and data analysis was done. Compilation of final report was in process.

Genetic studies on theory of humours with special reference to hepatitis and other *Ṣafrāwī* related diseases (gastritis)

Molecular biology (genomics) work was completed leading to completion of the project. The standards of CYP3 gene primers were checked. PCR (polymerase chain reaction) in CYP3 gene along with RFLP (restriction fragment length polymorphism) for (n=100) samples was performed. In molecular biology studies, drug metabolizing genes GSTT1 and GSTM1 were studied to see the genotype frequency of the two genes in the patients along with controls using gene tool software. In GSTM1 H/H was 51% in relation to controls whereas in Null it was 49%. In GSTT1 H/H was 69% in relation to controls and Null was 31% in relation to controls. The standards of CYP3 gene polymorphism studies were completed. CYP3 gene polymorphism was being done on 100 *Ṣafrāwī* patients. The biochemical,

physiological and pathological parameters were in the physiological range. The correlation of the pulse tracing with the temperament was sometimes concordant while at times it was discordant.

Genetic studies on theory of humours with special reference to cancer and other *Sawdāwī* related diseases (psoriasis)

Primers were designed, standardized and polymorphism studies for CYP3 (drug metabolizing genes) to see genotype frequency in the patients suffering from psoriasis using gene tool software was also carried out. Drug metabolizing genes CYP3 were studied in 100 psoriasis patients of *Sawdāwī* temperament in relation to *Sawdāwī* healthy volunteers. The analysis of results was completed. The biochemical, physiological and pathological parameters were in the physiological range. The correlation of the pulse tracing with the temperament was sometimes concordant while at times it was discordant.

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

Twelve healthy volunteers were enrolled of which one was *Damwī*, and 11 were *Sawdāwī*. The final results were under analysis. Primers were designed, standardized and polymorphism studies for CYP3 (drug metabolizing genes) to see genotype frequency using gene tool software was also carried out. Drug metabolizing genes CYP3 were studied in 543 healthy volunteers. The biochemical, physiological and pathological parameters were in the physiological range. The correlation of the pulse tracing with the temperament was sometimes concordant while at times it was discordant. DNA isolation was performed for 543 control samples and DNA concentrations were checked. PCR (CYP3A4) for the patients and control samples was performed and PCR samples were separated on 1% gel electrophoresis. RFLP was carried out with Hin III restriction enzymes for the above samples and samples were separated on 3% gel electrophoresis. Statistical analysis for CYP3A4 data was carried out.

Pharmacogenomics of Unani formulations in vitiligo

Blood samples were collected in Paxgene blood RNA tubes from five vitiligo patients and 100 controls for the pharmacogenomics studies. Serum samples from the patients and controls were also collected and stored at –80 °C to assess other biological parameters in the protocol. RNA was isolated from vitiligo patients' whole blood samples and healthy volunteers' samples by using Paxgene blood RNA isolation kit. Qualitative check for isolated RNA by agarose gel electrophoresis and quantitative check by Nano-drop reading using Multi mode reader were done. The isolated RNA was converted into cDNA by using reverse transcriptase enzyme. The converted cDNA samples were subjected to expression studies by using RT-PCR. Expression studies were completed for five vitiligo patients' samples for NLRP1 gene and MIF gene by using GAPDH as an internal control.

Clinical Assessment of *Mizāj* (Temperament)

During the reporting period, assessment of temperament of 608 patients attending the OPD of NRIUMSD, Hyderabad was done. These included the patients of *Baraṣ* (vitiligo), *Sayalān al-Raḥim* (leucorrhoea), *Dhayābīṭus Sukkarī* (diabetes mellitus), *Ḍu'f al-Dimāgh* (cerebrasthenia), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Sahar* (insomnia), *Khafaqān* (palpitation), *Nisyān* (amnesia), *Iltihāb al-Kabid* (asymptomatic hepatitis B healthy carriers), *Ḍaghṭ al-Dam Qawī Lāzimī* (essential hypertension), *Ḥaṣā al-Kulya* (nephrolithiasis), *Taḥajjur al-Mafāṣil* (osteoarthritis), *Nazla Muzmin* (chronic rhinosinusitis),

Waja' al-Mafāṣil (rheumatoid arthritis), *Ḍu'f al-Istihā'* (anorexia) and *Su'āl* (cough). Of the 608 cases, 385 were *Damwī*, 152 *Balghamī*, 52 *Ṣafrāwī* and 19 *Sawdāwī*.

In these patients, susceptibility for acquiring diseases in relation to different temperaments was also studied. An interim analysis of data revealed that the individuals of *Balghamī* temperament were more susceptible to *Baraṣ* (vitiligo) followed by *Damwī, Ṣafrāwī* and *Sawdāwī* temperaments. Similarly, persons of *Damwī* temperament were more susceptible to *Nazla Muzmin* (chronic rhinosinusitis), followed by *Balghamī* and *Ṣafrāwī* temperament. The persons of *Ṣafrāwī* temperament were susceptible to *Su'āl* (cough) followed by *Balghamī* temperament.

It was also observed that the persons with *Balghamī* temperament were more susceptible than others to *Nisyān* (amnesia), *Sayalān al-Raḥim* (leucorrhoea), *Kathrat al-Ṭamth* (heavy menstrual bleeding), *Ḍu'f al-Dimāgh* (cerebrasthenia) and *Sahar* (insomnia). The people of *Damwī* temperament were more susceptible to *Dhayābīṭus Sukkarī* (diabetes mellitus), *Ḍaghṭ al-Dam Qawī Lāzimī* (essential hypertension), *Ḥaṣā al-Kulya* (nephrolithiasis), *Khafaqān* (palpitation), *Nazla Muzmin* (chronic rhinosinusitis), *Waja' al-Mafāṣil* (rheumatoid arthritis), *Ḍu'f al-Istihā'* (anorexia) and *Taḥajjur al-Mafāṣil* (osteoarthritis), whereas the persons with *Ṣafrāwī* temperament were more susceptible to *Iltihāb al-Kabid* (asymptomatic hepatitis B healthy carriers).

New Projects

Apart from the above studies, the following three projects under the validation of fundamentals were initiated during the reporting period:

- A molecular approach towards understanding of Unani philosophy – Temperament susceptibility gene expression studies (IFN-gamma)
- Genetic studies of liver metabolism genes in relation to clinical phenotyping as per Unani philosophy (APOE gene)
- Genetic variants of IFN-γ (+874/A and +2109A/G genes polymorphism and its mRNA expression and inflammatory parameters in vitiligo

During the reporting period, 247 subjects including 31 healthy volunteers were enrolled in all the three projects involving the following studies:

- Determination of dominant temperament by *Ajnās ʿAshara*
- Determination of dominant temperament by special CRF on assessment of temperament
- Genetic marker studies in relation to temperament of each subject
- Study of biochemical, physiological and pathological parameters and pulse wave component analysis

Research-oriented Healthcare

General Outpatient Department (GOPD) Programme

The CCRUM undertakes GOPD Programme which also includes Geriatric OPD and RCH / MCH OPD. It is aimed at promoting, protecting and preserving public health through Unani Medicine. Besides, OPDs for Post-trial Treatment Access (PTA) is also conducted in order to provide treatment facility to the research patients after completing the trial. During the reporting period, this programme continued at National Research Institute of Unani Medicine (NRIUMSD), Hyderabad; Central Research Institutes of Unani Medicine

(CRIUMs), Lucknow; Regional Research Institutes of Unani Medicine (RRIUMs), Chennai, Bhadrak, Patna, Aligarh, Mumbai, Srinagar, Kolkata and New Delhi; Regional Research Centres, Allahabad and Silchar; Clinical Research Units (CRUs), Bengaluru, Bhopal, Burhanpur, Meerut, Kurnool and Edathala; Hakim Ajmal Khan Institute for Literary and Historical Research in Unani Medicine, New Delhi; AYUSH Wellness Centre, President's Estate, New Delhi; and All India Institute of Ayurveda, New Delhi. During the reporting period, a total of 3,48,682 patients comprising 2,41,834 patients in GOPDs, 24,036 in Geriatric OPDs, 8,769 in RCH / MCH OPDs, and 13,451 in OPDs for Post-trial Treatment Access (PTA) 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.

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. Under this programme, rural areas, urban slums and pockets predominantly inhabited by Scheduled Caste (SC) / Scheduled Tribe (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 referred to the Council's institutes / units and also to other hospitals for treatment of specific diseases or clinical research. Besides, health awareness is 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 National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad; Central Research Institutes of Unani Medicine (CRIUM), Lucknow; Regional Research Institutes of Unani Medicine (RRIUMs), Chennai, Bhadrak, Patna, Mumbai, New Delhi and Srinagar; Regional Research Centre (RRC), Allahabad; and Clinical Research Unit (CRU), Burhanpur. During the reporting period, 17 rural pockets / urban slums covering over 1.43 lakh population were covered. A total of 11,065 patients were treated with Unani pharmacopoeial formulations in 465 mobile visits made to these pockets. Predominant diseases as observed were cough, skin infections, fever, joint pain, osteoarthritis, leucorrhoea, rheumatoid arthritis, piles, etc.

3.1.2.4. Literary Research Programme

Under the Literary Research Programme, the Council published 'Unani Medicine: The Science of Health & Healing - An Overview'. The book precisely covers all the important aspects of Unani Medicine through its four main chapters; Introduction, Unani Medicine in India, Major Milestones of Unani Medicine and Globalization of Unani Medicine. This document provides an overview of Unani Medicine with details about its origin,

fundamentals, therapeutics, drugs, education, research & development and status in India and at international level.

The highlight of the reporting period was the compilation of zero-draft on international terminologies of Unani Medicine. The project is actually an initiative taken up by the WHO as part of its strategy on Traditional & Complementary Medicine. The Council's researchers related to literary research programme worked on the project under the guidance of the Ministry of AYUSH. The outcome document contained about five thousand terms which were elaborated on a specially devised proforma. The terms related to basic principles, fundamental theories, human structure and function, pathologies, diagnosis, diseases, therapeutics, preventive and health promotion interventions, pharmacology, preparation of food and medicines were covered besides miscellaneous terms. The template consisted of columns for Code, Subject heading, Term in English language with diacritical markings, Term in original script, Language of origin, Synonym (s) in English language with diacritical markings, Synonym (s) in original script, Short definition, Long definition/description, Suggested terminologies in English, Reference for terms, definitions and explanations, Context - Technical definitions from chosen Unani classical texts and commentaries, Reference of the context/s, Exclusions (What the term does not mean contextually). One more column was created for textual reference especially for those terms (not in all terms) which have some significance in modern context. The original text was quoted in this column. This document of Unani terminology is little different from the conventional subject dictionaries, as it has been prepared on a set proforma/template designed to make it intelligible for individuals who want to learn something about Unani Medicine but have no realization or perception of the system and not versed with the languages in which it has been mostly presented.

Besides, Urdu translation of two Arabic books – Al-Masāʾil fi'l-Ṭib and Al-Mughnī fī Tadbīr al-Amrāḍ wa Maʿrifat al-ʿIlal wa al-Aʿrāḍ continued. Urdu translation of two classical Persian texts – Kitāb al-Abniya ʿan Ḥaqāʾiq al-Adwiya and Riyāḍ al-Adwiya and English translation of Persian book Qarābādīn-i-Jalālī also continued.

The work for compilation of monographs on Mental Health and Mental Diseases in Unani Medicine and Standard Unani Treatment Guidelines for *Ḥummayāt* (fevers) continued.

During the reporting period, information on Parkinson's disease and Alzheimer's disease, Cerebrovascular accident (CVA), Unani formulations useful in lifestyle diseases/NCDs, Environmental diseases, Sexual disorders and vector borne diseases were compiled. References of the most recommended Unani drugs in lifestyle diseases/NCDs, environmental diseases, vector borne diseases and male sexual disorders were also compiled. Besides, modules for *Nabḍ Mufrad* and *Nabḍ Murakkab* were also developed for incorporation in AYUSH-Hospital Management Information System (A-HMIS).

3.2. Studies under IMR Policy

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

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 asymptomatic hepatitis B carriers. The patients were divided into three groups. In group-I, the patients received PTH-1 (two capsules of 500 mg each) thrice daily after meal. In group-II, the patients received PTH-2 (two capsules of 500 mg each) thrice daily after meal. In group-III, the patients received PTH-3 (two capsules of 500 mg each) thrice daily after meal. The duration of treatment was six months.

During the reporting period, no new patient was registered in group-I. Since inception of the study, a total of 23 cases were registered. Out of them, 11 patients have completed the study and 12 patients dropped out of the study. Out of the completed cases, one (9.1%) responded whereas 10 (90.9%) did not respond to the treatment.

In group-II, one new patient was registered. Since inception of the study, 29 cases were registered. Out of them, 17 cases completed the study, 11 dropped out of the study, and one case was under study. Out of the completed cases, one (5.9%) case responded to the treatment showing significant reduction in viral load and 16 (94.1%) cases did not respond to the treatment.

In group-III, eight new patients were registered, whereas three patients continued from the previous year, bringing the total to 11 patients. Since inception of the study, a total of 46 cases were registered. Out of them, 15 cases completed the study, 26 cases dropped out of the study, and five cases were under study. Out of 15 completed cases, two (13.3%) cases responded to the treatment and 13 did not respond. From the results, it can be deduced that the formulation studied is safe as 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. Group-I received PTA-2 (one tablet of 500 mg) thrice daily after meal and PTA-4 (oil form) for local application on the affected parts. Group-II received PTA-3 (one tablet of 500 mg) thrice daily after meal and PTA-4 (oil form) for local application on the affected parts. The duration of treatment was 12 weeks.

During the reporting period, 12 new patients was registered in group-I, whereas six patients continued from the previous year, bringing the total to 18 patients. Out of them, six patients completed the study, one dropped out and 11 were under study. Out of the completed cases, one (16.6%) patient showed good response and five (83.3%) patients showed significant response to the treatment. Since inception of the study, 54 cases were registered. Out of them, 26 cases completed the study, 17 dropped out and 11 were under study. Out of the completed cases, five (19.2.%) showed good response, 16 (61.5%) showed significant response, three (11.5%) showed poor response and two (8%) cases did not respond to the treatment.

In group-II, nine new patients were registered, whereas five continued from the previous year, bringing the total to 14 patients. Out of them, five patients completed the study, two dropped out and seven were under study. Out of the completed patients, one (20%) patient showed good response and four (80%) patients had significant response to the treatment.

Since inception of the study, 45 cases were registered, of which 26 cases completed the study, 12 dropped out of the study and seven cases were under study. Out of the completed cases, two (7.7%) showed good response, 21 (81%) showed significant response, and three (11.5 %) showed poor response to the treatment. The test drugs were found well-tolerated and no adverse effect was observed.

Evaluation and study of the effect of Unani formulation(s) - UNIM-001 and UNIM-003 on various biomarkers in the patients with *Baraṣ* (vitiligo)

The study aimed to establish any potential biomarkers in *Baraṣ* (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 received coded Unani drugs UNIM-001 (two tablets of 800 mg each) orally twice daily and UNIM-003 for local application. The duration of treatment was eight months. The patients were followed- up clinically every two weeks, whereas biomarker analysis was done at baseline, after four months and eight months.

During the reporting period, estimation of anti-TPO was carried out by enzyme linked immunosorbent assay (ELISA) on 34 healthy volunteers and 34 vitiligo patients. The project was completed with expression studies on 4 genes and 5 serum bio levels. Expression studies were carried out in NLRF1, FOXP3, MIF and IL22 genes. Estimation of biolevels included serum lipid peroxidise (MDA), estimation of serum total antioxidant levels, estimation of serum IL-22 levels and estimation of IL-2 levels at baseline, in month 4 and month 8.

Bench work was completed and compilation of the research work was in process.

Evaluation of anti-inflammatory activity of Unani formulation(s) – UNIM-301 and UNIM-302: An in-vitro and in-vivo study

An *in-vitro* and *in-vivo* study to evaluate the anti-inflammatory activity of coded Unani drugs – UNIM-301 and UNIM-302 was carried out at NRIUMSD, Hyderabad. The *in-vitro* study aimed to explore the cellular and molecular mechanism of both the drugs being used for the treatment of arthritis in order to create evidence-based data and pave the way for acceptance of these drugs globally. Further, an *in-vivo* study aimed to evaluate the safety and efficacy and anti-inflammatory activity of UNIM-301.

In-vitro study: 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 formulation extracts were performed. The procedure for cell line maintenance, passaging and cryopreservation was standardized. Cell proliferation assay (MTT assay) of UNIM-302 extracts (AQ, HE, ME) with different concentration was performed on RAW 264.7 cell lines. The amount of nitric oxide determination and scavenging activity of all the three extracts (AQ, HE, ME) of both drugs (UNIM-301 & UNIM-302) with different concentrations (from 0.1-1000 b/ml) were measured. The level of intracellular reactive oxygen species (ROS) was measured in RAW macrophage cells treated with all three extracts of both drugs with different concentrations (from 0.1-1000 b/ml) along with LPS 1µg. In nitric oxide determination, the drugs acted in the dose dependent manner. In intracellular ROS determination, all three extracts of both drugs with different concentrations (0.1 to 1000 µg) significantly inhibited LPS stimulation and reduced production of ROS in RAW cells.

In-vivo study: An *in-vivo* study to evaluate the safety and efficacy (anti-inflammatory activity) of coded Unani drug – UNIM-301 was completed and compilation of the research work was in process at the end of the reporting period.

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 at NRIUMSD, Hyderabad.

In-vitro study: The aqueous (AQ), hydro-ethanolic (HE) and methanolic (ME) extracts from all the four drugs were prepared and used for *in-vitro* assays, including both cell free and cell based assays. Melanin content estimation was performed with all the four drugs by using three solvents (Aqueous, Hydro-ethanol and Methanol) and α-MSH was taken as positive control. Methanolic extracts of UNIM-004 and UNIM-005 elicited better increase in the level of melanin content with respect to control and positive control.

Melanin assay was further followed by Tyrosinase enzyme activity, which is the key regulator enzyme for melanin production. B16F10 cells were treated with all the four drugs by using three solvents (Aqueous, Hydro-ethanol and Methanol) and α-MSH was taken as positive control. Methanolic extracts of UNIM-004 and UNIM-005 elicited better increase in the level of Tyrosinase enzyme production with respect to control (22-35%) as well as positive control (04-18%). Cyclic AMP signalling pathway levels were estimated by using cAMP assay kit and followed according to kit manual.

In-vivo study: An *in-vivo* study to evaluate the safety of UNIM-001 and UNIM-004 was completed and compilation of research work was in process at the end of the reporting period.

Immunological study on Unani pharmacopoeial drugs – *Maʻjūn Jograj Gūgal* and *Rawghan Mālkanganī* to validate their anti-inflammatory and anti-arthritic property in cases of *Waja' al-Mafāṣil* (rheumatoid arthritis)

The study aims to establish the effect of Unani pharmacopoeial formulations on the level of certain immunological markers such as IL-1β, IL-17, IL-11, IL-6, TNF-α, CRP which are involved in cases of *Waja' al-Mafāṣil* (rheumatoid arthritis). The study is being conducted at NRIUMSD, Hyderabad. The duration of the study is three years. The study drug *Maʻjūn Jograj Gūgal* is given 7gm orally along with local application of the oil *Rawghan Mālkanganī* for a period of 84 days. The patients are clinically assessed fortnightly. Immunological marker analysis is done at baseline and at the end of the study. So far, 12 samples of completed cases (pre and post treatment) have been estimated for immunological markers including IL-1β, IL-17, IL-11, IL-6, TNF-α and HsCRP. The study was in progress at the end of the reporting period.

3.3. Collaborative Research

Pharmacokinetic, stability and quality control studies on *'Araqiyāt* reported in Unani Pharmacopoeia of India using HPTLC and GC-MS

A study on pharmacokinetics, stability and quality control of ***'Araqiyāt*** reported in Unani Pharmacopoeia of India using HPTLC and GC-MS was conducted at Department of Pharmacognosy and Phyto-chemistry, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi. The main objective of the study was to develop quality control

methods using HPTLC and GC-MS and to analyze metabolites present in them for their stability and pharmacokinetic profile.

During the reporting period, accelerated stability of *Araqiyāt* was checked at three different temperatures such as in refrigerator (5±2ºC/60±5%RH), room temperature (25±2ºC/60±5%RH) and stability chamber (40±2ºC/75±5% RH). The drug concentration remaining was quantified up to three months where zero time samples were taken as control.

Out of many compounds identified in different *'Araqiyāt* using GC-MS camphor, menthol in *'Araq-i 'Ajīb*; fenchone and anethole in '*Araq-i Bādiyān;* fenchone and anethole in *ʿAraq-i Birinjasif*; γ-terpene and thymol in *Araq-i Ajwāyin*; carveol and carvone in *ʿAarq-i Naʿnāʿ*; phenyl ethyl alcohol in '*Araq-i Gulāb;* thymol in '*Araq-i Gājar*; phenyl and phthalic acid in *'Araq-i Mako* and *'Araq-i Kāsnī* were found as major contributing compounds and used for testing of stability.

The quality control analysis of *Araqiyāt* using HPTLC and GC-MS resulted in the generation of scientific data which can be used for checking their quality as well as for predicting their mechanism based on their metabolites. The stability analysis revealed that formulations should be consumed within 10-15 days of opening their caps if stored at room temperature because most of the compounds are prone to escape at room temperature. Pharmacokinetic studies of *Araqiyāt* are yet to be completed.

Evaluation of *Aftīmūn* (*Cuscuta reflexa* Roxb.) plant and seeds on different human cancer (*Saraṭān*) cell lines

A study on evaluation of *Aftīmūn* (*Cuscuta reflexa* Roxb.) plant and seeds on different human cancer (*Saraṭān*) cell lines were carried out at Department of Chemistry, Jamia Millia Islamia, New Delhi.

During the reporting period, the anti-cancerous and antioxidant activities of the plant extracts were evaluated. The percentage of anticancer activities for lung cancer cell lines was in the range of 2.16 to 47.50 for all the extracts. Among them, ethyl acetate extract was more effective with anticancer activities in the range of 2.16 to 32.68% for all the concentrations used. The IC50 and Hill's constant values for lung cancer cell lines were 74.48 to 902 µg/mL and 0.95 to 23.95. The results showed good DNA binding results. Among all the plant extracts, acetone extract was more effective with anticancer activities in the range of 0.230 to 33.84% for all the concentrations. The IC50 and Hill's constant values for breast cancer cell lines were 51.59 to 240 µg/mL and 3.18 to 47.93. It was observed that the plant extracts showed greater anticancer activities in breast cancer cell lines as well as lung cancer cell lines as compared to fractions obtained from the extracts using flash chromatography. The plant extracts interacted with DNA resulting in good binding constants. The order of binding constants was III> IV> II> I> V> VI> VII> VIII. These results confirmed good binding characteristics of the plant extracts with DNA. Further, these plant extracts were screened for anticancer activities with lung cancer cell lines (H-1299) and breast cancer (MCF-7) cell lines. The antioxidant activities of ethyl acetate and acetone extracts showing higher anticancer potential were also checked. Each extract showed different antioxidant activity with respect to ascorbic acid.

Experimental studies on the hepatoprotective and immunomodulatory effects of *Dawā' al-Kurkum*, a polyherbal Unani preparation, and its cellular and molecular mechanisms in rats

A study to evaluate the hepatoprotective and immunomodulatory effects of *Dawā' al-Kurkum*, a polyherbal Unani preparation, and to assess the cellular and molecular mechanisms involved in mediating such effects was conducted at Department of Pharmacology, Vallabhbhai Patel Chest Institute (VPCI), University of Delhi, Delhi.

During the reporting period, the anti-tubercular drugs, namely isoniazid, rifampicin, and pyrazinamide, when given to Wistar rats in combination showed changes in the markers of liver functions, oxidative stress and histopathological studies. *Dawā' al-Kurkum* was found to be effective against the anti-TB drugs induced hepatotoxicity as it significantly prevented the hepatotoxic damage induced in rats, however, its 50% hydro-alcoholic extract had also good effects. D-Galactosamine which is potentially hepatotoxic to Wistar rats, was given in single dose as proven by changes in the markers of liver functions, oxidative stress and histopathological studies. Both *Dawā' al-Kurkum* and its 50% hydro-alcoholic extract were found to be effective against Galactosamine induced hepatotoxicity as they significantly prevented the hepatotoxic damage induced in rats, with differential effects on biochemical and oxidative stress parameters. Paracetamol induced model showed that concurrent administration of *Dawā' al-Kurkum* and its 50% hydro-alcoholic extract along with Paracetamol significantly prevented the rise in the level of serum SGOT, SGPT, ALP, total bilirubin and direct bilirubin. Further, measurement of oxidative stress parameters in liver homogenates showed protective effects of *Dawā' al-Kurkum* against raised levels of reactive oxygen and nitrogen species in response to Paracetamol as seen by lowered levels of MDA and NOx and elevating the levels of GSH.

Evaluation of anticancer potential of a Unani pharmacopoeial formulation *Dawā' al-Kurkum*

A study to evaluate the potential of Unani pharmacopoeial formulation, *Dawā' al-Kurkum* against human liver cancer cells was carried out at Amity Institute of Pharmacy, Amity University, Noida, Uttar Pradesh. The *in-vitro* study utilized human cancer cell line HepG2.

During the reporting period, *in-vitro* cell culture analysis was carried out, HepG2 cells were grown and propagated in the laboratory of Amity University. The HepG2 cells were treated with different concentrations of the drug to see its cytotoxic activity, taking 0.5% DMSO as control. The cytotoxic potential of the drug was evaluated using MTT survival assay, wound healing assay and scratch assay. Additional work of checking the *in-vitro* cytotoxic potential of the drug in two more liver cancer cell lines - Hep3B and HuH 7 - was carried out and the results were compared with noncancerous cells (HEK293). Further investigation was carried out on molecular biology through realtime PCR to substantiate the results.

Delineating the anti-cancer potential and the mechanism of action of Unani medicinal formulation *Iṭrīfal Aftīmūn* in chronic myelogenous leukemia

A study to evaluate the potential of Unani pharmacopoeial formulation, *Iṭrīfal Aftīmūn* in chronic myelogenous leukemia (CML) was carried out at All India Institute of Medical Sciences, New Delhi. During the reporting period, *Iṭrīfal Aftīmūn* was provided by the CCRUM and also prepared in the lab. The formulation prepared in the lab was characterized by HPLC and the sample was also sent for LC-MS. Further, CML cell lines (K562 and KU812) were procured by ATCC and maintained. The IC30 and IC50 were determined for all the drugs using MTT assay. The anti-tumour efficacy of *Iṭrīfal Aftīmūn* was tested alone and in combination with standard chemotherapy drug (imatinib) in cell line

model of CML. Upon cell cycle analysis, it was observed that sub-G0/G1 phase increased upon treatment with *Iṭrīfal Aftīmūn* and imatinib alone in leukemic cell lines. The mode of cytotoxicity was assessed by Annexin V-FITC/PI assay which showed that percentage of early and late apoptotic cells got increased in cell lines after treatment with *Iṭrīfal Aftīmūn*. In addition, mitochondrial membrane potential (MMP) determination by JC1 assay showed the loss of MMP after treatment. ELISA kits (for VEGF, Ang-2, IL-6, TNF-α, IFN-γ and IL-10) were procured and few were standardized.

Effect of Unani preparations on macrophage polarization and its role in increased browning of fat leading to amelioration of insulin resistance

A study to evaluate the effect of Unani preparations on macrophage polarization and its role in increased browning of fat leading to amelioration of insulin resistance was carried out at Jamia Hamdard, New Delhi. During the reporting period, it was found through *in-vitro* analysis that *ʿAraq* was significantly cytotoxic only at higher concentrations. The concentration with more than 90% viability was used further. The administration of *ʿAraqiyāt* to cells decreased the pro-inflammatory markers while increased the anti-inflammatory markers. Further, Th-2 modulation potential of extract was investigated to see its effect on nitric oxide production and inflammatory cytokines production using LPS stimulated RAW macrophages. To further evaluate the Th2 modulation potential of *ʿAraq* and extract *in- vivo*, high fat diet (HFD) C 57BL/6 mice model was developed. The development of insulin resistance was evaluated by blood sugar level measurement from retro-orbital tail vein. The mice were sacrificed to investigate relative organ weight and cellularity of lymphoid organs. It followed the same trend and it was observed that dosing of *ʿAraqiyāt* has significant reducing effects on lymphocyte proliferation. Dosing of *ʿAraq-i-Mako*, *ʿAraq-i-Kāsnī* and *ʿAraq-i-Luk Maghsūl* were also found to decrease the pro-inflammatory markers.

Phytochemical standardization and evaluation of anti-cancer and immune-modulatory activity of Unani formulation *Iṭrīfal Ghudadī*

A study was initiated to evaluate the anti-cancer and immune-modulatory effect and phytochemical standardization of Unani formulation *Iṭrīfal Ghudadī* at Interactive Research School for Health Affairs, Pune, Maharashtra. The main objective of the study is to phyto-chemically standardize *Iṭrīfal Ghudadī* and to assess the effect of the formulation on viability of cancerous (breast, cervical and oral) and non-cancerous cell lines as well as on the growth kinetics of the cancerous cell lines that would be most sensitive to the formulation.

Pharmacokinetics, stability and quality control studies of *Iṭrīfal's* in Unani Pharmacopoeia of India (Part 2, V1 & 2) using chromatographic analysis by HPTLC and LC-MS

A study was initiated to evaluate the pharmacokinetics, stability and quality control of *Iṭrīfal's* of Unani Pharmacopoeia of India (Part 2, V1 & 2) using chromatographic analysis by HPTLC and LC-MS at Department of Pharmacognosy and Phyto-chemistry, School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi. The main objective of the study is to develop quality control methods using HPTLC and GC-MS and to analyze metabolites present in them for their stability and pharmacokinetic profile.

Identification of anti-dengue viral compounds from Unani medicinal plants and formulations

A study was initiated to evaluate the anti-dengue viral compounds from Unani medicinal plants and formulations at Institute of Molecular Medicine, School of Interdisciplinary Sciences, Jamia Hamdard, New Delhi. The main objective of the study is to prepare the

drugs as per Unani Pharmacopoeia of India and to evaluate their potential anti-viral activities against dengue infection.

In-vitro evaluation of antiviral activity of Unani drugs and their green nanoparticles against dengue virus

A study for *in-vitro* evaluation of antiviral activity of Unani drugs and their green nanoparticles against dengue virus was conducted at Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi. During the reporting period, molecular docking studies of NS1, NS3 and NS5 proteins of dengue virus against drugs compounds were carried out. Amentoflavone, carpaine, dehydrocarpaine I, ursolic acid, dehydrocarpaine II interacted with all the dengue virus serotypes. The top ligands which interacted with most of the proteins were part of *Ḥabb-i-Papīta*: ursolic acid (*Zingiber officinale*), carpaine, dehydrocarpaine I (*Carica papaya*) and *Khamīra Marwarīd*: Amentoflavone (*Salix caprea*).

Preclinical evaluation of UNIM-401 and UNIM-403 against experimentally induced psoriasis and UNIM-004 and UNIM-005 for their efficacy against experimentally induced vitiligo in mice

A study was initiated for preclinical evaluation of UNIM-401 and UNIM-403 against experimentally induced psoriasis and UNIM-004 and UNIM-005 for their efficacy against experimentally induced vitiligo in mice at National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad. The main objective of the study is to evaluate the effect of coded drugs in experimental models, as the exact molecular mechanism of action of the formulations is yet to be elucidated.

Reverse pharmacology of *Asrīn* and *Dawāʾ al-Shifāʾ* to evaluate their anti-hypertensive efficacy, safety and mechanism of action

A study for reverse pharmacology of *Asrīn* and *Dawāʾ al-Shifāʾ* and to evaluate their anti-hypertensive efficacy, safety and mechanism of action was initiated at Division of Pharmacology, CSIR-Central Drug Research Institute, Lucknow. The main objective of the study is to generate scientific evidence for clinical efficacy of antihypertensive Unani formulations as well as to envisage the demonstration of antihypertensive and cardioprotective activity and safety by using various *in-vitro* assays and the rat model of hypertension.

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 Medicine: The Science of Health and Healing – An Overview
- Unani Medicine and Research Trends – An Insight
- CCRUM Annual Report – 2018-19 (English)
- CCRUM Annual Report – 2018-19 (Hindi)
- Souvenir – International Conference on Unani Medicine
- Margdarshika – Rajbhasha Adhiniyam / Niyam
- Prevention and Control of Obesity (English)

- Prevention and Control of Obesity (Urdu)
- Prevention and Control of Hypertension (English)
- Prevention and Control of Hypertension (Urdu)
- Prevention and Control of Diabetes (English)
- Prevention and Control of Diabetes (Urdu)
- CCRUM Wall Calendar - 2020

3.4.2. Journals / Periodicals

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

- Hippocratic Journal of Unani Medicine, Volume-13, Number-2
- CCRUM Newsletter, Volume-38, Number-4
- CCRUM Newsletter, Volume-39, Number-1
- CCRUM Newsletter, Volume-39, Number-2

3.4.3. Research Papers

During the reporting period, the following research papers authored by the Council's officers were published in reputed national and international journals:

- Aaliya., Qamar, U., Kazmi, M. H., & Jabeen, A. (2019). Therapeutic evaluation of a topical Unani formulation in patients with *Qūbā* (dermatophytosis): A case series. *Int. J. AYUSH, 8*(2), 11–20.
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3.5. Extension of Healthcare Services

3.5.1. School Health Programme

The 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 visit 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 NRIUMSD, Hyderabad; CRIUM, Lucknow; RRIUMs, Bhadrak, Patna, Mumbai and Srinagar; and CRU, Burhanpur. The Council's physicians visited 12 schools that were adopted under the School Health Programme particularly those falling in the pockets adopted under Mobile Clinical Research Programme. A total of 6,245 school children were covered under this programme. Out of them, health check-up of 4,928 children was conducted; and 2,485 children suffering from different ailments, 2,470 were treated in 120 visits made to these schools. With a view to educate the children on healthy living, 42 lectures were delivered on preventive and promotive health aspects. The most common diseases found among them included cold & cough, dental cavities, tonsillitis, helminthiasis, skin infections, otorrhoea 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 public demand, another Unani Specialty Centre started functioning at Deen Dayal Upadhyay (DDU) Hospital, New Delhi on 01 November 2010. During the reporting period, a new Unani Medical Centre was established at VMMC & Safdarjung Hospital, New Delhi which was inaugurated by Shri Shripad Yesso Naik, Hon'ble Minister of State (IC) for AYUSH and Minister of State for Defence, Government of India on September 13, 2020. These centres are run by the Council. Besides the General Outpatient Department (GOPD) facilities, these centres 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, 19,928 patients were treated at Unani Medical Centre in Dr. RML Hospital, 16,607

patients at Unani Speciality Centre in DDU Hospital, New Delhi and 6,496 patients at Unani Medical Centre at VMMC & Safdarjung Hospital, New Delhi. Patients visiting the centres were suffering from chronic diseases. Counselling of patients, particularly the senior citizens, was also done to improve their physical activities and mental health.

3.5.3. Health Camps

The Council organized 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, 11 health camps were organized and 8,903 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.

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, 1,84,708 female patients in different OPDs were treated. Efficacy of Unani pharmacopoeial formulations was also validated under this component. Health lectures / group meetings on preventive and promotive health aspects were also organized 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-Raḥim* (leucorrhoea), *Iḥtibās al-Ṭamth* (amenorrhoea), *Kathrat al-Ṭamth* (Menorrhagia) and *Sū' al-Qinya* (Anaemia) also continued.

3.5.5. Activities in the North-Eastern Region

The Regional Research Centre, Silchar continued Research/GOPD Programmes. During the reporting period, 5,380 patients were treated. The most commonly occurring diseases were *Ḥummā* (fever), *Sayalān al-Raḥim* (leucorrhoea), *Sū' al-Haḍm* (dyspepsia), *Ḥummā Iǰāmiya* (malaria), *Ishāl* (diarrhea), *Zaḥīr* (dysentery) and *Waja' al-Mafāṣil* (rheumatoid arthritis). The patients were treated with Unani pharmacopoeial drugs.

3.5.6. Mobile Healthcare Program under Schedule Caste Sub-Plan

The CCRUM runs Mobile Healthcare Program under Schedule Caste Sub-Plan (SCSP) at NRIUMSD, Hyderabad; CRIUM, Lucknow; RRIUMs, New Delhi, Aligarh, Patna, Mumbai, Kolkata and Chennai; RRC, Allahabad; and CRU, Bhopal to extend healthcare services to the SC population at their doorstep. The program aims to screen / examine the SC population for their health status in Mobile OPDs and health camps and to provide Unani treatments to the patients suffering from different diseases. It also aims to create awareness among the masses on preventive, promotive and curative health aspects through lectures, group meetings, health camps and distribution of literature. Five villages predominately having SC population were identified for undertaking the program at each centre. During the reporting period, 6,76,482 total population including 3,22,121 SC population were covered and a total of 43,634 individuals benefited from the program.

3.5.7. Mobile Healthcare Program under Tribal Sub Plan

Just like Mobile Healthcare Program under Schedule Caste Sub-Plan, the CCRUM runs Mobile Healthcare Program under Tribal Sub Plan (TSP) at RRIUM, Bhadrak and CRUs, Burhanpur and Kurnool to extend healthcare services to the ST population at their doorstep. The program aims to screen / examine the ST population for their health status in Mobile OPDs and health camps and to provide Unani treatments to the patients suffering from different diseases. It also aims to create awareness among the masses on preventive, promotive and curative health aspects through lectures, group meetings, health camps and distribution of literature. Five villages predominately having ST population were identified for undertaking the program at each centre. During the reporting period, 73,355 total population including 52,239 ST population were covered and 15,046 individuals benefited from the program.

3.6. Integration of Unani Medicine with NPCDCS

The CCRUM, under the aegis of the Ministry of AYUSH, Government of India, launched a pilot project for integration of Unani Medicine in National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) at Lakhimpur Kheri, Uttar Pradesh. With the objective to ensure prevention and early diagnosis of lifestyle diseases, reduce complications and drug dependency, and supplement NPCDCS in preservation and promotion of health, the CCRUM started this project through its Central Research Institute of Unani Medicine, Lucknow at 17 Community Health Centres (CHCs), 54 Primary Health Centres (PHCs) and NPCDCS Cell at District Hospital of Lakhimpur Kheri.

Under this programme, Lifestyle Clinics were set up at each of the District Hospital and 17 CHCs where after due screening healthy individuals are educated about preventive measures and healthy lifestyle and high risk individuals are offered diet therapy, regimen therapy and Yoga therapy, whereas the diseased people are provided Unani medicinal treatment along with the above therapies. Besides, all the 54 PHCs in the district are covered through health camps for screening, health awareness and propagation of healthy lifestyle. The visitors suffering from any disease covered under the programme are referred to the Lifestyle Clinic for proper treatment.

In the project on Integration of Unani Medicine in NPCDCS, 1,52,953 individuals were screened and treated with Unani medicine for different aliments. Of them, 1,739 individuals were enrolled in high risk group of diabetes mellitus and 2,695 as diseased, whereas 1,915 were enrolled in high risk group of hypertension and 3,867 as patients. Similarly, 165 persons were enrolled in high risk group of hyperlipidaemia and 108 as diseased. Besides, 424 health camps were organized that benefitted 8,013 individuals through health screening and distribution of disease specific health literature. A total of 560 health awareness lectures were also delivered during the health camps which were attended by 13,542 people. As much as total number of 70,277 persons attended the Yoga classes.

3.7. Linking Education with Research

With a view to link education with research and utilize the comprehensive facilities available at its institutes, the CCRUM is conducting postgraduate (MD) programmes in Unani Medicine at National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD), Hyderabad and Regional Research Institute of Unani Medicine, Srinagar in affiliation with

Kaloji Narayana Rao University of Health Sciences, Warangal (Telangana) and University of Kashmir, Srinagar respectively. Twenty eight students were admitted during the reporting period with intake capacity of 07 students in each discipline of *Mu'ālajāt* (Medicine) and *'Ilm al-Adwiya* (Pharmacology) at both the institutes.

The students were trained through a structured academic schedule comprising theory classes, hands-on practical classes, bedsides teaching and dissertation projects. The institutes also organized monthly meeting for postgraduate training that included clinical and research skills, development of protocols, case presentations and discussions. Students were posted in various OPDs as well as IPD wards for clinical training on rotation basis. The academic activities also included seminars, journal club and tutorials. The faculty members conducted classes as per fixed time table and syllabus prescribed by the CCIM. The students of 1st batch (2016–17) completed their course and submitted theses based on their research work. The students of 2nd and 3rd batches were engaged in their theses work, in addition to attending classes.

During the reporting period, several meetings of Departmental Research Committee, Board of Studies and Institutional Ethics Committee were organized to deliberate, evaluate and approve the research proposals for thesis work.

4. INFORMATION, EDUCATION & 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 Wide Area Network (WAN). The Centre provided its services to the readers through e-Granthalaya Library Software that controls the Online Public Access Catalogue (OPAC), circulation of books, etc. A total of 57 books including 32 purchased and 25 complimentary books were acquired. Besides, 160 e-Books received from Athens Academy Library, Kithore, Meerut and one CD were also added in the collection of the library.

A total number of 2,265 books were in circulation including 56 books that were circulated through Inter-Library Loan Service to the Athens Academy Library and DELNET's member libraries. The library subscribed 3,667 issues of daily newspapers and 160 issues of popular magazines. In addition, 94 issues of journals were also received out of which 24 were in Hindi language. The LIC carried out physical processing and barcoding of 124 books.

The LIC provided spiral binding and photocopying, and reference services to the readers. Comb or thermal binding of 210 documents and photocopying of 10,819 pages were carried out. Besides, long and short range reference service was provided through WhatsApp and e-mail to the researchers and allied staff members of the Council. A Facebook page was also created and maintained during the year with an objective of facilitating the researchers with reference services and recent updates. The LIC collected Rs. 4,075.00 as user charges against annual membership, photocopy and spiral binding services and consultation.

The Library continued digital publication and circulation of Medical News Update Service among 780 subscribers on daily basis. The Selective Dissemination of Information (SDI) service also continued at the LIC. Under this service, 5,655 news clippings were collected, of which 3,150 important ones were sent to Assistant Director (Unani) whereas over 1,620 were displayed on the library notice board.

The LIC continued a digitization project and scanned 10,821 pages of old and rare manuscripts, books and journals pertaining to Unani Medicine. The library is also developing a Digital Repository in DSpace software for the benefit of Unani fraternity at global level. Under this initiative, 10,821 digitized pages were uploaded on the digital repository. Data of 57 new additions in the library were also uploaded on e-Granthalaya cloud database.

The Centre continued institutional membership of British Council Library, Medical Library Association of India, American Resource Centre and Developing Library Network (DELNET) during the year.

During the reporting period, 398 member and guest researchers visited the LIC to access its resources. Besides, the following 10 international guests visited the LIC:

- Mr. Jannatul Ferdous, Dhaka, Bangladesh
- Mrs. Sandhya Rani Das, Dhaka, Bangladesh (visited twice)
- Mr. Abdul Khaleq Ahmed, Jeddah, Saudi Arabia

- Dr. Saiful Islam, Bangladesh
- Dr. Hkm Mohammad Shamim, Bangladesh
- Dr. Mohd. Layek Ahmed, Bangladesh
- Hakim Moinuddin, Bangladesh
- Hakim A H M Razu, Bangladesh
- Dr. Rafiqul Islam, Bangladesh
- Dr. Mahfoozur Rahman, Dhaka

4.2. Organization of Conferences, Seminars, Workshops, etc.

4.2.1. Unani Day Celebrations and International Conference on Unani Medicine

The Central Council for Research in Unani Medicine (CCRUM) celebrated Unani Day on February 11 in a grand manner and organized an International Conference on Unani Medicine at Vigyan Bhawan, New Delhi during February 11–12, 2020 to mark the occasion.

The event also marked distribution of AYUSH Awards for Unani Medicine, release of CCRUM publications, presentation of NABH accreditation certificate to NRIUMSD, Hyderabad and exhibition of industry.

International Conference

The international conference was organised on the theme *'Unani Medicine – Towards Achieving the Sustainable Development Goal (SDG-3) of 'Good Health and Well-Being'.* It highlighted the role of Unani Medicine in attaining good health and wellbeing and emphasized the need for integration and synergy of all medical systems to address the health challenges we are facing today. In the presence of experts, luminaries and scholars of Unani Medicine, the conference provided an ample platform for healthy discussion and brain storming of ideas and creation of better avenues for achieving the sustainable development goal of good health and well- being. Besides inaugural and valedictory sessions, the conference had a panel discussion, expert talks and eight scientific sessions.

Inaugural Session

The international conference was inaugurated by Shri Rajnath Singh, Hon'ble Union Minister for Defence in the august presence of Shri Shripad Yesso Naik, Hon'ble Minister of State (IC) for AYUSH and Minister of State for Defence, Dr. Jitendra Singh, Hon'ble Minister of State (IC), Ministry of Development of North Eastern Region, Shri Vaidya Rajesh Kotecha, Secretary, Ministry of AYUSH, Shri Pramod Kumar Pathak, Additional Secretary, Ministry of AYUSH, Prof. Asim Ali Khan, Director General, CCRUM, Ministry of AYUSH and Dr. Mohammad Tahir, Advisor (Unani), Ministry of AYUSH, Government of India.

Inaugurating the international conference, Shri Rajnath Singh said that Unani Medicine is a unique system of medicine nurtured by the best of intellect of many cultures and civilizations. Due to its accessibility, affordability and holistic approach, it has been fulfilling health care needs of the people even in the far-flung areas of the country. He further said that the system can play an important role in finding solutions for various health challenges including noncommunicable diseases.

Addressing the conference, Dr. Jitendra Singh emphasized the need for an inclusive and integrated health care regime that should guide health policies and programmes in future.

He emphasized that there is a worldwide resurgence of interest in holistic systems of health care, particularly with respect to the prevention and management of chronic, non-communicable and systemic diseases.

In his address, Shri Shripad Yesso Naik said that Unani Medicine with its cost-effective remedies can offer solution to health challenges of ageing population, emergence of chronic diseases, environmental and climate change related health risks and also to the lack of access to quality health care. He added that the Ministry of AYUSH is focused to tap the real potential of AYUSH systems in imparting preventive, promotive and holistic healthcare to the people.

Addressing the conference, Vaidya Rajesh Kotecha advocated for pluralistic and integrated approach to health by way of making traditional systems of medicine more accessible in the health care delivery system. He underscored the need for incorporating information technology in AYUSH health care delivery and highlighted IT initiatives of the ministry.

Earlier in his welcome address, Prof. Asim Ali Khan, Director General, CCRUM said that the CCRUM is progressing well in its mandate of research and development in Unani Medicine. He extended his gratitude to Hon'ble AYUSH Minister for upgrading the Central Research Institute of Unani Medicine (CRIUM), Hyderabad to National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD).

The occasion also witnessed presentation of NABH accreditation certificate to NRIUMSD, Hyderabad by Shri R. P. Singh, Secretary General and Shri Atul Kochhar, CEO, NABH, Quality Council of India to Director General, CCRUM.

Panel Discussion

The panel discussion session was themed on 'Traditional Health Knowledge: Innovative Solutions for Contemporary Healthcare'. Prof. Seyed Ehtesham Hasnain, Vice Chancellor, Jamia Hamdard, New Delhi and Prof. Ram Vishwakarma, Director, Indian Institute of Integrative Medicine, Jammu were moderators of the session, whereas Dr. D. S. Gangwar, Additional Secretary & Financial Advisor, Ministry of Health and Family Welfare, Govt. of India, Prof. Kunwar Mohammad Yusuf Amin, Department of Ilmul Advia, Ajmal Khan Tibbiya College, Aligarh Muslim University, Aligarh, Dr. W. Selvamurthy, President, Amity Science, Technology and Innovation Foundation and Director General, Amity Directorate of Science and Innovation, Noida, Prof. Ritu Priya, Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi, Prof. Imamuddin Ahmed, former Principal, Govt. Unani Medical College, Chennai, Dr. S. Farooq, President, Himalaya Drug Company, Shri Pradeep Multani, Vice President, PHD Chamber of Commerce and Industry and Chairman, Multani Pharmaceuticals Ltd. and Hakim Mohsin Dehlvi, General Secretary, Unani Drug Manufacturers Association, New Delhi participated as the panellists. The session began with the welcome note to the moderators and panellists of the session. In his opening remarks, Prof. Seyed Ehtesham Hasnain said that in the wake of new health challenges like coronavirus there is a need to explore how Unani Medicine and other traditional medicine systems could be of relevance to address them.

Moderating the discussion, Prof. Ram Vishwakarma highlighted that the modern medicine has been enormously benefited from traditional systems of medicine. He further said that almost all the medicines used in CNS disorders, all the anticancer compounds used in clinics and antibiotics are derived from traditional medicine and therefore integration of traditional medicine with modern medicine is not a new phenomenon.

Dr. W. Selvamurthy said that Unani Medicine sees man as a whole; it considers physical, mental as well as spiritual status of human beings.

Prof. Yusuf Amin emphasized that to find out innovative solutions for contemporary healthcare issues from Unani Medicine and other traditional medicines, we have to look at and use them according to their own pathological and pharmacological schemes rather than converting them into their molecular counterpart.

Dr. D. S. Gangwar talked about the importance of traditional medicine in our life and asserted

that most of the lifestyle disorders like hypertension, obesity, and coronary artery diseases are preventable through AYUSH systems of medicine.

Prof. Ritu Priya focused on a sustainable healthcare system and environmental integrity. She discussed about the pharmaceutical industry and resultant pollution in the country. She also talked about how natural system of medicine can bring some innovation in healthcare system.

Dr. S. Farooq termed the AYUSH systems of medicine a blessing to the mankind and stressed the need to do more research in Unani Medicine and natural nutraceuticals like mango and jamun.

Prof. Imamuddin Ahmed highlighted the importance of Unani Medicine and said that this system is far efficient than modern system of medicine for treating diabetes, coronary heart disease, etc. He further said that the diseases like psoriasis and leucoderma are curable in Unani Medicine.

Shri Pradeep Multani discussed about the status of Chinese system of medicine and suggested that proponents of Indian systems of medicine like Unani Medicine and Ayurveda should learn from it and come forward for the good health of the country through these systems.

Hakim Mohsin Dehlvi discussed about the sugar content in Unani medicines and stressed the need to address it as high content of sugar is not good for health.

Dr. Amanullah, Research Officer (Unani) Scientist – III, Dr. Tamanna Nazli, Research Officer

(Unani), Dr. Shamim, Research Associate (Unani) and Dr. Kavita Negi, Research Associate (Botany) at the CCRUM were rapporteurs of the session.

Expert Talk

The expert talk session had Dr. A. Venkat Raman, Faculty of Management Studies, University of Delhi, New Delhi, Dr. Atul Mohan Kochhar, CEO, National Accreditation Board for Hospitals & Healthcare Providers, New Delhi and Prof. T. C. James, Visiting Fellow, Research and Information System for Developing Countries, New Delhi as speakers.

Dr. A. Venkat Raman delivered his talk on ‘Challenges in attaining SDG-3 focusing on health system enablers and their challenges’. He emphasized that focus should not be given only on clinical aspects of health but also on new dimensions from social to economic for preservation of health and prevention of diseases. He elaborated the pivotal role of human resources in the achievement of the targets of SDG-3 and laid emphasis on imparting proper training and mentoring of manpower and partnership with private sector and non-government organizations. He said that accountability and responsibility of stakeholders and transparency of systems are the key to success and asserted that

extensive planning, efficient coordination and governance among the related sectors are critical for overcoming determinants of health.

Dr. Atul Mohan Kochhar delivered his talk on 'Importance of quality assurance in healthcare services'. He highlighted the significance of quality assurance and role of National Accreditation Board for Hospitals and Healthcare Providers (NABH) and National Accreditation Board for Testing and Calibration Laboratories (NABL) in health sector.

Prof. T. C. James delivered a comprehensive talk on the role of traditional medicine in achieving SDG-3 and stressed that it follows the principles of integrated development including nutrition, physical, mental and social requirements of individuals and community along with sustainable environment. He highlighted the fact that traditional medicine has a unique combination of accessibility and acceptability, safety, holistic and personalized approach and affordability which are helpful in achieving the goals of SDG-3.

Dr. Mohammad Fazil, Research Officer (Unani) Scientist- IV, Dr. Ahmad Sayeed, Research Officer (Unani) Scientist-III and Dr. Shagufta Parveen, Research Associate (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session - I

Scientific Session - I was held on February 12, 2020 and the theme was 'Unani Medicine for lobal Health'. The session was chaired by Prof. Ahmed Kamal, Pro-Vice Chancellor, Jamia Hamdard, New Delhi, Dr. S. J. S. Flora, Director, National Institute of Pharmaceutical Education and Research, Raebareli, Prof. Md Abdul Mannan, Vice Chancellor, Hamdard University, Bangladesh, Dr. Mohd Ashraf Ganie, Department of Endocrinology and Metabolism, Sher-i-Kashmir Institute of Medical Sciences, Srinagar, J&K and Dr. Munawwar Hussain Kazmi, Deputy Director Incharge, National Research Institute of Unani Medicine for Skin Disorders, Hyderabad.

Dr. Roy Upton, President, American Herbal Pharmacopoeia, USA delivered his presentation on 'Pharmacopeial Standards for Herbal Medicines' and stressed on integrated approach for healthcare. 'Too often modern research is presented as superior to traditional knowledge when in fact much of what is practiced in modern medicine is not evidence-based and much of traditional knowledge is evidenced-based', he said. In her presentation on *'Ilāj bi'l- Ghidhā'* (Dietotherapy): A Core Mode of Unani Treatment – An Appraisal', Dr. M.U.Z.N. Farzana, Senior Lecturer, Institute of Indigenous Medicine, University of Colombo, Sri Lanka highlighted the importance of food and treatment through diets in Unani Medicine and presented classification of diets according to caloric value and production of chyme. She said that the management of several lifestyle disorders such as hypertension, diabetes, dyslipidaemia in Unani Medicine is by dietotherapy and lifestyle modifications alone or as adjuvant with pharmacotherapy.

Dr. Mujeeb Hoosen, Coordinator, Unani Tibb, School of Community and Health Sciences, University of the Western Cape, South Africa presented his paper on 'The Role of Spirituality and Spiritual Care in Unani Medicine Education and Practice' and shed light on the current status of spirituality and spiritual care in Unani Medicine education and practice. Dr. Master Alagan Govindan, Secretary, Association of Ayushpathi Malaysia, Malaysia presented his paper on 'The Scope of Practice of Unani Medicine in Malaysia' and informed that 95% of Malaysian women buy products for reproductive health problems online of which about 60% are from Unani Medicine and 95% of Malaysian older population buy Unani Medicine for geriatric care and anti-ageing therapies.

The fifth paper of the session was presented by Prof. Arman Zargaran, Coordinator, International Affairs for Traditional Medicine, Ministry of Health & Professor, School of Persian Medicine, Tehran, Iran on 'Finding new medicines according to the Avicenna's knowledge: An example of traditional chamomile oil on carpal tunnel syndrome (CTS)' and claimed that due to its improving effect on symptoms, physical function, and minimal effects on some of electrodiagnostic parameters, chamomile oil could be applied as a complementary treatment in such CTS patients.

Dr. Pradeep Kumar, Research Officer (Pathology) Scientist-IV, Dr. Mokhtar Alam, Research Officer (Botany) and Dr. Sofia Naushin, Research Associate (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session – II

Scientific Session – II was themed on 'Recent Researches in Unani Medicine'. It was chaired by Prof. G.P. Talwar, Director (Research), Talwar Research Foundation, New Delhi, Dr. D. S. Gangwar, Additional Secretary & Financial Advisor, Ministry of Health and Family Welfare, Govt. of India, New Delhi, Dr. Majid Ahmed Talikoti, Surgical Oncology Specialist, Batra Hospital, New Delhi, Prof. Mohammad Faisal, Associate Professor, Department of Oral and Dentistry Surgery, Faculty of Dentistry, Jamia Millia Islamia, New Delhi, Hakim Mohsin Dehlvi, General Secretary, UDMA, New Delhi and Dr. Mohammad Fazil, Rseaerch Officer (Unani) Scientist-IV and Incharge, Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine, New Delhi.

Prof. Mohammad Akhtar Siddiqui, Department of Moalajat, School of Unani Medical Education and Research, Jamia Hamdard, New Delhi, Prof. S. Raisuddin, Department of Medical Elementology and Toxicology, School of Chemical and Life Sciences, Jamia Hamdard, New Delhi, Prof. Tanveer Naved, Amity Institute of Pharmacy, Amity University, Noida, Prof. Iffat Zareen Ahmad, Department of Bioengineering, Integral University, Lucknow and Dr. Kiran Sanjay Bhise, Professor, Pharmaceutics and Principal, MCE Society's Allana Campus, Pune were speakers of the session.

Prof. Siddiqui delivered his presentation on 'Management of liver fibrosis and cirrhosis of liver in Unani Medicine' and discussed the results of a study conducted by him on Unani medicines for chronic liver diseases.

Prof. Raisuddin presented his paper on '*Kushtajāt* as biological response modifiers' and discussed the mechanism of drugs containing metals and minerals and important *Kushtajāt* used in Unani Medicine.

Prof. Tanveer Naved presented his paper on 'Nutraceuticals: Recent advances and regulatory aspects in India'. He discussed the classification and scope of nutraceuticals and various nutraceuticals available in market and presented registration process of nutraceuticals in India.

Prof. Iffat del ivered her presentation on '*In-vitro* and *in-vivo* study of hepatoprotective activity of *Nigella sativa* extracts in various germination stages'. She elucidated the study conducted by her on the drug concluding that methanolic sprout extract of *N. sativa* showed high protective activity in PCM induced hepatotoxicity.

Dr. Kiran Sanjay Bhise was the last speaker of the session who delivered a presentation on 'Unani anti-psoriatic topical nano particulate drug delivery systems' and discussed the topic at length.

Dr. Abdul Raheem, Research Officer (Unani) Scientist-IV, Dr. Mustehasan, Research Officer

(Unani) Scientist-II and Dr. Rukshanda Taiyab, Technical Officer (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session – III

Scientific Session – III was focused on 'Achieving Sustainable Development Goal (SDG-3)'. It was chaired by Prof. Surender Singh, Department of Pharmacology, AIIMS, New Delhi, Dr. Khalid bin Ibrahim, Director, Selangor State Health Department, Malaysia, Dr. Mushtaq Ahmad, former Director, Central Research Institute of Unani Medicine, Hyderabad, Prof. Syed Mahtab Ali, School of Unani Medical Education and Research, Jamia Hamdard, New Delhi, Dr. Shagufta Parveen, Incharge, Regional Research Institute of Unani Medicine, New Delhi and Dr. N. Zaheer Ahmed, Incharge, Regional Research Institute of Unani Medicine, Chennai.

Dr. Gayatri Vyas Mahindroo, Director, National Accreditation Board for Hospitals & Healthcare Providers, New Delhi, Dr. Mohammad Akram, Department of Tahaffuzi wa Samaji Tib, School of Unani Medical Education and Research, Jamia Hamdard, New Delhi, Dr. Jugal Kishore, Head, Department of Community Medicine, VMMC & Safdarjung Hospital, New Delhi and Dr. S. M. Arif Zaidi, Department of Jarahat, School of Unani Medical Education and Research, Jamia Hamdard, New Delhi were speakers. They made deliberations on 'Developing Standards for AYUSH Hospitals', 'Concept of Preventive Healthcare in Unani Medicine', 'Snapshots of National Health Program of India' and 'Successful Unani Intervention in the Cases of Buerger's Disease' respectively.

Dr. Nighat Anjum, Research Officer (Unani) Scientist-III, Dr. Usama Akram, Research Officer (Unani) and Dr. Fouzia Basheer, Research Associate (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session – IV

'Recent Researches in Unani Medicine' was the theme of Scientific Session – IV. It was chaired by Prof. Mohammad Zahid Ashraf, Department of Biotechnology, Jamia Millia Islamia, New Delhi, Dr. S.K. Rajput, Director, AIISM and Professor, Amity Institute of Pharmacy, Amity University, Noida and Dr. Hakimuddin, Incharge, Regional Research Institute of Unani Medicine, Bhadrak. The session had four presentations on 'Efficacy of *Ma'jūn 'Ushba*, a Unani formulation with reference to biochemical and immunological parameters in the management of rheumatoid arthritis (*Waja' al-Mafāṣil*) – An experimental study', 'Exploring new drug delivery mechanism in Traditional Medicines', 'Validation of traditional Unani plant products and their ingredients for anticancer effect on hepatocellular carcinoma' and 'Comparison of Unani formulations *Zarūr-i-Qulā'* and *Jawārish Āmla Sāda* with allopathic antioxidants in the management of patients with early-intermediate stage oral submucous fibrosis' by Dr. M. Rasool, School of Biosciences and Technology, VIT University, Vellore, Prof. Farhan Jalees Ahmad, Department of Pharmaceutics, School of Pharmaceutical Education & Research, Jamia Hamdard, New Delhi, Dr. Alpana S. Moghe, Head, Department of Cell & Molecular Biology, Rajiv Gandhi Institute of IT and Biotechnology, Bharati Vidyapeeth, Pune and Dr. Arpita Rai, Assistant Professor, Faculty of Dentistry, Jamia Millia Islamia, New Delhi respectively.

Dr. R.P. Meena, Research Officer (Chemistry) Scientist-III, Dr. Farah Ahmed, Research Officer (Unani) and Dr. Anju, Research Associate (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session – V & VII

Session – V was dedicated for deliberation on 'Medical Tourism - A Promising Area for Traditional Medicine', whereas Session – VII was themed on 'Unani Medicine for Geriatric Care and Role of Regimenal Therapy in Musculoskeletal Disorders'. The two sessions were combined due to paucity of time. Prof. Y. K. Gupta, President, All India Institute of Medical Sciences, Bhopal, Dr. P.K. Sen, Additional Director General of Health Services, New Delhi, Shri Arun Srivastava, Deputy Director General, Ministry of Tourism, Govt. of India, New Delhi, Dr. M. A. Waheed, Chairman, Unani Pharmacopeia Committee, Govt. of India, New Delhi, Prof. S. Shakir Jamil, former Director General, Central Council for Research in Unani Medicine, New Delhi, Prof. M. A. Jafri, Department of Ilmul Advia, School of Unani Medical Education and Research, Jamia Hamdard, New Delhi, Ms. Amina Al Haidan, Director, Lotus Holistic Institute, Abu Dhabi, Dr. Maqbool Ahmad Khan, Incharge, Central Research Institute of Unani Medicine, Lucknow, Dr. Sarfaraz Ahmad, Deputy Director, Regional Research Institute of Unani Medicine, Aligarh and Dr. Haseeb Alam, Incharge, Regional Research Institute of Unani Medicine, Mumbai chaired these sessions.

Dr. Deepika Gunawat, Sr. Consultant, Max Multi Specialty Center, New Delhi, Dr. Claudia Preckel, Intercultural Trainer, University of Ruhr, Bochum, Germany and Dr. Ravi Reddy, Sri Sri Tattva, Bengaluru delivered their presentations on 'Modalities for setting up of wellness centers', 'More than wellness - baths, bathing and the role of the *Ḥammām* for medical tourism; and 'Medical tourism, a strategy to promote Traditional Medicine' respectively.

Prof. Mohd. Anwar, Department of Ilaj bit Tadbeer, Faculty of Unani Medicine, Aligarh Muslim University, Aligarh and Dr. S.M. Abbas Zaidi, Government Unani Medical College, Bhopal delivered their presentations on 'Regimenal therapies for health promotion in elderly people' and 'Concept of nose to brain drug delivery in Unani Medicine' respectively.

Dr. Saleem Siddiqui, Research Officer (Unani) Scientist-IV, Dr. Jamal Akhtar, Research Officer (Unani) Scientist-III, Dr. Bilal Ahmad, Research Officer (Unani) Scientist-III, Dr. Neelam Quddusi, Research Officer (Unani) Scientist-III, Dr. Nusrat Jahan, Research Associate (Unani) and Dr. Zeba Afrin, Research Associate (Unani) at the CCRUM were rapporteurs of the two sessions.

Scientific Session – VI

Scientific Session – VI was held on the topic 'An integrative approach in mother and child healthcare'. It was chaired by Prof. Abdul Wadud, Director, National Institute of Unani Medicine, Bengaluru, Prof. M.M. Wamiq Amin, Head, Department of Mahiyat al-Amraz, Ajmal Khan Tibbiya College, AMU, Aligarh, Dr. Mukhtar Ahmad Qasmi, Joint Adviser (Unani), Ministry of AYUSH, Govt. of India and Dr. Yunus Iftekhar Munshi, Research Officer (Unani) Scientist-IV and Incharge, Regional Research Institute of Unani Medicine, Kolkata. The session had four presentations on 'Integrative approach for maternal and child health', 'Dietary recommendations for mother and child', 'Child healthcare in Unani system of medicine' and 'Management of menstrual disorders - Few case studies' by Prof. Suhail Fatima, Dean, School of Unani Medical Education and Research, Jamia Hamdard, New

Delhi, Dr. Parmeet Kaur, Chief Dietician, All India Institute of Medical Sciences, New Delhi, Prof. Shaik Shahul Hameed, Head, Department of Atfal, Markaz Unani Medical College, Kozikhode and Prof. Syeda Aamena Naaz, Department of Amraz e Niswan wa Atfal, Faculty of Unani Medicine, AMU, Aligarh respectively.

Dr. Asma Sattar, Research Officer (Chemistry) Scientist-III, Dr. Azma, Research Officer (Unani) Scientist-III and Dr. Saad Ahmad, Consultant (Unani) at the CCRUM were rapporteurs of the session.

Scientific Session – VIII

Scientific Session – VIII was based on 'Unani Medicine for mental health and respiratory diseases'. It was chaired by Prof. Saud Ali Khan, Principal, Ajmal Khan Tibbiya College, Aligarh Muslim University, Aligarh, Prof. Mohd. Idris, Principal, Ayurvedic & Unani Tibbia College, New Delhi, Dr. Sayeed Ahmad, Associate Professor, Pharmacognosy & Phytochemistry, Jamia Hamdard, New Delhi and Dr. Seema Akbar, Incharge, Regional Research Institute of Unani Medicine, Srinagar.

In this session, Prof. Kavita Gulati, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi presented her paper on 'Experimental studies on the cellular and molecular mechanism of action of UNIM-352, a polyherbal Unani formulation, to validate its use as a drug for bronchial asthma' and highlighted the encouraging results of the study conducted in collaboration with the CCRUM. Dr. Munawwar Hussain Kazmi, Deputy Director Incharge, National Research Institute of Unani Medicine for Skin Disorders, Hyderabad presented a paper on 'Clinical study of a Unani formulation in *Nisyān*' and highlighted the outcome of research on *Ma'jūn Nisyān* in the treatment of amnesia. The study demonstrated a significant increase in MMSE score and reduction in signs and symptoms of the disease.

Dr. Zaki Ahmad Siddiqui, Research Officer (Unani) Scientist-IV, Dr. Mahe Alam, Research Officer (Unani) and Dr. Shah Alam, Research Associate (Unani) at the CCRUM were rapporteurs of the session.

Valedictory Session

The two-day International Conference on Unani Medicine concluded on February 12, 2020 with the note that integration and synergy of all medical systems are the need of the hour to address the health challenges the world is facing today.

Addressing the valedictory session, Shri Pramod Kumar Pathak, Additional Secretary, Ministry of AYUSH, Government of India appreciated the CCRUM for organizing such a successful international conference and congratulated the recipients of AYUSH Awards for Unani Medicine. He further said that Unani Medicine has the capacity to manage health problems and play an important role in achieving the sustainable development goal of good health and well-being.

In his address, Prof. Seyed Ehtesham Hasnain, Vice Chancellor, Jamia Hamdard, New Delhi said that Unani Medicine attracts people because of its holistic approach but there are areas that need serious research and scientific validation as well as publication of data in top international journals.

Speaking on the occasion, Prof. Javed Musarrat, Vice Chancellor, Baba Ghulam Shah Badshah University, Jammu & Kashmir appreciated the Ministry of AYUSH for celebrating the birthday of Hakim Ajmal Khan as Unani Day. He laid emphasis on translational research and validation studies in Unani Medicine.

Dr. B. Karunakar Reddy, Vice Chancellor, Kaloji Narayana Rao University of Health Sciences, Warangal, Telangana emphasized the need to focus on prevention as well as cure. He also highlighted the need for documentation of data related to research and health care delivery.

Padma Shri Dr. M.A. Waheed, Chairman, Unani Pharmacopoeia Committee laid emphasis on validation of traditional systems of medicine on scientific parameters for globalization of Unani Medicine.

Earlier in his wrap-up remarks, Prof. Asim Ali Khan, Director General, CCRUM summed up the two-day proceedings and informed that during the eight scientific sessions the conference had deliberations on 'Unani Medicine for Global Health', 'Recent Researches in Unani Medicine', 'Achieving the Sustainable Development Goal (SDG-3)', 'Medical Tourism – A Promising Area for Traditional Medicine', 'Integrative Approaches for Mother and Child Health', 'Unani Medicine for Geriatric Care and Role of Regimenal Therapy in Musculoskeletal Disorders' and 'Unani Medicine for Mental Health and Respiratory Diseases'. The conference had 40 presentations besides panel discussion and expert talk. Around 1200 delegates, resource persons, academicians, researchers and students from India, USA, South Africa, Sri Lanka, Bangladesh, UAE, Iran, Malaysia and Germany participated in the conference.

The conference concluded with the vote of thanks proposed by Dr. Mohd Tahir, Advisor (Unani), Ministry of AYUSH.

AYUSH Awards for Unani Medicine

The inaugural session of the International Conference on Unani Medicine also accommodated the ceremony for conferment of AYUSH Awards for Unani Medicine. Various Unani scientists and experts were honoured in recognition of their contributions in the area of research, teaching and practice of Unani Medicine.

The Best Research Paper Awards were presented to Dr. Abiha Ahmad, Aligarh Muslim University, Aligarh for clinical research, Dr. Mahaboob Khan Rasool, Vellore Institute of Technology, Vellore for drug research and Dr. Md. Anzar Alam, National Institute of Unani Medicine, Bengaluru for literary research in Unani Medicine. The awards comprised a citation, a shawl and a cash award of Rs 50,000 each.

The Young Scientist Awards were conferred on Dr. Mohammad Mohsin, Aligarh Muslim University, Aligarh for clinical research, Dr. Shariq Shamsi, National Institute of Unani Medicine, Bengaluru for drug research and Dr. Javed Ahmed Khan, Mohammadiya Tibbiya College, Malegaon for literary research in Unani Medicine. The awards in the category comprised a citation, a shawl and a cash award of Rs 100,000 each.

The Best Teacher Awards were presented to Dr. Arshiya Sultana, National Institute of Unani Medicine, Bengaluru for clinical research, Prof. Mohd. Aftab Ahmed, Jamia Hamdard, New Delhi for drug research and Dr. Abdul Haseeb Ansari, National Institute of Unani Medicine, Bengaluru for literary research in Unani Medicine. They were given a citation, a shawl and a cash award of Rs 200,000 each.

The Lifetime Achievement Awards were conferred on Dr. Syed Rafatullah, Complementary and Alternative Medicine Division, Armed Forces, Ministry of Defence, Riyadh, Saudi Arabia and Prof. Mohd. Anwar, Aligarh Muslim University, Aligarh for Best Researcher and Best Academician in Unani Medicine respectively. The awards comprised a citation, a shawl and a cash award of Rs. 200,000 each.

Release of CCRUM Publications

During the inaugural function of the conference, the dignitaries released the Conference Souvenir, 'Unani Medicine and Research Trends – An Insight' and 'Unani Medicine: The Science of Health and Healing – An Overview' published by the CCRUM. The dignitaries also released two other publications of the CCRUM, namely '*Qarābādīn-i-Jalālī*' and *'Kitāb al-Murshid'* during the valedictory session of the conference. The souvenir comprises 32 messages from dignitaries besides abstracts of papers presented during the conference and brief bios of resource persons / researchers, whereas 'Unani Medicine and Research Trends – An Insight' comprising three chapters presents an overview of Unani Medicine and an insight into recent researches in the system. 'Unani Medicine: The Science of Health and Healing – An Overview' presents an overview about the history and development of Unani Medicine through four chapters: Introduction; Unani System of Medicine in India; Major Milestones of Unani Medicine; and Globalization of Unani Medicine. Originally written in Persian by Jalaluddin Amrohvi, '*Qarābādīn-i-Jalālī*' is included in 'The Drugs and Cosmetics Act, 1940' and comprises description of more than 1000 tested Unani formulations, while '*Kitāb al-Murshid*' is a general treatise on medical aphorisms authored by legendary physician Muhammad b. Zakariyya Razi (d. 926 AD).

4.2.2. Inauguration of NRIUMSD by AYUSH Minister

Shri Shripad Yesso Naik, Hon'ble Minister of State (IC) for AYUSH and Minister of State for Defence, Government of India inaugurated National Research Institute of Unani Medicine for Skin Disorders (NRIUMSD) upgraded from Central Research Institute of Unani Medicine (CRIUM) at AG Colony Road, Erragadda, Hyderabad on November 03, 2019.

Shri G. Kishan Reddy, Hon'ble Minister of State for Home Affairs, Govt. of India, Shri Pramod Kumar Pathak, Additional Secretary, Ministry of AYUSH, Government of India and Prof. Asim Ali Khan, Director General, CCRUM were present on the occasion. Speaking on the occasion, Shri Shripad Yesso Naik lauded the success of the CRIUM in the treatment of vitiligo and other chronic and stubborn diseases and said that it's perhaps the only medical institution in the world which has treated more than 1.5 lakh patients of vitiligo alone.

In his address, Shri G. Kishan Reddy urged the researchers to find safe and viable solutions to prevalent health challenges, such as vector borne diseases, noncommunicable diseases, cancer and tuberculosis.

Addressing the audience, Shri Pramod Kumar Pathak highlighted current health challenges and urged to exploit the potential of Unani Medicine in addressing them through its cost-effective remedies.

Earlier in his welcome address, Prof. Asim Ali Khan, Director General, Central Council for Research in Unani Medicine (CCRUM) said that the NRIUMSD has been upgraded from the Central Research Institute of Unani Medicine (CRIUM), a premier institute under the CCRUM, for its commendable work in the field of skin disorders. He hoped that the visionary decision of Hon'ble AYUSH Minister for its upgradation as NRIUMSD would help it to develop as a state-of-the-art national facility for research and patient care for skin disorders along with other diseases.

4.2.3. National Seminar on IPR

The Central Council for Research in Unani Medicine (CCRUM), Ministry of AYUSH, Government of India organized a National Seminar on Intellectual Property Rights (IPR) at the Central Research Institute of Unani Medicine (RRIUM), Lucknow on July 10, 2019. The seminar highlighted issues related to IPR management and commercialization and significance of property rights and patents for a scientific organization.

The seminar was inaugurated by Shri Pramod Kumar Pathak, Additional Secretary, Ministry of AYUSH, Government of India. Dr. Mohd. Tahir, Advisor (Unani), Ministry of AYUSH, Prof. Asim Ali Khan, Director General, CCRUM, Dr. H. Purushotham, Chairman & MD, NRDC, New Delhi and Dr. Maqbool Ahmad Khan, Deputy Director Incharge, CRIUM, Lucknow graced the occasion.

Addressing the inaugural session, Shri Pramod Kumar Pathak appreciated the CCRUM for obtaining 17 patents related to the development of certain novel and therapeutic compositions and SCAR primers. He urged for conducting innovative research and obtaining more patents in the future.

Speaking on the occasion, Dr. Mohd. Tahir stressed the need for validating Unani System of Medicine in order to keep its relevance intact in the modern scientific world.

Dr. H. Purushotham said that dealing with patents is a serious business and appreciated the CCRUM for its achievements in this area. He assured that under the MoU signed between NRDC and CCRUM, assistance would be provided for filing patents and transfer of technology.

Earlier in his welcome address, Prof. Asim Ali Khan shed light on overall working and achievements of the Council and its research institutes. Underscoring the progress in the area of patenting, he informed that the CCRUM has been awarded 17 patents and another 13 applications are in pipeline with the Indian Patent Office (IPO). The inaugural session concluded with vote of thanks presented by Dr. Maqbool Ahmad Khan, Deputy Director Incharge, CRIUM, Lucknow.

The technical sessions had deliberations on Overview of IPR and Commercialization, Strengths of Unani Medicine: IPR Perspective, Patents, Bio-piracy and Traditional Knowledge Associated with Medicine, Patents and Herbals, Provisions for IPR in Biological Diversity Act 2002, Responsibility of IPR.

4.2.4. Seminar on Pharmacovigilance of ASU Drugs - Emerging Trends and Future Prospects

With a view to acquainting AYUSH practitioners, researchers and academicians working in different AYUSH institutions with the pharmacovigilance objectives, the Central Council for Research in Unani Medicine (CCRUM) organized a Seminar on Pharmacovigilance of ASU Drugs - Emerging Trends and Future Prospects at its Regional Research Institute of Unani Medicine, Chennai on November 20, 2019.

Inaugurating the seminar, Shri Pramod Kumar Pathak, Additional Secretary, Ministry of AYUSH, Government of India highlighted the necessity of pharmacovigilance and quality control in AYUSH sector. Appreciating increasing demand of herbal medicines at global level, he underscored the need to ensure quality and regulatory compliance and keep a tab on misleading advertisements.

Earlier in his welcome address, Prof. Asim Ali Khan, Director General, CCRUM shed light on the mechanism of pharmacovigilance in AYUSH systems and the role of researchers. Prof. S. P. Thyagarajan, former Vice Chancellor, University of Madras and Dean (Research), Sri Ramachndra University, Chennai and Prof. Dr. K. Kanakavalli, Director General, Central Council for Research in Siddha, Chennai also addressed the inaugural session.

Prof. Jugal Kishore, Safdarjung Hospital, New Delhi delivered the keynote address on 'Pharmacovigilance Program of India' and Padma Shri Dr. M. A. Waheed, former Director, Central Research Institute of Unani Medicine, Hyderabad delivered the special address on 'Pharmacovigilance – A Researcher's Perspective'. Later in the technical sessions, experts from various disciplines including Dr. Galib, Associate Professor, All India Institute of Ayurveda, New Delhi elaborated on various aspects of pharmacovigilance in AYUSH sector. The seminar concluded with the vote of thanks by Dr. N. Zaheer Ahmed, Incharge, Regional Research Institute of Unani Medicine, Chennai.

4.2.5. Lecture on Nutrition

The Central Council for Research in Unani Medicine (CCRUM) organized a lecture on *'Importance of Nutrition during Antenatal Care, Postnatal Care and for the Optimal Growth of Children'* at AYUSH Auditorium, New Delhi on September 27, 2019. The lecture was organized as a part of Rashtriya Poshan Maah (National Nutrition Month) celebration with an objective of spreading the message of nutrition – *'Sahi Poshan, Desh Roshan'*.

In his welcome address, Prof. Asim Ali Khan, Director General, CCRUM emphasized the need to tap potentials of AYUSH systems to address health problems arising due to malnutrition. He encouraged the researchers to take up the field for bringing out awareness material.

Speaking on the occasion, Prof. Vd. K S Dhiman, Director General, Central Council for Ayurvedic Sciences (CCRAS) said that AYUSH systems lay great emphasis on nutrition as they treat foods either as diet or medicine or both as diet and medicine.

In her lecture, Dr. Parmeet Kaur, Chief Dietician, AIIMS, New Delhi highlighted the importance of nutrition, important nutrients and dietary requirement of mother and child during first 1000 days. She also elaborated on sources of nutrition and presented a balanced diet plan for pre-pregnancy, pregnancy and lactating phases.

On this occasion, the dignitaries honoured the winners of Writoskill Competition – 2019 organized by the CCRUM on *'Importance of Nutrition during Antenatal Care, Postnatal Care and for the Optimal Growth of Children'*.

The program concluded with vote of thanks proposed by Dr. N Srikanth, Deputy Director General, CCRAS. Dr. Ghazala Javed, Research Officer (Unani), Scientist-IV coordinated and conducted the event which was well attended by researchers from the various research councils of Ministry of AYUSH.

4.2.6. Workshop on Simplification of Translation

The Council's Central Research Institute of Unani Medicine (CRIUM), Hyderabad organized a Workshop on Simplification of Translation on June 29, 2019 with an objective to train the officials for using Hindi language in official works.

In his introductory remarks, Dr. Munawwar H Kazmi, Deputy Director Incharge, CRIUM, Hyderabad urged the officials to adopt Hindi as the preferred language for discharging

official works. Dr. Gulam Mohammad Hussain, Research Officer (Pharmacology) and Incharge, Rajbhasha Anubhag at CRIUM, Hyderabad delivered keynote address on 'Simplification of Translation in Hindi Language'. He informed the participants about various websites and tools useful for Hindi translation and elaborated on how to effectively use them. The workshop concluded with vote of thanks proposed by Shri M A Bari Farooqui, Hindi Assistant, CRIUM, Hyderabad. Dr. Khadeerun Nisa, Assistant Director (Unani), Dr. Asiya Khanum, Assistant Director (Unani), Dr. Alokananda Chakraborty, Research Officer (Physiology) and all the officers and staff were present in the workshop. The workshop proved very useful for the participants.

4.2.7. Lecture on Research Designs

The Central Council for Research in Unani Medicine (CCRUM) organized a lecture on Research Design at its headquarters in New Delhi on May 8, 2019. The lecture delivered by Dr. Poornima Tiwari, Safdarjung Hospital aimed at capacity building of research personnel.

In his opening remarks on the occasion, Prof. Asim Ali Khan, Director General, CCRUM highlighted the importance of design in the course of research activities and encouraged the participants to develop good understanding of the subject. Dr. Poornima Tiwari who is professor at Department of Community Medicine, Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi enlightened the audience with her deep knowledge on the topic and elaborated various types of research designs, their characteristics, applicability and methodologies. Researchers from the Central Council for Research in Ayurvedic Sciences and Central Council for Research in Homoeopathy along with researchers of the CCRUM from its headquarters and institutes located in Delhi/NCR participated in the lecture.

4.2.8. Training Program on Translation

The Town Official Language Implementation Committee (TOLIC) (Central Offices - 1), Hyderabad in collaboration with the Central Translation Bureau organized a short-term Training Program on Translation at the Central Research Institute of Unani Medicine (CRIUM), Hyderabad during June 10–14, 2019. The training aimed at capacity building of translators and other eligible staff of government offices covered under the TOLIC.

In his introductory remarks, Dr. Munawwar H Kazmi, Deputy Director Incharge, CRIUM, Hyderabad and Chairman, TOLIC urged the officials to adopt Hindi as the preferred language for discharging official works. Shri Ishwar Chandra Mishra, Assistant Director, Central Translation Bureau (Bengaluru Centre), Shri Anil Kumar Sharma, Assistant Director, Central Translation Bureau (New Delhi) participated in the training as resource persons.

During the week-long program, both the resource persons shed light on importance of Hindi language and Official Language Policy, explained provisions of Official Languages Act and discussed technical aspects of Hindi translation in illuminating detail. They also elaborated responsibilities of Hindi translators and other government officials towards Hindi language. Syntax of Hindi and English languages, essentials of translation, necessity of having deep knowledge of source and target languages, elements to keep in mind while structuring sentences and other aspects of translation and linguistics were discussed at length. The trainers suggested using simple language in translation and avoiding complex

sentences and informed about various technical tools, dictionaries, Google and other websites suitable for translation work.

Hands-on training and translation tests of the participants were also conducted during the program. The training program that was spread in ten technical sessions concluded on June 14, 2019 with vote of thanks delivered by Shri M A Bari Farooqui, Member Secretary, TOLIC.

4.2.9. Lecture on Social Media

The Central Council for Research in Unani Medicine (CCRUM) organized a lecture on social media at its headquarters on June 14, 2019 with an aim to enlighten AYUSH professionals about exploiting the potentials of social media platforms in better outreach and effective propagation of AYUSH systems.

The lecture was delivered by Prof. Shohini Ghosh, Officiating Director, Anwar Jamal Kidwai Mass Communication Research Centre, Jamia Millia Islamia, New Delhi. In his introductory remarks, Prof. Asim Ali Khan, Director General, CCRUM shed light on the background of AYUSH and highlighted the activities and achievements of CCRUM in the area of research and development in Unani Medicine. Talking about the social media, he said that it is a powerful tool that can be leveraged for marketing of AYUSH drugs, getting AYUSH systems their due recognition and disseminating information about research outcomes and government initiatives under the Ministry of AYUSH.

Prof. Shohini Ghosh delivered her lecture on 'Communication Skills in Digital Age' and highlighted the tremendous changes that took place in the field of communication and social media. She discussed about the disruptions created by digital technology and its global impact in detail. She encouraged the AYUSH professionals to use digital tools judiciously and smartly to reach out to the public.

Around 40 AYUSH professionals from the Research Councils under the Ministry of AYUSH participated in the lecture. It was first of a series of lectures planned to be organized in line with the mandate of Ministry of AYUSH to promote and propagate AYUSH systems through various digital tools as mentioned in the National Health Policy 2017.

4.3. Participation in Seminars, Conferences, Workshops, Training Programmes

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, seminars, conferences, etc. During the reporting period, they participated in the following programmes:

- 1st World History of Unani Medicine Conference – 2019 organized by Nayyar-e-Tib Hakim Ahmed Ashraf Academy for Public Health and Medical Heritage at Hyderabad during November 28–30, 2019.
- 22nd National Convention on Knowledge, Library & Information Networking (NACLIN 2019) organized by Developing Library Network (DELNET), New Delhi at Udaipur, Rajasthan during September 18–20, 2019.
- 2nd IPC Interactive Meet on Pharamacopoeia Standards organized by All India Institute of Ayurveda, New Delhi at Ghaziabad on July 26, 2019.
- 5th IUPHAR World Conference on the Pharmacology of Natural Products organized by ICMR-National Institute of Nutrition at Hyderabad during December 4–7, 2019.

- 7th International Congress of Society for Ethnopharmacology (SFEC-2020) organized by School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi in association with Society for Ethnopharmacology, India at New Delhi during February 15–17, 2020.
- Homoeopathic Research Methodology and Biostatistics organized by Central Council for Research in Homoeopathy, New Delhi and J.S.P.S. Govt. Homoeopathic Medical College at Hyderabad during May 24–25, 2019.
- Indo-US Workshop on Human Diversity and Health Disparities organized by Centre for Cellular and Molecular Biology (CCMB) at Hyderabad during January 16–20, 2020.
- International Conference on Frontiers in Sustainable Agriculture and Biological Sciences (FSABS-2020) organized by Department of Botany, Periyar University at Salem, Tamil Nadu during March 16–17, 2020.
- International Conference on Fundamentals of Unani Medicine: The Basis for Complete Health organized by Ajmal Khan Tibbiya College, Aligarh Muslim University at Aligarh during December 3–4, 2019.
- International Conference on Recent Trends in Stochastic Modelling and its Applications (ICRTSMA-2020) organized by Department of Statistics, Manonmaniam Sundaranar University at Tirunelveli, Tamil Nadu during January 9–11, 2020.
- International Conference on Standardization of Diagnosis and Terminologies in Ayurveda, Unani and Siddha Systems of Medicine (ICoSDiTAUS-2020) organized by Ministry of AYUSH, Government of India at New Delhi during February 25–26, 2020.
- International Symposium on Cancer Prevention and Treatment organized by Jawaharlal Nehru University at New Delhi on February 20, 2020.
- IT Course for AYUSH Professionals organized by the Centre for Development of Advanced Computing (C-DAC), Pune during July 1–28, 2019.
- Medicinal Plants Buyers-Sellers Meet for Telangana and Andhra Pradesh organized by Regional cum Facilitation Centre (RCFC)-Southern Region, Kerala Forest Research Institute (KFRI), Peechi, Kerala, Telangana State Medicinal Plants Board (TSMPB), Telangana and Andhra Pradesh Medicinal and Aromatic Plants Board (APMAB), Vijayawada at Hyderabad on January 22, 2020.
- National Conference on Evidence Based Medicine (MCON'19) organized by Ajmal Khan Tibbiya College, Aligarh Muslim University, Aligarh during November 5–6, 2019.
- National Seminar on 'Tibb-e-Unani: Masail wa Wasail' organized by World Unani Foundation in collaboration with Jamia Hamdard at New Delhi on February 22, 2020.
- National Seminar on Conservation of Bioresources organized by Central Council for Research in Ayurvedic Sciences at New Delhi during August 13–14, 2019.
- National Seminar on Effective Protection of Traditional Knowledge and Cultural Expression: National and Community Experiences organised by National Law University at Guwahati, Assam during May 3–4, 2019.

- National Seminar on Holistic (Kulliyat Guided) Research in Unani Medicine organized by Ajmal Khan Tibbiya College, Aligarh Muslim University at Aligarh during February 24–25, 2020.
- National Seminar on Siddha organized by Central Council for Research in Siddha, Chennai at New Delhi on January 09, 2020.
- National Seminar on Varmam Science organized by Central Council for Research in Siddha at Chennai during August 22–23, 2019.
- National Workshop on Healthcare Waste Management organized by VMMC & Safdarjung Hospital at New Delhi during April 25–26, 2019.
- NDL-UNESCO International Symposium on Knowledge Engineering for Digital Library Design-2019 organized by National Digital Library, IIT, Kharagpur and IIT, Delhi at New Delhi during December 9–11, 2019.
- Pharma Vision - 2019 organized by Aisha Herbal Clinic & Research Centre, Hyderabad in collaboration with AIUTC (New Delhi), Una-Talk and Nizam Academy, Hyderabad at Sultan Salarjung Auditorium, Hyderabad on December 28, 2019.
- Preconference Workshop and Conference on Pharmacovigilance organized by Institute for Postgraduate Teaching & Research in Ayurveda at Gujarat during November 8–10, 2019.
- Seminar on Environmental Safety and Concerns - Its Impact on Health organized by Central Council for Research in Homoeopathy, New Delhi on December 21, 2019.
- Seminar on Prevention and Control of Non-Communicable Diseases organized by National Institute of Unani Medicine, Bangalore during December 16–17, 2019.
- Traditional Medicine-Modern Approaches for Affordable and Accessible Healthcare organized by Department of Science & Technology, Ministry of Science & Technology, Government of India at Noida during February 10–14, 2020.
- Workshop on Integrity - A Way of Life organized by National Research Institute of Unani Medicine for Skin Disorders at Hyderabad on October 30, 2019.

4.4. Participation in Arogya Fairs/ Expos

The Ministry of AYUSH, Government of India in collaboration with state governments and other stakeholders organizes and participates in Arogya fairs / expos and similar events 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 during the reporting period.

During all these events, the CCRUM showcased its progress in the area of clinical research, drug standardization, survey and cultivation of medicinal plants, and literary research. It also displayed posters and charts highlighting various concepts of Unani 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. The list of the events is as follows:

S. N.	Name of Event	Place	Duration
1.	International Health and Wellness Expo - The Yogshala Expo	New Delhi	10–12 May 2019
2.	Yoga Day Expo	New Delhi	21st June 2019
3.	Health Expo 2019	Dehradun, Uttarakhand	18–20 July 2019
4.	6th AYUSH Natural Expo	Goa	1–3 August 2019
5.	National Arogya	Vashi, Mumbai	22–25 August 2019
6.	Rise in Haryana	Hansi, Haryana	29–31 August 2019
7.	Bhopal Vigyan Mela	Bhopal, Madhya Pradesh	13–16 September 2019
8.	7th Indian National Exhibition	Kolkata	25–29 September 2019
9.	UDMA Day	New Delhi	11–14 October 2019
10.	11th East Himalayan Expo	Shillong, Meghalaya	16–22 October 2019
11.	Vibrant Goa	Goa	17–19 October 2019
12.	Arogya Mela	Mohali, Punjab	18–20 October 2019
13.	CII Chandigarh Fair 2019	Chandigarh	18–21 October 2019
14.	MTNL Perfect Health Mela	New Delhi	18–22 October 2019
15.	Arogya Mela	Udaipur, Rajasthan	19–22 October 2019
16.	India International Science Festival	Kolkata	5–8 November 2019
17.	India International Trade Fair	New Delhi	14–27 November 2019
18.	Yoga Utsav/Shivir	Uttarakhand	16–18 November 2019
19.	Expo at Parliament Annexe	New Delhi	18–29 November 2019
20.	Global Exhibition on Services	Bengaluru, Karnataka	26–28 November 2019
21.	State Level Arogya	Panjim, Goa	30 November–2 December 2019
22.	International Conference on Kulliyat	Aligarh, Uttar Pradesh	3–4 December 2019
23.	Chutka Sceintifica Literacy	Mandla, Madhya	5–7 December 2019

S. N.	Name of Event	Place	Duration
	cum Health and Wellness Festival	Pradesh	
24.	Sanrachna	Kathua, Jammu & Kashmir	5–7 Decemebr 2019
25.	State Level Arogya	Itanagar, Arunachal Pradesh	5–8 December 2019
26.	Punjab International Trade Expo	Punjab	12–16 December 2019
27.	State Level Arogya	Coimbatore	13–15 December 2019
28.	AYUSH Natural World Expo	Worli, Mumbai	17–29 December 2019
29.	Destination Gujarat	Gujarat	18–20 Decemebr 2019
30.	National Level Arogya Fair	Varanasi, Uttar Pradesh	19–22 December 2019
31.	71st Indian Pharmaceutical Congress	Chennai	20–22 December 2019
32.	107th Indian Science Congress	Bengaluru, Karnataka	3–7 January 2020
33.	National Seminar on Medicinal and Aromatic Plants	New Delhi	15th January 2020
34.	Mahakumbh Mela	Prayagraj, Uttar Pradesh	14th January–13th February 2020
35.	Global Agricultural Festival	Nashik, Maharashtra	23–27 January 2020
36.	Swadeshi Mela	Uttar Pradesh	25th January–3rd February 2020
37.	International Conference on Unani Medicine	New Delhi	11–12 February 2020
38.	National Arogya	Dehradun, Uttarakhand	12–16 February 2020
39.	Darshan Arogya Wellness Expo	Thrissur, Kerala	14–18 February 2020
40.	Rise in Uttar Pradesh	Ghaziabad, Uttar Pradesh	14–26 February 2020
41.	SFEC	Jamia Hamdard, New Delhi	15–17 February 2020
42.	International Yoga Fest	Hrishikesh	1–7 March 2020
43.	State Level Arogya	Aizawl, Mizoram	5–7 March 2020
44.	National Arogya	Bengaluru, Karnataka	11–15 March 2020

4.5. Participation in Promotion of Official Language

The CCRUM puts its best efforts for promotion of the official language in day-to-day functioning and adopts appropriate measures as per time-to-time instructions and guidance from the Department of Official Language. The Council has central as well regional official language implementation committees at its headquarters and regional research institutes / centers that monitor and review the status of the use of Hindi language in official dealings.

During the reporting period, the Council conducted review meetings, organized Hindi workshops and observed Hindi Pakhwada at its headquarters and institutes. The Pakhwada was observed to mark Hindi Diwas on 14th September and motivate employees to create an environment for implementation of the Official Language Policy in day-to-day work.

The Pakhwada at the headquarters was observed during September 5–19, 2019. Addressing the inaugural function on September 05, 2019, Prof. Asim Ali Khan, Director General, CCRUM stressed the need to increase use of Hindi in official as well as personal works and encouraged everyone to participate with zeal in the competitions and activities of Hindi Pakhwada. He urged that efforts for promotion of Hindi should not end with the conclusion of the Pakhwada but must continue throughout the year.

Dr. Jamal Akhtar, Research Officer (Unani) and Incharge, Hindi Section, CCRUM presented progress report with regard to the targets assigned for the year. Smt. Akhtar Parween, Hindi Assistant proposed vote of thanks.

The prize distribution function was organized on September 24, 2019. Speaking on the occasion, Dr. Anil Khurana, Director General, Central Council for Research in Homoeopathy, New Delhi emphasized that greater promotion of Hindi language needs sincere efforts at each level.

Speaking on the occasion, Shri Ramanand Meena, Deputy Secretary, Ministry of AYUSH, Government of India highlighted certain important aspects related to the implementation of official language policy.

In his address, Prof. Asim Ali Khan, Director General, CCRUM appreciated the efforts of the officials involved in successful organization of the Pakhwada.

During the function, officials with high score in sectionwise review of the quantum of work carried out in Hindi at the headquarters were awarded. The winners of various competitions organized to promote the language were also awarded. The competitions included Hindi Dictation, Hindi Translation, Hindi Note Writing, Hindi Debate, Hindi Poetry, Hindi Vocabulary and Hindi Essay Writing.

Hindi Pakhwada was also celebrated in various institutes / centres of the Council spread in different parts of the country and various competitions and activities similar to the headquarters were organized.

Apart from organizing the Hindi Pakhwada, the Council participated in the meetings of Town Official Language Implementation Committee and meetings of the 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, 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 formulated. 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.

4.6. Promotions

- Shri Mohammad Urooj was promoted as Research Officer (Pharmacology) at NRIUMSD, Hyderabad on May 06, 2019.
- Dr. Murugeswaran was promoted as Assistant Director (Botany) at DSRI, Ghaziabad on May 24, 2019.
- Smt. Kiran Negi was promoted as Assistant Research Officer (Pharmacognosy) at DSRU, New Delhi on June 13, 2019.
- Shri Subhashendu Singh was promoted as Assistant Research Officer (Pharmacognosy) at RRIUM, Bhadrak on June 13, 2019.
- Shri Akhlaq Mustafa was promoted as Research Officer (Chemistry) at DSRU, New Delhi on June 13, 2019.
- Shri Shoaib Ahmad Ansari was promoted as Research Officer (Chemistry) at DSRI, Ghaziabad on June 13, 2019.
- Shri Mohammad Younis Dar was promoted as Research Officer (Chemistry) at RRIUM, Srinagar on June 13, 2019.
- Shri M. Javed was promoted as Assistant Director (Administration) at CCRUM hqrs. on June 21, 2019.
- Dr. Mohammad Jameel was promoted as Research Officer (Botany/ Pharmacognosy) at RRIUM, Aligarh on August 28, 2019.
- Shri Aslam Siddiqui was promoted as Research Officer (Botany/Pharmacognosy) at NRIUMSD, Hyderabad on August 28, 2019.
- Dr. Priyanka Verma was promoted as Research Officer (Bio-chememistry) at RRIUM, New Delhi on December 13, 2019.
- Smt. Sonali Sajwan was promoted as Assistant Research Officer (Pharmacognosy) at DSRI, Ghaziabad on January 01, 2020.
- Dr. K. Venkatesan was promoted as Assistant Research Officer (Pharmacognosy) at RRIUM, Chennai on January 01, 2020.
- Shri Mohd. Parvez was promoted as Accounts Officer at CCRUM hqrs. on January 21, 2020.
- Shri Devanand was promoted as Assistant Director (Administration) at CCRUM hqrs. on January 22, 2020.
- Shri Ali Imran was promoted as Junior Administrative Officer at RRIUM, Patna on January 23, 2020.
- Shri Syed Anvaruddin Kirmani was promoted as Assistant at RRIUM, Chennai on February 03, 2020.
- Shri Oonnittan M.A. was promoted as Assistant at CRU, Bhopal on February 03, 2020.
- Shri Asif Abbasi was promoted as Assistant at RRIUM, New Delhi on February 03, 2020.

- Shri Mohd. Sabir was promoted as Assistant at CRIUM, Lucknow on February 03, 2020.
- Shri Parvez Akhtar was promoted as Assistant at RRIUM, Patna on February 03, 2020.
- Shri N.P. Sharma was promoted as Assistant at RRIUM, Aligarh on February 03, 2020.
- Smt. Gayatri Chawla was promoted as Assistant at CCRUM hqrs. on February 03, 2020.

4.7. Retirements

- Smt. Basanti Guha, Upper Division Clerk at RRIUM, Bhadrak retired on superannuation on April 30, 2019.
- Shri Syed Masood Iqbal, Ward Boy at RRIUM, Bhadrak retired on superannuation on April 30, 2019.
- Shri R. Chandrasekhar Babu, Upper Division Clerk at NRIUMSD, Hyderabad retired on superannuation on June 30, 2019.
- Shri HM Shivana, Lab Attendant at CRU, Bangalore retired on superannuation on June 30, 2019.
- Shri Abdul Kafi, Compounder at RRIUM, Aligarh retired on superannuation on July 31, 2019.
- Shri Ramiz Uddin Choudhury, Assistant Director (Administration) at CCRUM hqrs. retired on superannuation on July 31, 2019.
- Shri Ravi Ahuja, Plant Collector at CRIUM, Lucknow retired on superannuation on July 31, 2019.
- Shri A. Abdul Saleem, Pharmacy Attendant at RRIUM, Chennai retired on superannuation on July 31, 2019.
- Shri Mohd. Alluddin, Lab Attendant at RRIUM, Aligarh retired on superannuation on July 31, 2019.
- Shri Alampally Yadaiah, Mali at NRIUMSD, Hyderabad retired on superannuation on August 31, 2019.
- Shri Kurushna Chandra Naik, Ward Boy at RRIUM, Bhadrak retired on superannuation on September 30, 2019.
- Shri Mohd. Ahmad Tarique, Field Attendant at RRIUM, Bhadrak retired on superannuation on September 30, 2019.
- Shri Syed Osman, Upper Division Clerk at NRIUMSD, Hyderabad retired on superannuation on September 30, 2019.
- Smt. Shamshad Fatima, Assistant at RRIUM, Chennai retired on superannuation on October 31, 2019.
- Shri Farooq Ahmed Baba, Storekeeper at RRIUM, Srinagar retired on superannuation on October 31, 2019.
- Shri Mohammad Asif, Upper Division Clerk at CRU, Burhanpur retired on superannuation on November 30, 2019.

- Shri Pronay Roy, Driver at RRIUM, Bhadrak retired on superannuation on November 30, 2019.
- Shri Zameerul Islam, Junior Administrative Officer at RRIUM, Aligarh retired on superannuation on December 31, 2019.
- Shri Krishna Singh, Junior Administrative Officer at RRIUM, Patna retired on superannuation on December 31, 2019.
- Shri Mohd. Muqtader Khan, Pharmacist at NRIUMSD, Hyderabad retired on superannuation on January 31, 2020.
- Shri Rashid Ahmed Barbhuiya, Lab Attendant at RRC, Silchar retired on superannuation on January 31, 2020.
- Shri M. Javed, Assistant Director (Administration) at CCRUM hqrs. retired on superannuation on January 31, 2020.
- Shri Shahidul Khair, Research Officer (Botany) at DSRI, Ghaziabad retired on superannuation on January 31, 2020.
- Smt. Kalawati Kumari, Aya at RRIUM, Patna retired on superannuation on January 31, 2020.
- Dr. Sarfaraz Ahmad, Deputy Director at RRIUM, Aligarh retired on superannuation on February 29, 2020.
- Smt. Manibai Parmar, Sweeper at RRIUM, Mumbai retired on superannuation on February 29, 2020.
- Smt. Lilawati, Senior Library Attendant at CCRUM hqrs. retired on superannuation on February 29, 2020.
- Shri Zafruddin, Attendant at RRIUM, Aligarh retired on superannuation on February 29, 2020.
- Shri Naushad Ahmad Khazi, Lab Attendant at CRU, Bangalore retired on superannuation on March 31, 2020.
- Shri Nasser Ahmad, Driver at RRIUM, New Delhi retired on superannuation on March 31, 2020.

4.8. Deaths

- Mohd. Hidayath, Helper at NRIUMSD, Hyderabad died in harness on May 18, 2019.
- Shri M. Srinivas, Helper at NRIUMSD, Hyderabad died in harness on August 11, 2019.
- Shri Syed Haseeb Ahmed, Senior Production Assistant at CCRUM hqrs. died in harness on September 30, 2019.
- Shri Shaik Abdul Khader, Lab Technician at NRIUMSD, Hyderabad died in harness on January 30, 2020.
- Shri Narender Kumar, General Duty Assistant at RRIUM, New Delhi died in harness on February 22, 2020.

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 FOR THE YEAR ENDED 31 MARCH 2020

We have audited the attached Balance Sheet of Central Council for Research in Unani Medicine (Council) as at 31 March 2020, 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 2023-24. 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 (Schedule – 2) - ₹ 95.46 crore

A.1.1.1. Balance Sheet shows current liabilities amounting to ₹ 95.46 crore. However, there was an unutilized grant of ₹ 2.24 crore as on 31 March 2020, for which the Council has not depicted liability in the annual accounts ended March 2020. This has resulted in understatement of Current Liabilities and overstatement of Capital Fund by ₹ 2.24 crore.

A.2. Assets

A.2.1. Current Assets (Schedule – 5B) - ₹ 20.49 crore

A.2.1.1. The Fixed Deposits (as detailed in Annexure A) made by the Council were appearing in the accounts at its maturity value instead of deposit value, difference being the interest component. This has resulted in overstatement of Current Assets and capital fund by ₹ 1.11 crore.

B. General

B.1. The provisions for retirement benefits as required in the common format of accounts for the central autonomous bodies were not made on actuarial basis. This observation was also made during the previous audit.

B.2. As per Schedule-3/A of Earmarked Endowment funds, Council is maintaining 13 specific project accounts. Audit observed that there was no transaction in the following accounts during last year. Council shall review these accounts in case the projects have been closed then a decision shall be taken as per terms of grants either to refund the unspent amount or to take the balance as receipt of the Council.

Name of project	Closing balance as on 31.03.2020
Herb Garden	52706.00
Publication of Text books	59400.00
UPS a/c I	46704.82
AIIUM a/c	3549777.00
WHO a/c	2382.00
International events conference a/c	774604.00
DST a/c	764357.00
CRISM a/c	16775100.00
South African a/c	532484.68

B.3. Schedule of Income & Expenditure accounts shows capitalized expenditure as ₹ 8.75 crore. However, as per sanction letters, Grant-in-aid received for creation of capital assets is ₹ 6.00 crore. As no unspent balance of capital grant is appearing in accounts the excess capital expenditure of ₹ 2.75 crore is booked against the General grant which is against the terms and conditions of grant.

B.4. Scrutiny of records of Regional Research Institute of Unani Medicine (Institute), Okhla New Delhi revealed that the Institute has not

prepared Bank Reconciliation statement. The Institute maintains one bank account no. 603810100009151 in Bank of India at New Friends Colony, New Delhi. Bank statement shows opening balance of ₹ 884930/- as on 1 March 2019 and closing balance ₹ 2727465.00 as on 31 March 2020. However, the cash book shows Nil opening and closing balance. Institute prepares monthly Receipt and Payment account which also shows Nil opening balance and closing balance in March 2020. Hence, due to non preparation of Bank Reconciliation audit could not verify the reasons for difference in balances in cash book and Bank statement.

C. Grants-in-aid

(i) Health Account

The Council had received Grants-in-Aid of ₹ 174.54 (including ₹ 15.00 crore for the last year 2018-19, received in the current year) crore during 2019-20. The Council had unspent balance of Grants-in-Aid of ₹ 3.51 crore for the year 2018-19. The Council had generated ₹ 4.24 crore from its own resources. Thus, out of available amount of 18.32 crore, the Council utilized a sum of ₹ 180.08 crore leaving unspent balance of ₹ 2.24 crore as on 31.03.2020.

(ii) Specific Project Account

The Council also received grants of ₹ 0.77 crore for specific projects from various agencies, in addition to unspent balance of previous year ₹ 2.28 crore. The Council had its own receipts of ₹ 0.17 crore. The Council utilized ₹ 0.72 crore, leaving an unutilized balance of ₹ 2.50 crore as on 31.03.2020.

D. Management Letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of management of the Council 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 & Expenditure Account and Receipts & 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:

a. 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 at 31 March 2020; and

b. In so far as it relates to Income & Expenditure Account of the deficit for the year ended on that date.

For and on behalf of C&AG of India

Place: New Delhi
Date: 11.01.2021

Ashok Sinha
Principal Director of Audit
(Health Welfare & Rural Development)

ANNEXURE

1. Adequacy of internal audit system

The internal audit of the Council was conducted upto 2018-19 by the Ministry of Health & Family Welfare.

2. Adequacy of internal control system

Internal control system was not adequate as risk assessment was not done by the management. Further, 18 paras pertaining to the period 2014-19 were outstanding for settlement.

3. System of physical verification of fixed assets

The physical verification of fixed assets was conducted up to 2019-20 and no discrepancy was reported.

4. System of physical verification of inventory

The physical verification of Books and Publications was conducted up to 22.06.2017. The physical verification of stationery and consumables etc. was conducted upto 2019-20.

5. Regularity in payment of statutory dues

Payment of GST amounting to `19,684/- was outstanding as on 31.03.2020.

ANNEXURE - A

Head	S. No. in list of FDRs	Name of Bank	Accounts No.	Depp. Dated	Actual deposit amount	Deposit Amount shown in accounts	Difference
G.P.F – 2019-2020	1	Bank of India	602356110008036	24.2.2020	14969859.37	15935476.37	965617
	2	Bank of India	602345110011405	13.3.2020	12459075	13236641.00	777566
	3	Bank of India	602345110011406	13.3.2020	12459075	13236641.00	777566
	4	Union Bank	303/208501	4.12.2019	7764774	8265633.00	500859
	5	Union Bank	303/208502	4.12.2019	7958516	8471873.00	513357
	6	Union Bank	303/208503	4.12.2019	7759610	8260136.00	500526
	7	Union Bank	303/208500	4.12.2019	7958516	8471873.00	513357
	1	OBC	16103031007626	21.1.2020	15408454	16313728.00	905274
	2	OBC	16103031007633	21.1.2020	10506533	11123810.00	617277
G.I.S (2019)	2	Union B. of India	303/208708	13.4.2019	2472565	2643735.00	171170
	3	Union B. of India	532803030208705	13.4.2019	3090707	3304670.00	213963
New Pension Scheme (2019)	2	Union B. of India	532803030208720	18.4.2019	2472565	2643735.00	171170
Pension (2019)	1	Bank of Baroda	12870300019770	19.4.2019	9580687	10238902.00	658215
	3	Bank of Baroda	12870300036333	3.4.2019	9154975	9783942.00	628967
	4	Bank of Baroda	12870300036361	4.4.2019	9154975	9783942.00	628967
	5	Bank of Baroda	12870300036373	5.4.2019	9154975	9783942.00	628967
	6	Bank of Baroda	12870300036435	12.4.2019	9154975	9783942.00	628967
	7	OBC	16103031001501	1.10.2019	4685347	5312944.00	627597
	8	OBC	16103031001518	1.10.2019	4685347	5312944.00	627597
Total					**160851530**	**171908509.4**	**11056979**

5.2. Audited Statement of Accounts

Index of the Annual Accounts for the Year 2019–2020

S. No.	Name of the Accounts	Page No.	Schedules at Page No.
1.	Balance Sheet	112	116–130
2.	Income & Expenditure Account	113	131–138
3.	Receipt & Payment Account	114–115	139–166
4.	Notes on Accounts	167	-

Balance Sheet as on 31st March 2020

S. N.	Liabilities	Schedule No.	Page #	Current Year	Previous Year	S. N.	Assets	Schedule No.	Page #	Current Year	Previous Year
1.	Capital Fund	(S/1)	116	1,10,67,91,530.00	1,02,57,15,494.00	1.	Fixed Assets	(S/3)	123-125	1,27,73,42,844.00	1,20,83,00,726.00
2.	Current Liabilities and Provision for Retirement Benefits	(S/2)	117-118	95,45,81,348.00	1,02,11,94,462.00	2.	Investments (Others)	(S/5C)	126	53,03,06,979.00	48,19,49,928.00
3.	Earmarked/ Endowment Fund	S/3(A)	119-122	2,49,61,506.00	2,27,90,241.00	3.	Current Assets				
							(I) Loans & Advances	(S/5B)	127-128	20,48,66,764.00	30,88,57,211.00
							(II) Bank/Cash Balance: 4,88,56,291.23 2,49,61,506.00	(S/5A) (S/3A)	129-130	7,38,17,797.00	7,05,92,332.00
	Total			2,08,63,34,384.00	2,06,97,00,197.00		Total			2,08,63,34,384.00	2,06,97,00,197.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Income & Expenditure A/c for the Year Ending 31st March 2020

S. N.	Expenditure	Page #	Current Year	Previous Year	S. N.	Income	Page #	Current Year	Previous Year
1.	Establishment Expenditure	134	1,15,08,88,077.00	1,00,83,45,407.00	1.	GIA	131	1,59,54,00,000.00	1,45,50,00,000.00
2.	Administrative Expenditure	135	12,03,58,225.00	10,30,93,145.00	2.	Fee from MD Students	131	28,37,236.00	23,42,011.00
3.	Material & Supplies	136	13,77,63,783.00	9,66,24,912.00	3.	Bank Interest Earned	131	57,29,841.00	53,97,938.00
4.	Other Charges	137	11,65,40,808.00	9,92,74,590.00	4.	Interest on Refundable Advances	131	9,25,616.00	10,76,154.00
5.	Depreciation	138	1,84,96,415.00	1,84,36,810.00	5.	Income from Sale of Publications	131	3,14,955.00	2,90,551.00
6.	Balance Being Excess of Income over Expenditure	138	-	3,31,890.00	6.	Other Misc Income	132	1,99,15,695.00	2,35,81,928.00
					7.	Less. Capitalized	133	(-)8,75,38,533.00	(-)16,15,83,928.00
					8.	Excess of Expenditure Over Income	133	64,62,498.00	2,100.00
	Total Rs.		1,54,40,47,308.00	1,32,61,06,754.00		Total Rs.		1,54,40,47,308.00	1,32,61,06,754.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Receipt & Payment A/c for the Year Ending 31st March 2020

S. N.	Receipts	Page #	Current Year	Previous Year	S. N.	Payments	Page #	Current Year	Previous Year
1.	Opening Balance	139-140			1.	Establishment Expenses	153-154	1,14,91,67,788.00	83,79,52,592.00
	(i) Cash in Hand		4,45,855.00	4,40,855.00	2.	Administrative Expenses		11,99,64,498.00	10,29,36,510.00
					3.	Other Expenses			
	(ii) Cash at Bank		7,01,46,476.00	8,94,71,974.00		(i) Material & Supplies	153-154	13,76,03,153.00	6,72,96,862.00
	Total Opening Balance 7,05,92,331.00			-		(ii)) Advance to Govt. Servants	155-156	35,34,950.00	10,50,000.00
2.	GIA Received	139-140	1,60,30,77,500.00	-		(iii) Outstanding Advances	157-158	4,93,49,798.00	33,29,617.00
	(i) From Government of India			1,31,05,50,000.00		(iv) Other Charges		12,33,45,413.00	10,30,79,588.00
	(ii) From Other Sources			-	4.	Investments (Out of Own Funds)	161-162	60,16,69,707.00	27,19,85,303.00
3.	Bank Interest	139-140	2,54,31,077.00	1,48,21,251.00	5.	Fixed Assets	155-156	58,20,296.00	76,42,161.00
4.	Interest on Refundable Advances	141-142	9,25,616.00	10,76,154.00	6.	Work in Progress	157-158	8,59,99,364.00	15,40,00,000,.00
5.	Other Receipts (H)	141-142	4,13,25,176.00	2,65,39,658.00	7.	Publication (Priced)	155-156	2,80,399.00	96,548.00
6.	Pension Fund Receipt	151-152	31,87,00,000.00	9,50,00,000.00	8.	Remittance of Recoveries	159-160	13,60,49,842.00	12,44,98,141.00
7.	By Adjustment of Advances Pertaining to Previous Years				9.	Amount to be Received from Concerned A/c, Institutes	159-160	22,02,757.00	1,72,077.00
8.	Recoveries for Remittance	143-144	13,99,18,153.00	12,25,34,068.00		-do-	161-162	2,01,138.00	3,41,621.00
9.	Sale of Publications (Priced)	143-144	3,14,155.00	2,89,551.00	10.	Undisbursed Amount Disbursed	159-160	47,686.00	-

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Receipt & Payment A/c for the Year Ending 31st March 2020

S. N.	Receipts	Page #	Current Year	Previous Year	S. N.	Payments	Page #	Current Year	Previous Year
10.	Recovery of Subscription & Advances	145-146	5,67,95,560.00	6,53,10,717.00	11.	Other Misc. Payments/ Transfers	163-164	38,77,20,171.00	21,47,50,289.00
11.	Investment Received	149-150	55,33,12,656.00	25,02,21,919.00		Amount Payable Paid	163-164	13,13,96,378.00	4,04,74,546.00
12.	Amount Receivable Received	145-146	3,66,30,781.00	2,08,95,668.00	12.	Amount from LIC Disbursed	161-162	4,60,000.00	
13.	Refund of Advances Pertaining to Previous Years	145-146	76,68,189.00	2,61,244.00	13.	Closing Balance			
14.	Security Deposit Receivable Received		-	-	(i)	Cash in Hand (Imprest) 4,60,855.00	-		
15.	Security Deposit	147-148	-	95,470.00	(ii)	Cash at Bank 7,33,56,942.00	166	7,38,17,797.00	7,05,92,331.45
16.	In Transit in Previous Year Received	147-148	15,01,72,077.00	-					
17.	Payable to other A/c's	149-150	9,63,430.00	4,94,915.00					
18.	Recovery of Refundable Advances	143-144	18,71,861.00	21,27,352.00					
19.	LIC for Disbursement	149-150	4,60,000.00	67,391.00					
20.	Other Mis. Receipts	131-142	4,72,573.00	-					
	Total Rs.		3,00,86,31,135.00	2,00,01,98,187.00		Total Rs.		3,00,86,31,135.00	2,00,01,98,187.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Capital Fund (H) (2019-2020) Schedule (S/1)

S. N.		Health A/c		F.W. A/c	
		Current Year	Previous Year	Current Year	Previous Year
(A) 1.	Opening Balance	1,53,44,43,532.00	1,38,70,49,491.71	3,852.00	1,93,523.00
2.	Add: Capitalized during the Year	9,44,29,546.00	+16,18,95,007.00		
3.	(i) Less: Less: Refunds	(-)68,91,013.00	(-)14,04,324.00		
	(ii) Less: Publications (Pried) not Fixed Assets so Deducted	-	(-)1,30,96,643.00		
	(iii) Less: Excess of Expenditure Over Income	(-)51,51,92,498.00	(-)50,87,31,889.00	(-)1,889.00	(-)1,89,671.00
	Total (Rs.)	1,10,67,89,567.00	1,02,57,11,642.00	1,963.00	3,852.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Current Liabilities [S/2 (2019-2020)]

S.N.	Health A/c	Current Year	Previous Year
1.	Recovery of CPF/GPF Subscription & Advance(s)	-	-
2.	Recovery of Income Tax	27,83,767.00	-
3.	Recovery of NPS to be Transferred	6,91,404.00	-
4.	Security Deposits	17,65,188.00	14,87,363.00
5.	Amount Paid Short	23,798.00	23,798.00
6.	Undisbursed Amount	63,845.20	1,52,719.20
7.	GIS	360.00	100.00
8.	Recoveries Received but Schedules Awaited	2,288.75	2,288.75
9.	Audit Fee Payable	-	1,00,000.00
10.	Professional Tax	1,040.00	3,940.00
11.	UPC Amount from CCRAS for Expenditure	30,00,000.00	30,00,000.00
12.	Exps. Payable/ Provision for Retirement Benefits	34,26,04,674.00	47,21,81,160.00
13.	GIS Recovery Received in R/O Council's Staff on Deputation Credited Wrongly in Health A/c to be Transferred to GIS A/c		-
14.	OPD/Regn. Fee payable by RRIUM, New Delhi	36.00	36.00
15.	Security Deposit (From CCCBC, New Delhi)	4,03,000.00	4,03,000.00
16.	Amount Recovered from Employee (Details Awaited) RRI, Kolkata)	16,469.00	16,469.00
17.	TDS Contractors/Supplies	32.00	33.00
18.	Advance Received for Adjustment	2,50,000.00	2,50,000.00
19.	GST	52,020.00	20,869.00
20.	Miscellaneous Recoveries to be Adjusted/Remitted	-	18,104.00
21.	Amount out of O. B. lying with RRI, New Delhi at the Time of Decentralization after Making Disbursement During the Year 2010-2011	16,103.00	6,103.00
22.	Payable to AIIA	7,42,885.00	2,01,143.00
23.	Adjustment of Advance from Hqrs. ND to be Adjusted by Decentralized Institutes	4,43,840.00	2,44,586.00
	Total (Rs.)	35,28,60,749.75	47,81,21,711.95

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Current Liabilities [S/2 (2019-2020)]

S.N.	Health A/c	Current Year	Previous Year
(B)	F/W A/c	17,090.00	17,090.00
(C)	NPS A/c		
	• NPS Liability to NPS Subscribers	1,08,51,873.00	97,95,047.00
	• Bank Interest Earned & Accrued	1,25,68,728.00	1,19,19,788.00
(D)	GPF/ CPF A/c		
	• Liability of GPF/CPF to GPF/CPF Subscribers	30,20,15,743.49	28,78,42,486.49
	• GPF Current Liability	10,825.00	10,825.00
	• Bank Interest Earned & Accrued	15,67,17,951.33	13,96,80,713.00
	• GPF Advance	64,18,683.00	51,68,633.00
(E)	GIS A/c		
	• GIS Liability to GIS Subscribers	2,81,71,814.00	1,86,30,837.84
	• Excess Received	1,026.00	1,026.00
	• CGHS Amount Wrongly Credited to be Transferred to Health A/c	650.00	650.00
(F)	Pension fund A/c		
	• Pension Funds, Bank Interest & Payment of Pension/FP, Commutation of Pension A/c there from	8,49,46,213.13	7,00,05,652.13
	Total P/2	95,45,81,346.70	1,02,11,94,461.54

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule Forming Part of Balance Sheet as on 31st March 2020
(Schedule -3/A) Earmarked/Endowment Funds

S.N.	Name of the Scheme	Herb Garden A/c	Publication of Text Books	UPS A/c I	DSOP A/c	Pharmacovigilance A/c	Unani Day	AIIUM A/c	WHO A/c
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Opening Balance	40,529.00	57,401.00	46,704.82	2,22,287.05	-	8,08,690.00	34,71,729.00	2,302.00
	Total (a)								
(b)	Additions								
	Grant-in-Aid					11,77,500.00	50,00,000.00		
	Other Additions A/c of								
	Bank Interest	12,179.00	1,999.00		7,576.00		41,179.00	1,18,048.00	80.00
	From Health A/c								
	Recoveries for Remittances						25,299.00		
	Receivable Received								
	Misc Receipts						7,93,091.00		
	Total (b)								
	Total (a+b)	52,706.00	59,400.00	46,704.82	2,29,863.05	11,77,500.00	66,68,259.00	35,49,777.00	2,382.00
(c)	Utilization/Expenditure								
	i) Capital Expenditure								
	Assets								
	Others								
	ii) Revenue Expenditure								

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule Forming Part of Balance Sheet as on 31st March 2020
(Schedule -3/A) Earmarked/Endowment Funds

S.N.	Name of the Scheme	Herb Garden A/c	Publication of Text Books	UPS A/c I	DSOP A/c	Pharmacovigilance A/c	Unani Day	AIIUM A/c	WHO A/c
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Salaries/wages Allowances								
	Other Administrative Expenditure				3,215.05	4,87,500.00	54,35,274.00		
	Material & Supplies						3,63,690.00		
	Amount Payable Paid						8,977.00		
	Unspent Balance Refunded								
	Temporary Transfer to Health A/c to be Received								
	Total (c)				3,215.05	4,87,500.00	58,07,941.00		
	Net balance (a+b (-)c)	52,706.00	59,400.00	46,704.82	2,26,648.00	6,90,000.00	8,60,318.00	35,49,777.00	2,382.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule Forming Part of Balance Sheet as on 31st March 2020
(Schedule -3/A) Earmarked/Endowment Funds

S.N.	Name of the Scheme	IPR	International Events Conference A/c	DST A/c	CRISM A/c	South African A/c	Total	
							Current Year	Previous Year
		(9)	(10)	(11)	(12)	(13)	(14)	(15)
(a)	Opening Balance	2,352.00	7,44,739.00	7,64,357.00	1,61,54,410.00	5,14,741.68	2,27,90,240.55	2,44,72,676.55
	Total (a)							
(b)	Additions							
	Grant-in-Aid	15,00,000.00					76,77,500.00	55,50,000.00
	Other additions A/c of							
	Bank Interest		29,865.00		6,20,690.00	17,743.00	8,49,359.00	16,00,007.00
	From Health A/c							
	Recoveries for Remittances						25,299.00	11,322.00
	Receivable received							
	Misc Receipts						7,93,091.00	5,04,250.00
	Total (b)							76,65,579.00
	Total (a+b)	15,02,352.00	7,74,604.00	7,64,357.00	1,67,75,100.00	5,32,484.68	3,21,35,489.55	3,21,38,255.55
(c)	Utilization/Expenditure							
	i) Capital Expenditure							
	Assets							2,50,681.00
	Others							
	ii) Revenue Expenditure							
	Salaries/Wages							3,23,670.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule Forming Part of Balance Sheet as on 31st March 2020
(Schedule -3/A) Earmarked/Endowment Funds

S.N.	Name of the Scheme	IPR	International Events Conference A/c	DST A/c	CRISM A/c	South African A/c	Total	
							Current Year	Previous Year
		(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Allowances							
	Other Administrative Expenditure	8,75,327.00					68,01,316.05	61,19,822.00
	Material & Supplies						3,63,690.00	
	Amount Payable Paid						8977.00	
	Unspent Balance Refunded							26,53,842.00
	Temporary Transfer to Health A/c to be Received							
	Total (c)	8,75,327.00					71,73,983.05	93,48,015.00
	Net Balance (a+b (-)c)	6,27,025.00	7,74,604.00	7,64,357.00	1,67,75,100.00	5,32,484.68	2,49,61,506.50	2,27,90,240.55

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of (Fixed Assets) (S/3) (H) 2019-2020

S.N.			Current Year	Previous Year
1.	Machinery & Equipment		4,43,59,917.00	4,73,88,487.00
2.	Books & Journals		2,80,36,453.00	3,06,24,832.00
3.	Land		27,85,336.00	27,85,336.00
4.	Vehicles		15,60,854.00	17,34,282.00
5.	Furniture & Fixtures		3,69,39,766.00	3,96,20,255.00
6.	Buildings		2,90,23,582.00	3,22,48,424.00
7.	Computers		34,84,433.00	18,53,069.00
8.	Work-in-Progress		1,13,11,35,498.00	1,05,20,27,147.00
		Total (Rs.)	1,27,73,25,839.00	1,20,82,81,832.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Consolidated Schedule of Fixed Assets as on 31st March 2020
Schedule S/3

S.N.	Name of the Assets	Opening Balance as on 01.04.2019		Gross Block		Less: Sale of Council's Publications (Priced)		
			Addition	Deductions	Total	Opening Balance as on 01.04.2019	Sale during the Year	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Machinery & Equipment	12,10,14,655.11	18,10,192.00		12,28,24,847.11			
2.	Furniture & Fixture	9,48,60,015.82	13,86,099.00		9,62,46,114.82			
3.	Computers	2,89,24,669.00	47,14,092.00		3,36,38,761.00			
4.	Land	27,85,336.00			27,85,336.00			
5.	Works in Progress	1,05,20,27,147.00	8,59,99,364.00	(-) 68,91,013.00	1,13,11,35,498.00			
6.	Books & Journals	3,40,17,182.00	5,19,799.00		3,45,36,981.00			
7.	Vehicles	79,24,683.69			79,24,683.69			
8.	Building	13,43,46,873.00			13,43,46,873.00			
9.	Council's Publications (Priced)	1,60,65,989.50						
10.	Total	1491966551.12						
11.	Councils Publications Priced not Fixed Assets so Deducted from here	(-) 1,60,65,989.50						
	Total	1,47,59,00,561.62	9,44,29,546.00	(-) 68,91,013.00	1,56,34,39,094.62			

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Consolidated Schedule of Fixed Assets as on 31st March 2020
Schedule S/3

S.N.	Name of the Assets	Depreciation					Net Block	
		Rate of Depreciation	Opening Balance as on 01.04.2019	On Addition	On Deductions	Total	As on 31.03.2020	As on 31.03.2019
		(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Machinery & Equipment	10%	7,36,18,070.11	48,39,572.00		7,84,57,642.11	4,43,67,205.00	4,73,96,585.00
2.	Furniture & Fixture	10%	5,52,33,848.82	40,67,179.00		5,93,01,027.82	3,69,45,087.00	3,96,26,167.00
3.	Computers	60%	2,70,71,600.00	30,82,728.00		3,01,54,328.00	34,84,433.00	18,53,069.00
4.	Land	-	-				27,85,336.00	27,85,336.00
5.	Works in Progress	-	-				1,13,11,35,498.00	1,05,20,27,147.00
6.	Books & Journals	10%	33,87,466.00	31,08,666.00		64,96,132.00	2,80,40,849.00	3,06,29,716.00
7.	Vehicles	10%	61,90,401.69	1,73,428.00		63,63,829.60	15,60,854.00	17,34,282.00
8.	Building	10%	10,20,98,449.00	32,24,842.00		10,53,23,291.00	2,90,23,582.00	3,22,48,424.00
9.	Council's Publications (Priced)							1,30,96,643.00
10.	Total		26,75,99,835.62					1,221,397,369.00
11.	Councils Publications Priced not Fixed Assets so Deducted from here							(-)1,30,96,643.00
	Total		26,75,99,835.62	1,84,96,415.00		28,60,96,250.62	1,27,73,42,844.00	1,20,83,00,726.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Investments Out of the Following Funds as on 31st March 2020
Schedule S/5C

S.N.		Current Year	Previous Year
1	GPF	42,83,16,508.16	38,96,53,289.16
2.	GIS	1,83,52,763.00	1,76,07,432.00
3.	Pension Fund	6,60,00,558.00	5,75,38,347.00
4.	NPS	1,76,37,149.99	1,71,50,859.99
	Total S/5C	53,03,06,979.15	48,19,49,929.15

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Current Assets (S/5(B) (2019-2020)

(A)	Health A/c	Current Year	Previous Year
1.	Contingent Advance	14,61,96,984.00	10,08,50,599.00
2.	Exhibitions Advance	73,000.00	7,3000.00
3.	T.A Advance	2,14,785.00	2,59,785.00
4.	Excess Paid to be Recovered/Adjusted	8,107.00	2,580.00
5.	LTC Advance	7,66,397.00	6,44,201.00
6.	Advance for Seminar	8,47,215.00	11,04,037.00
7.	Pay Advance	-	12000.00
8.	Scooter Advance	1,00,876.00	1,86,376.00
9.	Fan Advance	768.00	768.00
10.	Car Advance	2,75,165.00	6,61,501.00
11.	Computer Advance	16,57,978.00	13,63,418.00
12.	House Building Advance	22,93,872.00	4,53,507.00
13.	In Transit Amount	36,40,602.15	15,01,95,531.05
14.	Security Deposits	4,70,311.00	4,70,311.00
15.	Medical Advance	1,85,000.00	4,78,651.00
16.	Receivable from IPR A/c	-	3,41,621.00
17.	Receivable from LIC	1,351.50	1,351.50
18.	Excess TDS to be Recovered/Adjusted	19,706.00	19,706.00
19.	Training Advance	4,50,225.00	51,550.00
20.	Ethics Committee Advance	72,024.00	1,17,529.00
21.	Share Amount Receivable from CCRYN, New Delhi	2,62,992.00	2,62,992.00
22.	Advance for A-HMIS	1,34,200.00	-
23.	Receivable from F.W. A/c	17,090.00	17,090.00
24.	Swachhta Action Plan Advance	15,86,196.00	16,97,203.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Current Assets (S/5(B) (2019-2020)

(A)	Health A/c	Current Year	Previous Year
25.	NPS	-	3,48,308.00
26.	Bank Balance lying with RRI Kolkata to be Received/Adjustments	19,323.00	19,323.00
27.	Hindi Pakhwada Advance	1,89,550.00	1,17,900.00
28.	Advance for Health Camp	1,59,928.00	1,59,928.00
29.	Excess Transfer to Pension Fund a/c to be Received in Health A/c		
30.	Arogya Advance	1,10,251.00	3,13,826.00
31.	DD Received from Decentralized Institutes Returned due to Time Barred Now to be Received therefrom.		
32.	International Conference & Unani Day Advance	2,00,000.00	2,00,000.00
33.	Receivable from (Plan)		
	Total (Rs.)	15,99,53,897.00	26,04,24,592.55
(B)	Family Welfare A/c (i) Current Assets	2047.94	2047.94
(C)	NPS A/c (ii) Accrued bank interest on FDRs invested	7,90,682.00	7,62,844.00
(D)	GPF A/c (iii) Current Assets (iv) GPF Advance (v) Accrued bank interest on FDRs invested	33,852.98 64,18,683.00 2,74,66,495.54	33,852.98 51,68,633.00 3,10,27,469.54
(E)	GIS A/c (vi) Current Assets Subscription in Transit (vii) Accrued Bank Interest on FDRs Invested (viii) Receivable from NPS A/c as Payment Wrongly Paid from GIS A/c	180.00 200.00 11,60,198.00 7,920.00	180.00 200.00 9,77,904.00 7,920.00
(F)	Pension Fund A/c • Accrued Bank Interest on FDRs Invested	90,32,607.00	1,04,51,567.00
	Total Rs.P/2	20,48,66,763.46	30,88,57,211.01

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Break-up of Closing Balance as on 31st March 2020
S/5A & S/3A

Bank of India (A)	Schedule 5/A 16602	70,23,072.99	Health A/c
	Decentralized Institutes Bank Balances	1,48,86,653.57	
	Imprest- Decentralized Institutes Imprest- Headquarters, New Delhi & Centralized Institutes	2,23,987.15 2,36,867.60	
	Total (A)	2,23,70,581.31	
Bank of India (B)	16601	29,27,663.14	GPF A/c
-do-	16640	86,52,229.84	GIS A/c
Bank of Baroda	8477	99,13,048.13	Pension A/c
State Bank of India	1088	49,92,768.81	NPS A/c
	Total (B)	2,64,85,709.92	
	Grand Total (A + B) Schedule S/5A	4,88,56,291.23	
State Bank of India (C)	Schedule S/3A 3988	1,67,75,100.00	CRISM A/c
-do-	11685	35,49,777.00	AIIUM A/c
Bank of India	19612	46,704.82	UPS Aligarh
-do-	17450	52,706.00	Herb Garden A/c
-do-	17450	6,27,025.00	IPR a/c
-do-	2226	59,400.00	Publication of Text Books
-do-	25291	2,26,648.00	DSOP A/c

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Break-up of Closing Balance as on 31st March 2020
S/5A & S/3A

-do-	3654	7,74,604.00	International Events Conferences
-do-	6063	5,32,484.68	Unani Chair South African
-do-	190312	7,64,357.00	DST A/c
-do-	24656	2,382.00	WHO A/c
State Bank of India	7704	6,90,000.00 8,60,318.00	(i) Ph-co.Vigilance A/c (ii) Unani Day Conferences A/c
	Total (C) Schedule S/3A	2,49,61,506.50	
Grant Total (A +B +C)		7,38,17,797.73	

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

(A) Schedule of Income of the Income & Expenditure A/c for the Year Ending 31st March 2020

S. No.		Current Year	Previous Year
1.	Grant-in-Aid From Central Government	1,59,54,00,000.00	1,45,50,00,000.00
	Total Rs.	1,59,54,00,000.00	1,45,50,00,000.00
2.	Fee from MD Students	28,37,236.00	23,42,011.00
3.	Bank Interest Earned on Saving Bank Balance (Health A/c)	57,29,841.00	53,97,938.00
4.	Interest on Refundable Advances of Scooter Advance, Car Advance, HBA, Computer Advance, etc.	9,25,616.00	10,76,154.00
5.	Income from Sale of Council's Publications (800/- + 314155)	3,14,955.00	2,90,551.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Income of the Income & Expenditure A/c for the Year Ending 31st March 2020

S.No. (6)	Other Income	Current Year	Previous Year
(i)	Sale of Tender Forms	5,250.00	13,400.00
(ii)	OPD, Registration, Investigation Fee from Patients	1,73,28,398.00	1,78,19,858.21
(iii)	Postal Order from Candidates	18,925.00	530.00
(iv)	Sale of Raddi	5,160.00	549.00
(v)	Cheques Issued in Previous Year Cancelled	69,751.00	66,946.00
(vi)	Excess Expenditure Previous Year Recovered/Reversed	7,36,664.00	67,391 + 27,80,130 + 8000.00
(vii)	I Card Fees	175.00	-
(viii)	License Fees	1,23,350.00	1,20,988.00
(ix)	Electricity and Water Charges	49,457.00	34,516.00 + 8725.00
(x)	NPS (Pran Card) Issued	95.00	-
(xi)	LSPC	47,248.00	42,548.00
(xii)	CGHS Recovery	11,27,100.00	14,08,535.00
(xiii)	Refunds from Collaborative Research Projects	98,191.00	-
(xiv)	Library User Charges	2,425.00	14,068.00
(xv)	Penal Interest	3,948.00	-
(xvi)	RTI Fee	30.00	10.00
(xvii)	Scrap/Condemned Items	11,647.00	3,02,025.00
(xviii)	Recovery of Excess Payment (SRPP)	2,299.00	-
(xix)	Miscellaneous Receipt	1,56,544.00	68,200.00
(xx)	Inadmissible TA Recovery	20,900.00	-
(xxi)	Excess Payment of Salary	91,209.00	-
(xxii)	Recovery of Leave Encashment (LTC)	16,929.00	-
(xxiii)	Misc Receipts Credited by Bank, Credit taken in Cash Book Now.	-	8,25,509.00
	Total S.No.6	1,99,15,695.00	2,35,81,928.00
	Grant Total 1 to 6	1,62,51,23,343.00	-

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Income of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No.(7)	Less: Capital Expenditure from GIA	Current Year	Previous Year
(i)	Machinery Equipments	18,10,192.00	49,69,813.00
(ii)	Furniture & Fixtures	13,86,099.00	6,14,061.00
(iii)	Computers	47,14,092.00	15,08,888.00
(iv)	Books & Journal	5,19,799.00	4,91,166.00
(v)	Works in Progress 8,59,99,364.00 Refunds (-) 68,91,013.00	7,91,08,351.00	15,40,00,000.00
	Total S.No.7	(-)8,75,38,533.00	(-)16,15,83,928.00
	Excess of Expenditure Over Income	64,62,498.00	2,100.00
	Grand Total (Income Side)	1,54,40,47,308.00	1,32,61,06,754.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

(B) Schedule of Expenditure of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No. 1.	Establishment Expenses	Current Year	Previous Year
(i)	Pay & Allowances, etc.	67,06,59,946.00	62,42,15,541.00
(ii)	Wages	8,00,95,693.00	6,48,77,271.00
(iii)	Council's Contribution to NPS	2,42,00,019.00	1,92,41,711.00
(iv)	Council's Contribution to GIS	1,03,51,490.00	-
(v)	Council's Contribution to CGHS	59,94,825.00	6,63,003.00
(vi)	Pension Fund Transfer	31,87,00,000.00	9,50,00,000.00
(vii)	TA	-	49,76,925.00
(viii)	Deposit Link Insurance Scheme	2,40,000.00	1,80,000.00
(ix)	Retirement Benefits, Gratuity & Leave encashment	3,83,81,425.00	2,89,48,193.00
(x)	Medical Advances	8,69,851.00	-
(xi)	Total (i) to (x)	1,14,94,93,249.00	
2.	Estt Expenses Payable		
	(i) 7th CPC Arrears	-	5,01,52,763.00
	(ii) Funds Released to Decentralized Institutes for Feb 2019 Salary	-	3,57,47,030.00
	(iii) Wages	-	67,496.00
	(iv) Provision for Retirement Benefits	13,94,828.00	8,42,75,474.00
	Total Rs.	1,15,08,88,077.00	1,00,83,45,407.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Expenditure of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No. 3.	Administrative Expenses	Current Year	Previous Year
(i)	Office Expenses	7,90,97,548.00	7,33,13,836.00
(ii)	Rent & Taxes	51,21,268.00	51,43,732.00
(iii)	Maintenance	1,17,41,604.00	1,16,90,649.00
(iv)	Information & Technology (M)	43,78,809.00	40,73,285.00
(v)	Consolidated Expenses	1,39,96,406.00	87,42,124.00
(vi)	TA	59,19,960.00	-
	Total	12,02,55,595.00	10,29,63,626.00
(vii)	Expenses Payable		
	(i) Rent & Taxes	1,02,630.00	2000.00
	(ii) Office Expenses	-	1,17,682.00
	(iii) Information & Technology	-	1,651.00
	(iv) Maintenance	-	8,186.00
	Total Rs.	12,03,58,225.00	10,30,93,145.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Expenditure of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No. 4.		Current Year	Previous Year
	Material & Supplies	13,76,03,153.00 1,60,630.00	6,72,96,861.94 -
	Material & Supplies payable	-	2,93,28,050.00
	Total Rs.	13,77,63,783.00	9,66,24,911.94

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Expenditure of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No.(5)	Other Charges	Current Year	Previous Year
(i)	SAP	13,75,841.00	25,79,433.00
(ii)	SRPP	21,64,656.00	1,93,58,367.00
(iii)	Training Programme	5,99,235.00	2,40,486.00
(iv)	Hindi Pakhwada	9,81,971.00	14,23,755.00
(v)	Health Mela	12,85,500.00	4,20,317.00
(vi)	Collaborative Research Projects	81,87,258.00	57,54,796.00
(vii)	Health Mela/Exhibition	-	7,29,119.00
(viii)	Unani Day/Seminar	6,86,700.00	4,22,390.24
(ix)	Arogya Fair	12,53,379.00	5,31,290.00
(x)	Health Camps	68,721.00	3,13,813.00
(xi)	EMR	75,780.00	2,28,027.00
(xii)	Ethics Committee	2,02,818.00	1,07,330.00
(xiii)	UPC Expenses	34,753.00	42,241.00
(xiv)	GPF Dormant A/c (Cr) in Health A/c so Payment on this A/c Made from	-	43,871.00
(xv)	NPCDCS	2,99,53,789.00	2,88,08,706.00
(xvi)	Seminar/Workshop	6,66,626.00	20,23,090.00
(xvii)	GIA to Chemical Research Unit, Aligarh	-	1,50,000.00
(xviii)	Unani Academic Course	6,73,49,204.00	3,53,72,176.00
(xix)	NABH Accreditation	4,35,745.00	3,68,233.00
(xx)	A-HMIS	7,06,474.00	3,68,233.00
(xxi)	Council's Publication (Priced)	2,80,399.00	96,548.00
(xxii)	Medical Advances	2,31,959.00	-
(xxiii)	Misc. Expenses	-	2,14,531.00
	Exps. Payable SRPP	-	46,071.00
	Total Rs.	11,65,40,808.00	9,92,74,590.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Expenditure of Income & Expenditure A/c for the Year Ending 31st March 2020

S.No. (6)	Depreciation	Current Year			Previous Year		
		Health	(F.W)	Total	Health	(F.W)	Total
(i)	Machinery & Equipments	48,38,762.00	810.00	48,39,572.00	50,79,342.00	900.00	50,80,242.00
(ii)	Furniture & Fixtures	40,66,588.00	591.00	40,67,179.00	43,78,824.00	657.00	43,79,481.00
(iii)	Computers	30,82,728.00	0.00	30,82,728.00	18,13,762.00	0.00	18,13,762.00
(iv)	Books & Journals	31,08,178.00	488.00	31,08,666.00	33,86,923.00	543.00	33,87,466.00
(v)	Vehicles	1,73,428.00	0.00	1,73,428.00	1,92,698.00	0.00	1,92,698.00
(vi)	Building	32,24,842.00	0.00	32,24,842.00	35,83,161.00	0.00	35,83,161.00
	Total Rs.	1,84,94,526.00	1889.00	1,84,96,415.00	1,84,34,710.00	2100.00	1,84,36,810.00
	Grand Total (A) to (E)	1,84,96,415.00		1,54,40,47,308.00	1,84,36,810.00		1,32,57,74,864.00
	Excess of Income Over Expenditure			-			3,31,890.00
	Grand Total (Exp Side) Rs.			1,54,40,47,308.00			1,32,61,06,754.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	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				1,30,50,00,000.00		
	(a) Cash-in-Hand (Imprest)	4,41,867.60	4,36,867.60	1,59,54,00,000.00		57,29,841.00	53,97,937.67
	(b) Cash-in-Hand (Other than Imprest)	3,987.15	3,987.15				
	(c) Cash-at-Bank	3,46,81,075.23	79,07,846.43				
	Total (Health A/c) S. No. 1	3,51,26,929.98	83,48,701.18	1,59,54,00,000.00	1,30,50,00,000.00	57,29,841.00	53,97,937.67
2.	Other Specific Accounts						
	(i) IPR	2,352.00	-	15,00,000.00	3,50,000.00		
	(ii) Herb Garden A/c	40,527.00	39,140.00			12,179.00	1,387.00
	(iii) Pub. Of Text Books A/c	57,401.00	55,435.00			1,999.00	1,966.00
	(iv) UPS A/c	46,704.82	46,704.82			-	-
	(v) DSOP	2,22,287.05	2,14,784.05			7,576.00	7,503.00
	(vi) AIIUM A/c	34,31,729.00	33,14,201.00			1,18,048.00	1,17,528.00
	(vii) Digitalization of Manuscript A/c	-	123.00				1.00
	(viii) National Conference on Unani Day	8,08,690.00	-	50,00,000.00	52,00,000.00	41,179.00	49,171.00
	(ix) WHO A/c	2,302.00	2,223.00			80.00	79.00
	(x) International Events, Conference A/c	7,44,739.00	709,529.00			29,865.00	35,210.00
	(xi) DST A/c	7,64,357.00	40,31,453.00				40,254.00 +7,36,840.00
	(xii) Pharmacovigilance Workshop A/c	-	-	11,77,500.00	-	-	-
	(xiii) CRISM A/c	1,61,54,410.00	1,55,61,970.00			6,20,690.00	5,92,440.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Opening Balance		GIA		Bank Interest	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(1)		(2)		(3)	
	(xiv) South African A/c	5,14,741.68	4,97,113.68			17,743.00	17,628.00
	Total S. No. 2	2,27,90,240.55	2,44,72,676.55	76,77,500.00	55,50,000.00	8,49,359.00	16,00,007.00
3.	(i) NPS A/c	38,01,131.81	18,75,124.81			3,06,225.00	1,30,412.00
	(ii) CPF/GPF A/c	68,19,413.14	83,02,928.14			1,44,66,871.00	51,37,740.00
	(iii) GIS A/c	38,877.84	12,08,324.84			4,00,481.00	81,353.00
	(iv) Pension Fund A/c	20,15,738.13	4,57,05,073.13			36,78,300.00	24,73,801.00
	Total S. No. 3	1,26,75,160.92	5,70,91,450.92	-	-	1,88,51,877.00	78,23,306.00
	Grand Total S. No. 1 to 3	7,05,92,331.45	8,99,12,828.65	1,60,30,77,500.00	1,31,05,50,000.00	2,54,31,077.00	1,48,21,250.67

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	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)	
1.	Health Scheme A/c	2,10,03,086.00	2,58,57,548.21	9,25,616.00	10,76,154.00	4,72,573.00	67,391.00
	Total S. No. 1	2,10,03,086.00	2,58,57,548.21	9,25,616.00	10,76,154.00	4,72,573.00	67,391.00
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Text Books A/c						
	(iv) UPS A/c I						
	(v) South African Unani Chair A/c						
	(vi) DSOP						
	(vii) EMR						
	(viii) Digitalization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						
	(xvii) International Conference on Unani Day	7,93,091.00	5,04,250.00				
	Total S. No. 2	7,93,091.00	5,04,250.00				

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	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)	
3.	(i) NPS A/c						
	(ii) CPF/GPF A/c	8,04,156.00	1,04,462.00				
	(iii) GIS A/c	98,64,927.00	-				
	(iv) Pension Fund A/c	80,86,599.00	73,398.00				
		7,73,317.00	-				
	Total S. No. 3	1,95,28,999.00	1,77,860.00				
	Grand Total S. No. 1 to 3	4,13,25,176.00	2,65,39,658.21	9,25,616.00	10,76,154.00	4,72,573.00	67,391.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Recoveries of Refundable Advances		Sale of Council's Publications		Recoveries for Remittance	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(7)		(8)		(9)	
1.	Health Scheme A/c	18,71,861.00	21,27,352.00	3,14,155.00	2,89,551.00	13,96,63,114.00	11,75,73,207.00
2.						2,29,640.00 100.00	1,86,640.00
	Total S. No. 1	18,71,861.00	21,27,352.00	3,14,155.00	2,89,551.00	13,98,92,854.00	11,77,59,847.00
3.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Text Books A/c						
	(iv) UPS A/c I						
	(v) Seminar A/c						
	(vi) DSOP						
	(vii) EMR						
	(viii) Digitalization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Recoveries of Refundable Advances		Sale of Council's Publications		Recoveries for Remittance	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(7)		(8)		(9)	
	(xvii) International Conference on Unani Day					25,299.00	11,322.00
	Total S. No. 2					25,299.00	11,322.00
4.	(i) NPS A/c						
	(ii) CPF/GPF A/c						
	(iii) GIS A/c						
	(iv) Pension Fund A/c					-	47,62,899.00
	Total S. No. 3					-	47,62,899.00
	Grand Total S. No. 1 to 3	18,71,861.00	21,27,352.00	3,14,155.00	2,89,551.00	13,99,18,153.00	12,25,34,068.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Recovery of Subscription/Advances		Refund of Advances Paid in Previous Year		Receivable Amount Received	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(10)		(11)		(12)	
1.	Health Scheme A/c			7,77,176.00	400.00		
				68,91,013.00	2,15,172.00	6,19,446.00	3,91,070.00
				-	45,672.00	-	(+)49,118.00
	Total S. No. 1			76,68,189.00	2,61,244.00	6,19,446.00	4,40,188.00
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. Of Text Book A/c						
	(iv) UPS A/c I						
	(v) Seminar A/c						
	(vi) DSOP						
	(vii) EMR						
	(viii) Digitalization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST A/c						
	(xiii) Donation A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Recovery of Subscription/Advances		Refund of Advances Paid in Previous Year		Receivable Amount Received	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(10)		(11)		(12)	
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						
	(xvii) National Conference on Unani Day						
	Total S. No. 2	-	-	-	-	-	-
3.	(i) NPS A/c	10,56,826.00	17,95,595.00			3,15,014.00	-
	(ii) CPF/GPF A/c					2,89,29,697.00	1,64,21,537.00
	CPF/GPF A/c Subscription	5,36,54,104.00	6,05,64,710.00				
	CPF/GPF A/c Advance	12,64,950.00	20,40,250.00				
	(iii) GIS A/c	8,19,680.00	9,10,162.00			9,77,904.00	28,61,467.00
	(iv) Pension Fund A/c					57,88,720.00	11,72,476.00
	Total S. No. 3	5,67,95,560.00	6,53,10,717.00			3,60,11,335.00	2,04,55,480.00
	Grand Total S. No. 1 to 3	5,67,95,560.00	6,53,10,717.00	76,68,189.00	2,61,244.00	3,66,30,781.00	2,08,95,668.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Security Deposit Lying with the Council		In Transit Amount Received		Security Deposit of the Council with Others Received	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
1.	(i) Health Scheme A/c	-	50,000.00	1,72,076.90			
	(ii) Health Scheme A/c	-	(+)45,470.00	15,00,00,000.00			
	(iii) TDS			15,01,72,076.90			
	Total S. No. 1		95,470.00				
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) Seminar A/c						
	(vi) DSOP A/c						
	(vii) EMR A/c						
	(viii) Digitalization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST a/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Security Deposit Lying with the Council		In Transit Amount Received		Security Deposit of the Council with Others Received	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
	(xvii) CICISM A/c						
	Total 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		95,470.00	15,01,72,076.90			

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Payable Amount		Investment Received		LIC Amount for Disbursement	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(16)		(17)		(18)	
1.	(i) Health Scheme A/c	39.00 21,252.00	4,94,915.00				
	(ii) Health Scheme A/c	7,42,885.0	-				
	(iii) TDS	1,99,254.00	-				
	Total S. No. 1	9,63,430.00	4,94,915.00				
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) Seminar A/c						
	(vi) DSOP						
	(vii) EMR A/c						
	(viii) Digitalization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						
	(xvii) CICISM A/c						
	Total S. No. 2						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Payable Amount		Investment Received		LIC Amount for Disbursement	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(16)		(17)		(18)	
3.	(i) NPS A/c			69,42,487.00			
	(ii) CPF/GPF A/c			42,84,94,195.45	19,51,28,196.47		
	(iii) GIS A/c			1,07,66,346.00	1,47,21,718.00	4,60,000.00	
	(iv) Pension Fund A/c			10,71,09,628.00	4,03,72,005.00		
	Total S. No. 3			55,33,12,656.45	25,02,21,919.47	4,60,000.00	
	Grand Total S. No. 1 to 3	9,63,430.00	4,94,915.00	55,33,12,656.45	25,02,21,919.47	4,60,000.00	

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Pension Fund Transfer from Health Account		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	Current Year	Previous Year
		(19)		(20)		(21)	
1.	Health Scheme A/c					1,96,01,60,058.00	1,46,72,16,299.06
	Total S. No. 1					1,96,01,60,058.00	1,46,72,16,299.06
2.	Other Specific Accounts						
	(i) IPR A/c					15,02,352.00	3,50,000.00
	(ii) Herb Garden A/c					52,706.00	40,527.00
	(iii) Pub. of Textbook A/c					59,400.00	57,401.00
	(iv) UPS A/c I					46,704.82	46,704.82
	(v) DSOP					2,29,863.05	2,22,287.05
	(vi) AIIUM A/c					35,49,777.00	34,31,729.00
	(vii) Digitalization of Manuscript A/c					-	124.00
	(viii) WHO A/c					2,382.00	2,302.00
	(ix) International Events, Conference A/c					7,74,604.00	7,44,739.00
	(x) International Conference on Unani day					66,68,259.00	57,64,743.00
	(xi) DST A/c					7,64,357.00	48,08,547.00
	(xii) CRISM A/c					1,67,75,100.00	1,61,54,410.00
	(xiii) South Unani Chair Asian a/c					5,32,484,68	5,14,741.68

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Receipts for the Year Ending 31st March 2020

S. N.	Head	Pension Fund Transfer from Health Account		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	Current Year	Previous Year
		(19)		(20)		(21)	
	(xiv) Pharmacovigilance workshop A/c					11,77,500.00	-
	Total S. No. 2					3,21,35,489.55	3,21,38,255.55
3.	(i) NPS A/c					1,24,21,683.81	38,01,131.81
	(ii) CPF/GPF A/c					53,44,33,386.59	28,76,99,823.14
	(iii) GIS A/c					2,33,28,215.84	1,97,83,024.84
	(iv) Pension Fund A/c	31,87,00,000.00	9,50,00,000.00			44,61,52,302.13	18,95,59,652.60
	Total S. No. 3	31,87,00,000.00	9,50,00,000.00			1,01,63,35,588.37	50,08,43,632.39
	Grand Total S. No. 1 to 3	31,87,00,000.00	9,50,00,000.00			3,00,86,31,135.92	2,00,01,98,187.00

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

Sd/-
(Mohammad Parvez)
Accounts Officer

Sd/-
(Devanand)
Assistant Director (Admn.)

Sd/-
(Prof. Asim Ali Khan)
Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme A/c	1,14,91,67,788.00	83,76,28,922.00	11,99,64,498.00	10,27,96,567.00	13,76,03,153.00	6,72,96,861.94
	Total S. No. 1	1,14,91,67,788.00	83,76,28,922.00	11,99,64,498.00	10,27,96,567.00	13,76,03,153.00	6,72,96,861.94
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) South African Unani Chair A/c						
	(vi) DSOP						
	(vii) EMR						
	(viii) Digitization of Manuscript A/c				124.00		
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICST A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c		3,23,670.00		1,39,819.00		
	(xvi) CRISM A/c						
	(xvii) South African A/c						
	Total S. No. 2		3,23,670.00		1,39,943.00		

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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	1,14,91,67,788.00	83,79,52,592.00	11,99,64,498.00	10,29,36,510.00	13,76,03,153.00	6,72,96,861.94

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme A/c	58,20,296.00	73,91,480.00	2,80,399.00	96,548.00	35,34,950.00	10,50,000.00
	Total S. No. 1	58,20,296.00	73,91,480.00	2,80,399.00	96,548.00	35,34,950.00	10,50,000.00
2.	Other Specific Accounts						
	(i) ROTP A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Text Books A/c						
	(iv) UPS A/c I						
	(v) South African Unani Chair A/c						
	(vi) DSOP A/c						
	(vii) EMR A/c						
	(viii) Digitization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) DST A/c		2,50,681.00				
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xvi) South African A/c						
	Total S. No. 2		2,50,681.00				
3.	(i) NPS A/c						
	(ii) GPF A/c						
	(iii) GIS A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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)	
	(iv) Pension Fund A/c						
	Total S. No. 3						
	Total S. No. 1 to 3	58,20,296.00	76,42,161.00	2,80,399.00	96,548.00	35,34,950.00	10,50,000.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme A/c	4,75,55,163.00		Comp 973,711.00 M/E 39,500.00 Rec 84,202.00 M/E 60,644.00			
		14,30,945.00	12,15,883.00	F/F 24,000.00	N.R. (+) 1,92,448.00	8,59,99,364.00	
				B&J 16,342.00	Rec. 9,78,42,176.24		
	Health Scheme A/c		18,66,319.00	Comp 5,67,419.00			
	Health Scheme A/c			Rec 11,47,78,279.00			15,40,00,000.00
	Total S. No. 1	4,89,86,108.00	30,82,202.00	11,65,44,097.00	9,80,34,624.24	8,59,99,364.00	15,40,00,000.00
2.	Other Specific Accounts						
	(i) IPR			8,75,327.00	3,47,648.00		
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) AIIUM A/c						
	(vi) DSOP a/c			3,215.05			
	(vii) EMR A/c						
	(viii) Digitization of Manuscript A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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)	
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) Pharmacovigilance workshop			4,87,500.00			
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						
	(xvii) International Conference on Unani Day	3,63,690.00	2,47,415.00	54,35,274.00	46,97,316.00		
	(xviii) South African A/c						
	Total S. No. 2	3,63,690.00	2,47,415.00	68,01,316.05	50,44,964.00		
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	4,93,49,798.00	33,29,617.00	12,33,45,413.05	10,30,79,588.24	8,59,99,364.00	15,40,00,000.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme A/c					47,686.00	
	(i) Health Scheme A/c	21,97,230.00	1,72,076.90	13,58,11,225.00	11,95,37,280.00		
	Health Scheme A/c	5254.00 273.00		2,29,640.00	1,86,640.00		
	Total S. No. 1	22,02,757.00	1,72,076.90	13,60,40,865.00	11,97,23,920.00	47,686.00	
2.	Other Specific Accounts						
	(i) IPR						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) AIIUM A/c						
	(vi) DSOP A/c						
	(vii) EMR A/c						
	(viii) Digitization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICSJ A/c						
	(xiii) Donation A/c						
	(xiv) International Events Conference A/c						
	(xv) DST A/c			-			
	(xvi) CRISM A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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)	
	(xvii) International Conference on Unani Day			8,977.00	11,322.00		
	(xviii) South African A/c						
	Total S. No. 2			8,977.00	11,322.00		
3.	(i) NPS A/c						
	(ii) GPF A/c						
	(iii) GIS A/c						
	(iv) Pension Fund A/c				47,62,899.00		
	Total S. No. 3				47,62,899.00		
	Total S. No. 1 to 3	22,02,757.00	1,72,076.90	13,60,49,842.00	12,44,98,141.00	47,686.00	

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	Name of the Scheme	Amount remitted by the Decentralized Institutes but Receivable in Hqrs, New Delhi		Investments A/c		Received from LIC Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
1.	Health Scheme A/c	2,01,138.00	3,41,621.00				
	Total S. No. 1	2,01,138.00	3,41,621.00				
2.	Other Specific Accounts						
	(i) IPR						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) AIIUM A/c						
	(vi) DSOP A/c						
	(vii) EMR A/c						
	(viii) Digitization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICSJ A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						
	(xv) DST A/c						
	(xvi) CRISM A/c						
	(xvii) International Conference on Unani Day						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	Name of the Scheme	Amount remitted by the Decentralized Institutes but Receivable in Hqrs, New Delhi		Investments A/c		Received from LIC Disbursed	
		Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
		(13)		(14)		(15)	
	(xviii) South African A/c						
	Total S. No. 2						
3.	(i) NPS A/c			74,28,777.00			
	(ii) GPF A/c			46,71,57,414.45	21,11,04,774.47		
	(iii) GIS A/c			1,15,11,677.00	1,76,07,432.00	4,60,000.00	
	(iv) Pension Fund A/c			11,55,71,839.00	4,32,73,097.00		
	Total S. No. 3			60,16,69,707.45	27,19,85,303.47	4,60,000.00	
	Grand Total S. No. 1 to 3	2,01,138.00	3,41,621.00	60,16,69,707.45	27,19,85,303.47	4,60,000.00	

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme						
	(i) Health Scheme A/c	2,01,143.00	90,000.00				
	Health Scheme A/c	13,11,95,235.00	7,32,000.00				
	Health Scheme A/c		3,96,52,546.00				
	Total S. No. 1	13,13,96,378.00	4,04,74,546.00				
2.	Other Specific Accounts						
	(i) IPR A/c						
	(ii) Herb Garden A/c						
	(iii) Pub. of Textbook A/c						
	(iv) UPS A/c I						
	(v) AIIUM A/c						
	(vi) DSOP A/c						
	(vii) EMR A/c						
	(viii) Digitization of Manuscript A/c						
	(ix) WHO A/c						
	(x) NMPB A/c						
	(xi) UPS A/c II						
	(xii) ICSJ A/c						
	(xiii) Donation A/c						
	(xiv) International Events, Conference A/c						

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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)	
	(xv) DST A/c				(1,42,117 + 25,11,725 + 6,76,178)		
	(xvi) CRISM A/c						
	(xvii) International Conference on Unani Day						
	Total S. No. 2				33,30,020.00		
3.	(i) NPS A/c			138.00			
	(ii) GPF A/c			6,30,16,265.00	19,41,000.00		
	-do-			5,56,721.00	4,63,64,063.00		
	-do-			7,73,317.00	2,01,41,169.00		
	-do-			2,006.00	13,29,404.00		
	(iii) GIS A/c			20,86,207.00 6,18,102.00	16,64,978.00 6,224.00 +178.00 4,65,335.00		
	(iv) Pension Fund A/c			32,05,94,445.00 72,970.00	13,95,07,918.00		
	Total S. No. 3			38,77,20,171.00	21,14,20,269.00		
	Grand Total S. No. 3	13,13,96,378.00	4,04,74,546.00	38,77,20,171.00	21,47,50,289.00		

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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.	Health Scheme						
	(i) Health Scheme A/c			2,23,70,581.31	3,51,26,929.98	1,96,01,60,058.00	1,46,72,16,299.06
	Total S. No. 1			2,23,70,581.31	3,5126,929.98	1,96,01,60,058.00	1,46,72,16,299.06
2.	Other Specific Accounts						
	(i) Pharmacovigilance Workshop A/c			6,90,000.00		11,77,500.00	
	(ii) Herb Garden A/c			52,706.00	40,527.00	52,706.00	40,527.00
	(iii) Pub. of Textbook A/c			59,400.00	57,401.00	59,400.00	57,401.00
	(iv) UPS A/c I			46,704.82	46,704.82	46,704.82	46,704.82
	(v) DSOP A/c			2,26,648.00	2,22,287.05	2,29,863.05	2,22,287.05
	(vi) AIIUM A/c			35,49,777.00	34,31,729.00	35,49,777.00	34,31,729.00
	(vii) Digitization of Manuscript A/c			-	-		124.00
	(viii) WHO A/c			2,382.00	2,302.00	2,382.00	2,302.00
	(ix) International Events, Conference A/c			7,74,604.00	7,44,739.00	7,74,604.00	7,44,739.00
	(x) IPR			6,27,025.00	2,352.00	15,02,352.00	3,50,000.00
	(xi) DST A/c			7,64,357.00	7,64,357.00	7,64,357.00	48,08,547.00
	(xii) CRISM A/c			1,67,75,100.00	1,61,54,410.00	1,67,75,100.00	1,61,54,410.00
	(xiii) South African A/c			5,32,484.68	5,14,741.68	5,32,484.68	5,14,741.68
	(xiv) International Conference on Unani day			8,60,318.00	8,08,690.00	66,68,259.00	57,64,743.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

Schedule of Payments for the Year Ending 31st March 2020

S. N.	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)	
	Total S. No. 2 (ii to xiv)			2,49,61,506.50	2,27,90,240.55	3,21,35,489.55	3,21,38,255.55
3.	(i) NPS A/c			49,92,768.81	38,01,131.81	1,24,21,683.81	38,01,131.81
	(ii) GPF A/c			29,27,663.14	68,19,413.14	53,44,33,386.59	28,76,99,823.14
	(iii) GIS A/c			86,52,229.84	38,877.84	2,33,28,215.84	1,97,83,024.84
	(iv) Pension Fund A/c			99,13,048.13	20,15,738.13	44,61,52,302.13	18,95,59,652.60
	Total S. No. 3			2,64,85,709.92	1,26,75,160.92	1,01,63,35,588.37	50,08,43,632.39
	Grand Total S. No. 1 to 3			7,38,17,797.73	7,05,92,331.45	3,00,86,31,135.92	2,00,01,98,187.00

Sd/-	Sd/-	Sd/-	Sd/-
(Syed Asif Mian)	(Mohammad Parvez)	(Devanand)	(Prof. Asim Ali Khan)
Consultant (Accounts)	Accounts Officer	Assistant Director (Admn.)	Director General

5.3. Notes on Accounts

1. Annual accounts of the Council for the year 2019–2020 have been prepared on the uniform format of Account for Central Autonomous Boides (Non-profit organization).
2. The Central Council for Research in Unani Medicine is fully financed by Govt. of India, Ministry of AYUSH through Grant-in-Aid. Therefore, income tax is not applicable on the organization.
3. The said accounts prepared on accrual basis.
4. Schedule are attached whereever necessary.
5. Depreciation has been charged on assets on diminishing balance method.
6. The construction works are 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 the Ministry of AYUSH, Government of India.
8. A schedule of investment prepared every year and given to audit which is duly reconciled with actual documents figure mentioning there the rate of interest duration, amount and name of Institutions, etc.
9. Retirement benefits are treated as per the Government of India 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 2019–2020 has been approved by the competent authority i.e. Standing Finance Committee on September 02, 2020.

Sd/-
Assistant Director (Admn.)
CCRUM, New Delhi

APPENDIX-I

INSTITUTIONAL NETWORK OF CCRUM

1 **Central Council for Research in Unani Medicine**
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 **National Research Institute of Unani Medicine for Skin Disorders**
Opp. ESI Hospital, AG Colony Road
Erragadda, Hyderabad – 500 038
Telangana
Phone: +91-40-23811551, 23810246
E-mail: criumhyderabad@gmail.com

3 **Central Research Institute of Unani Medicine**
Basaha, Kursi Road, Lucknow – 226 026
Uttar Pradesh
Phone: +91-522-2361720
E-mail: crium_lko@yahoo.co.in

4 **Hakim Ajmal Khan Institute for Literary & Historical Research in Unani Medicine**
Dr. MA Ansari Health Centre
Jamia Millia Islamia, Okhla
New Delhi – 110 025
E-mail: lriumnew1986@gmail.com

5 **Regional Research Institute of Unani Medicine**
1, West Meda Church Street, Royapuram
Chennai – 600 013, Tamil Nadu
Phone: +91-44-25955519
E-mail: rriumchennai@gmail.com

6 **Regional Research Institute of Unani Medicine**
Chandbali Bypass Road, Near Rural Police Station, Bhadrak – 756 100, Odisha
Phone: +91-6784-240289
E-mail: rriumbdk_unani@yahoo.co.in

7 **Regional Research Institute of Unani Medicine**
Guzri, Patna City, Patna – 800 008, Bihar
Phone: +91-612-2631106
E-mail: rriumpatna@gmail.com

8 **Regional Research Institute of Unani Medicine**
Shahjahan Manzil
Near AMU Riding Club, Qila Road, Aligarh – 202 001, Uttar Pradesh
Phone: +91-571-2704781, 2701399
E-mail: rrium_aligarh@rediffmail.com

9 **Regional Research Institute of Unani Medicine**
JJ Hospital Compound, Byculla, Mumbai – 400 008, Maharashtra
Phone: +91-22-23718706
E-mail: rrium_mumbai@gmail.com

10 **Regional Research Institute of Unani Medicine**
University of Kashmir Campus, Hazrat Bal
Srinagar – 190 006, Jammu & Kashmir
Phone: +91-194-2421604
E-mail: rrium.srinagar@gmail.com

11 **Regional Research Institute of Unani Medicine**
250A/29, GT Road (North), Liluah
Howrah – 711 204, West Bengal
Phone: +91-33-26550108
E-mail: kolrrium@gmail.com

12 **Regional Research Institute of Unani Medicine**
D-11/1, Abul Fazal Enclave, Jamia Nagar
New Delhi – 110 025
Phone: +91-11-26922759
E-mail: rriumdelhi@gmail.com

13 **Drug Standardization Research Institute**
PLIM, Sector–23, Kamla Nehru Nagar
Ghaziabad – 201 002, Uttar Pradesh
Phone: +91-120-2783029
E-mail: dsriccrum@gmail.com

14 **Regional Research Centre**
B-501/4, GTB Nagar, Opp. Dulhan Palace
Kareli, Allahabad – 211 016, Uttar Pradesh
Phone: +91-532-2551223
E-mail: rrcallahabad@gmail.com

15 **Regional Research Centre**
SM Dev Civil Hospital, Silchar – 788 001 (Cachar) Assam
Phone: +91-3843-267522
E-mail: crukxj522@gmail.com

16 **Drug Standardization Research Unit**
61-65, Institutional Area, Opposite D Block
Janakpuri, New Delhi – 110 058
Phone: +91-11-28521981
E-Mail: dsru.newdelhi@gmail.com

17 **Clinical Research Unit**
Kurupatil Nina Memorial, Near Panchayat Office, Edathala (N)
Alweye – 683 564, Kerala
Phone: +91-484-2836006
E-mail: crukerala@gmail.com

18 **Clinical Research Unit**
National Institute of Unani Medicine
Kotigepaliya, Magadi Main Road
Bengaluru – 560 091, Karnataka
Phone: +91-80-25480863
E-mail: crubangalore2000@yahoo.com

19 **Clinical Research Unit**
Dr. Abdul Haq Unani Medical College
40/23 Park Road, Kurnool – 518 001
Andhra Pradesh
E-mail: cru.kurnool@gmail.com

20 **Clinical Research Unit**
Cantonment General Hospital, Soti Ganj
Begumpul, Meerut – 250 001, Uttar Pradesh
Phone: +91-9012843253
E-mail: doctormtk@gmail.com

21 **Clinical Research Unit**
Gandhi Medical College, Bhopal – 462 001, Madhya Pradesh
Phone: +91-755-2540590
E-mail: cruu_incharge@yahoo.com

22 **Clinical Research Unit**
SH Unani Tibbiya College, Ganpati Naka
Burhanpur – 450 331, Madhya Pradesh
Phone: +91-7325-252250
E-mail: cruburhanpur@rediffmail.com

23 **Chemical Research Unit**
Department of Research in Unani Medicine, Near Office of Dean, Faculty of Science, Aligarh Muslim University
Aligarh – 202 001, Uttar Pradesh

24 **Unani Medical Centre**
(Extension Centre of RRIUM, New Delhi)
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 **Unani Medical Centre**
(Extension Centre of RRIUM, New Delhi)
VMMC & Safdarjung Hospital
New OPD Block, Ansari Nagar East, New Delhi – 110029
Phone: +91-11-26707121

NOTES

NOTES

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE
Ministry of AYUSH, Government of India
61–65, Institutional Area, Janakpuri, New Delhi – 110 058
Telephone: +91-11-28521981, 28525982
E-mail: unanimedicine@gmail.com
Website: http://ccrum.res.in

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE
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Website: www.ccrum.res.in