Annual Report 1997-98

CENTRAL COUNCIL FOR RESEARCH IN UNANI MEDICINE
Ministry of Health & Family Welfare, Government of India
NEW DELHI

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CCRUM

PREFACE

Unani Medicine forms an integral part of our national health care delivery organization. The government is providing increasing funds and support for all-round development of this system of health as well as other Indian systems of medicine. And to-day India has the largest network of educational, research, health care and pharmaceutical institutions of Unani Medicine.

As far as research in Unani Medicine is concerned, Central Council for Research in Unani Medicine (CCRUM) – which is an autonomous organization under the Ministry of Health, Government of India – is the world leader. Since its inception in 1979, the Council is busy conducting fundamental and applied research on various aspects of Unani Medicine. The research programme of the Council comprises clinical research, drug standardization, survey and cultivation of medicinal plants, literary research and family welfare research. During the year 1997-98 systematic studies continued in these areas.

Under the clinical research programme, clinical and therapeutic studies continued on 18 diseases, some of them having national priorities. During the reporting period, studies were completed on 18 formulations that were tested in different diseases. The Council applied for patents for seven Unani formulations/drugs – two for malaria, two for rheumatoid arthritis, one for bronchial asthma and two for infective hepatitis, whereas 11 other formulations are in the process of patentization. Besides development of new research drugs, validation trials of 18 kit medicines for common ailments that have been developed by the Council were also completed during the reporting period.

In the fundamental research, phase-II study on scientific evaluation of the concept of Akhlat (humors) and Mizaj (temperament) continued. Regimental therapy, namely Hajamat (cupping), experimentation also continued in musculo-skeletal disorders at different centres.

During the period under report, the work on standardization of single and compound drugs continued at different centres. Also, standardization work on different parameters of 61 single drugs and five compound formulations was undertaken. Besides, standardization of 34 pharmacopoeial single drugs allotted by the Department of Indian Systems of Medicine and Homoeopathy (ISM & H) was also undertaken. Standardization of method of manufacture of compound formulations also continued.

Under the survey and cultivation of medicinal plants programme, certain forest regions in Andhra Pradesh, Jammu & Kashmir, Orissa, Tamil Nadu and Uttar Pradesh were explored during the reporting period for their medicinal wealth. Besides, experimental cultivation of 13 plant species and large scale cultivation of nine important medicinal plants were also undertaken at the Council's herb gardens. A new herb garden on 19 acres of land provided by the Lucknow Development Authority has also been developed at Lucknow and medicinal plants of common interest are being maintained there.

Under the literary research programme, editing and translation of important Unani classics continued. During the reporting period, Urdu translation of two important books, namely Kitab-al-Hawi and Moalijat-e-Buqratia (each having three volumes) was published.

Under the family welfare research programme, trial of a Unani drug that not only proved a potent galactagogue but also enhanced the inter-pregnancy period, continued at different centres.

It is hoped that the Council would be able to achieve the set targets in developing safe, successful and cost-effective treatment for those diseases for which there is no viable solutions in other systems of medicine. Besides, standardization of Unani formulations and development of agro-techniques for cultivation of rare Unani medicinal plants are the main areas of thrust during the Ninth Five Year Plan period.

25 February 1999

Hakim Mohammed Khalid Siddiqui
Director

ADMINISTRATIVE REPORT ⇨


CCRUM

ADMINISTRATIVE REPORT

The Central Council for Research in Unani Medicine (CCRUM), which was established in 1979 to initiate, aid, conduct, develop and co-ordinate scientific research in Unani system of medicine continued its research activities during the current financial year with emphasis on consolidation and finalization of research work carried out at different centres.

Objectives

The main objectives of the Council are :

1. Formulation of aims and patterns of research on scientific lines in Unani Medicine.
2. To undertake research or other programmes in Unani Medicine.
3. 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.
4. To initiate, aid, conduct, develop and co-ordinate scientific research in 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.
5. To finance enquiries and researches for the furtherance of objectives of the Council.
6. To exchange information with other institutions, associations and societies interested in the objectives similar to those of the Council and specially in observation and study of diseases in the East in general and in India in particular.
7. To prepare, print, publish and exhibit papers, posters, pamphlets, periodicals and books to achieve the objects of the Council and to contribute to such literature.

Governing Body

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

Following was the constitution of the Governing Body of the Council during the reporting period.

President

Minister of State for Health & Family Welfare, Government of India.

Vice-President

Hakim Abdul Hameed, Chancellor, Jamia Hamdard, New Delhi, and Aligarh Muslim University, Aligarh.

Official Members

1. Secretary, Indian Systems of Medicine & Homoepathy (ISM&H) Ministry of Health & Family Welfare, Government of India.

2. Joint Secretary (ISM&H), Department of Indian Systems of Medicine &. Homoeopathy, Ministry of Health & Family Welfare, Government of India.
3. Joint Secretary & Financial Advisor (FA), Ministry of Health & Family Welfare, Government of India.

Non-Official Members

1. Prof. Hakim M. Taiyab, Aligarh.
2. Prof. Hakim S. Khaleefathullah, Chennai.
3. Hakim Madan Swarup Gupta, New Delhi.
4. Hakim Iqbal Ahmed, Delhi.
5. Hakim Ved Prakash Sharma, Bassi Pathanan, Punjab.
6. Prof. R.D. Kulkarni, Mumbai.
7. Prof. Irshad Masood, Roorkee.
8. Prof. Wazahat Husain, Aligarh.
9. Prof. S.N.A. Rizvi, New Delhi.

Member-Secretary

Hakim Mohammed Khalid Siddiqui, Director, Central Council for Research in Unani Medicine, New Delhi.

The Governing Body could not meet during the reporting period.

EXECUTIVE BOARD

The Executive Board (EB) of the Council consisted of the following members during the period under report.

1. Prof. Hakim S. Khaleefathullah, Chennai – *Chairman*
2. Joint Secretary (ISM&H), Department of Indian Systems of Medicine & Homoeopathy, Ministry of Health & Family Welfare, Government of India – *Member*
3. Joint Secretary & Financial Advisor (FA), Ministry of Health & Family Welfare, Government of India – *Member*
4. Prof. Hakim Mohammed Taiyab, Aligarh – *Member*
5. Hakim Madan Swarup Gupta, New Delhi – *Member*
6. Prof. Wazahat Hussain, Aligarh – *Member*
7. Hakim Mohammed Khalid Siddiqui, Director, CCRUM, New Delhi – *Member-Secretary*

During the reporting period the Executive Board of the Council met thrice. The first meeting was held on 11 June 1997, and the second meeting on 17 September 1997. The third meeting of the Board was held on 27 February 1998. In the first meeting held on 11 June 1997, the Executive Board was introduced about its powers and functioning. The Board was apprised of the objectives of the Council. The activities and achievements made in different research programmes during the past 18 years were reviewed. The Board considered and approved various proposals including approval of the annual progress report of the Council for the year 1996-97, payment of the property tax of

CRIUM, Hyderabad building, construction of building for the Regional Research Institutes of Unani Medicine (RRIUM) at Srinagar, Madras and New Delhi, redesignation of the post of Secrutiy Incharge-cum-Care Taker. The Executive Board considered and approved various recommendations made by Finance Committee in its meeting held on 27 May 1997. These included payment of hospital patient care allowance to the CCRUM employees based on the orders of Ministry of Finance as applicable in CGHS, revision of remuneration of Senior Research Fellows and Junior Research Fellows and scheme for adhoc research projects, upgradation of the Clinical Research Unit, Karimganj (Assam), establishment of Tribal Health Care Project at Burhanpur, approval of the Budget Estimates for the year 1997-98 (Plan and Non-Plan) in respect of CCRUM, conversion of Current Bank Account to Savings Bank Account as per the audit observations, approval of the rent in respect of the RRIUM, Bhadrak @ Rs. 15,000/- per month approximately subject to, however, fair assessment of the State Government authorities, and approval for provision of tissue culture lab, glass/green house at the Herb Garden, Lucknow.

The Executive Board also considered the proposal for increasing the bed strength in the in-patient department (IPD) at CRIUM, Hyderabad from 35 to 100 and authorised the Director, CCRUM to prepare a fresh staff requirement and submit to the Finance Committee keeping in view that the posts like chowkidar, security staff, catering staff, may be made only on contract basis and no regular such posts are proposed. The Executive Board also considered and approved holding of silver jubilee celebration of CRIUM, Hyderabad and authorised the Director to prepare a comprehensive plan.

In the second meeting of the Executive Board held on 17 September 1997, the Board confirmed the minutes of its first meeting held on 11 June 1997. Report of the action taken on various decisions taken in the first meeting was endorsed. The Executive Board considered and approved various recommendations made by the Finance Committee of the Council in its meetings held on 1 August 1997 and 26 August 1997. These included proposals for the approval of the continuation of plan scheme in the present shape for the on-going schemes of the CCRUM, undertaking work of identifying two marker compounds for each single Unani drugs, approval for incentive scheme for selection of research topics for MD (Unani) scholars of the choice of the CCRUM, rent in respect of RRIUM, Patna subject to the fulfilment of codal formalities, computerisation at the CCRUM, Headquarters and other centres along with the financial sanction of Rs. 4.00 lakhs in the first phase, payment of rent by CCRUM in connection with Mystique India Exhibition 1997, granting option for conversion of the CPF beneficiaries to GPF cum DCR in the light of 1987 orders subject, however, to the approval of Department of Pension of the Government of India, creation of additional posts for CRIUM, Hyderabad subject

however to phasing of the project and sanction of the competent authority, introduction of element of charged services for laboratory investigations on the pattern of CSIR subject to the details being considered by the Finance Committee, grant of special disability leave and reimbursement of medical claims for the employees of CRIUM, Hyderabad, subject however, to sanction of competent authority of the Government of India.

The Executive Board also considered and approved annual report of the Council for the year 1996-97 with the suggestion to slightly modify the report so that it become more acceptable and informative for the readers. Translation and publication of Unani literature into Hindi and other regional languages was also considered. The Board felt although it is not within the purview of the CCRUM to undertake production of text books yet it would be desirable if the literature generated by CCRUM is also of help to the students at undergraduate and postgraduate levels. The Council may undertake production of text books as an extramular project. The Board constituted a sub-committee under the chairmanship of the Director, CCRUM to decide about the type and nature of books to be produced and mode of translation/publication etc. The other members of the Committee may be Chairman, Scientific Advisory Committee, CCRUM, Chairman, Education Committee of the CCIM and Hakim M.S. Gupta as a representative member of CCIM. The Scientific Advisory Committee of the Council may also look into the aspects of rendering the entire classical literature from Arabic/ Persian into other languages.

The Executive Board appreciated the proposal of Director, CCRUM, for the production of health literature in the form of small pamphlets/booklets on maternal and child health and safe motherhood and proper development of child. The Board desired that the Chairman SAC may constitute small working group which can screen such pamphlets before their publication.

In the third meeting held on 27 February 1998 the Executive Board confirmed the minutes of the second meeting of the Board held on 17 September 1997. Action taken report on various decisions of the second meeting of the Executive Board was endorsed. The annual report of the Council together with the audited statement of the Accounts for the year 1996-97 was approved. The Board also considered and approved various recommendations of the Finance Committee made in its meeting held on 26 December 1997. The Board also agreed to the proposal for investment of funds of GPF/CPF with other financial institutions than Nationalised Banks with a view to getting better returns so as to minimize the gap between interest payable to the employees for the GPF/CPF accumulations and the interest earned from the Bank and advised the Director to ascertain details from various investment agencies and put up concrete proposals to the Finance Committee for consideration. The Executive Board recommended that the Council may concentrate on finalizing the

drugs and obtaining their patents for possible commercial exploitation. The Executive Board considered the proposals of finalization of research reports, monographs, introduction of merit promotion scheme for medical and non-medical scientists, sanction of hospital patients care allowance and revision of remuneration for Senior and Junior Research Fellows and authorised the Council's Director to persue these matters vigorously. The members of the Executive Board desired that the Council should hold an International seminar on Unani medicine by the end of year 1998.

Finance Committee

The Finance Committee of the Council consisted of the following members during the period under report.

1. Joint Secretary (ISM&H), Department of Indian Systems of Medicine & Homoeopathy, Ministry of Health & Family Welfare, Government of India. — *Chairman*
2. Joint Secretary & Financial Advisor (FA), Ministry of Health & Family Welfare, Government of India. — *Member*
3. Hakim Iqbal Ahmad Delhi — *Member*
4. Hakim Mohammed Khalid Siddiqui Director, CCRUM, New Delhi. — *Member-Secretary*

During the reporting period the Finance Committee of the Council met four times.

In the first meeting of the Finance Committee held on 27 May 1997, the Committee confirmed the minutes of the meeting held on 20 November 1996. Action taken on the various recommendations made in the said meeting was endorsed. The Committee considered various proposals. These included conversion of Current Bank Account to Savings Bank Account as a result of audit observation, liability for payment of rent of the building of RRIUM, Bhadrak by the Council, grant of hospital care allowance to the employees of the Council, establishment of tissue culture lab/climate controlled glass house/ green house at Institute of Unani Medicinal Plants (IUMP), Lucknow, revision of remuneration for Senior Research Fellows and Junior Research Fellows and advised the Director to send comprehensive proposals in respect of each to the Ministry for approval. The Committee also considered various recommendations of the Scientific Advisory Committee with reference to creation of posts at different research centres and felt that creation of additional posts at this stage would not be desirable. All these recommendations may be seen in the persepective of reorganization of the scheme.

Keeping in view of the instruction of Prime Minister for the North-Eastern state, upgradation of Clinical Research Unit, Karimganj and creation of additional posts was considerd by the Committee. The Committee authorised the Director to put-

up a comprehensive proposal for consideration of the Government, as early as possible so that the Unit may be upgraded to the level of Regional Research Institute of Unani Medicine providing essential staff for taking up meaningful research and operationalising over all time bound research activities.

In the second meeting of the Finance Committee held on 1 August 1997, the Committee confirmed the minutes of the meeting held on 27 May 1997. Followup action on the various recommendations of the said meeting was endorsed. The Committee approved continuation of the ongoing schemes of the CCRUM during the current Plan period. The Committee also agreed to the continuation of Plan Schemes in the present shape, but desired that basic condition may be adhered to, that there will be no major change in the content of the scheme and the project requirement of fund for implementation of the scheme over the Plan period would be kept within the 9th Five Year Plan outlay approved by the Planning Commission for the Council.

The Committee considered the scheme for Financial Assistance for participation in the International Conference and authorised the Director, CCRUM to draft a scheme on the pattern already in operation in the Department of Health & Family Welfare for CHS officers and put up to the next meeting of the Committee.

The Finance Committee had detailed discussion on the extramural research to be undertaken by the Council in the field of drug research and codifying the existing wealth of knowledge with regard to Unani drugs derived from plant, mineral and animal sources as also the tribal and folklore claims. Having discussed the various practical aspects of the scheme, the Committee agreed to engagement of a Senior Research Fellow in each scheme in the following manner:-

(i) Scheme for identifying two marker compounds for Single Unani Drugs – one Senior Research Fellow @ Rs. 3200/- per month for a period of six months.

(ii) Scheme for mineral origin drugs

(iii) Scheme for animal origin drugs

(iv) Scheme for plant origin drugs – one SRF @ Rs. 3200/- per month for a period of three months

(v) Scheme for Tribal/Folklore – one SRF @ Rs. 3200/- per month for a period of three months

Director, CCRUM was advised to take further action in this connection and get the work done on time-bound basis.

Proposal for creation of additional posts for CRIUM, Hyderabad was considered. The Committee desired that complete project report may be prepared taking into consideration all practical aspects attached to this issue and submit the same to the Committee in its next meeting.

Proposal for upgradation of the post of Survey Officer, RRIUM, Aligarh and upgradation of one post of photographer at CRIUM,

Hyderabad was also considerd. The Committee desired that in view of Fifth Pay Commission recommendations for the employees we may wait and the issue if necessary may be brought forth for consideration in the next meeting.

Proposal for incentive based scheme for selection of research topics for MD (Unani) scholars of the choice of the Council was considered. The Committee authorised the Director to initiate action in this regard.

The Committee agreed to the proposal for having accomodation for the RRIUM, Patna subject to the condition that proposal should have basic codal formalities fulfiled, such as advertisement in the newspapers together with quotation and assessment of rent by CPWD, etc. The Committee agreed to the proposals for the payment of rent by CCRUM in connection with the Mystique India 1997, computerisation at CCRUM Headquarters and subordinate institutes and regularization of withdrawal from GPF accounts.

In its third meeting held on 26 August 1997, the Committee confirmed the minutes of the meeting held on 1 August 1997. Report of the action taken on the various recommendations of the said meeting was endorsed. The Committee considered the proposal for a scheme for financial assistance to the research workers for participation in the international conferences and desired that a scheme may be drafted on the pattern of the scheme presently available for CHS officers and referred to the Integrated Finance Division of the Ministry of Health & Family Welfare for approval.

The Committee considered the proposal for conversion of CPF beneficiaries to GPF-cum-DCR and advised the Director to send a proposal to Integrated Finance Division, Ministry of Health & Family Welfare through Department of ISM&H for obtaininig clearance from Department of Pension. Proposals for creation of additional posts at CRIUM, Hyderabad and introduction of an element of charged services for laboratory investigations were also considerd. The Committee authorised the Director, CCRUM to work out a report for the phased development of CRIUM, Hyderabad and submit to the Department of ISM&H immediately for obtaining approval of the Ministry of Finance for holding a meeting of Project Implementation Committee. For introduction of charged services for loboratory investigations the Committee authorised the Director to evolve a policy on the pattern of CSIR.

The Committee considered proposal to waive/write off the losses due to theft at RRIUM, Bhadrak. The Committee was not satisfied with the proposal brought forth by the RRIUM, Bhadrak for writing off the losses and recommended that the responsibility should be fixed.

Upgradation of the Clinical Research Unit, Karimganj to the Regional Research Institute was considerd. The Committee authorised the Director to come up with the development programmes of this Unit in three phases – each phase having an element of construction activities. The land which has been alloted by the State Government

should also be utilized for cultivation purpose. Proposal for PIC may be submitted to the Department as early as possible.

The proposal for grant of special disability leave and reimbursement of medical claims in respect of various categories of the research workers and other staff of the CRIUM, Hyderabad who met an accident while travelling in a survey jeep was considered. The Committee agreed that in case of Senior Research Fellow and regular staff, they may be considered for relaxation of C.S. (M.A.) rules and the proposals may be sent to the Ministry of Finance through administration division of the Department of ISM&H but any financial assistance for medical treatment of casual labourer is neither desirable nor are there rules for the same.

The fourth meeting of the Finance Committee was held on 26 December 1997. At the meeting the Committee considered the minutes of the meeting held on 26 August 1997. Action taken on various recommendations of said Committee meeting was endorsed. The Committee considered the Audit Report received from the Director of Audit, Central Revenue together with the Audited Statement of Accounts of the Council for the year 1996-97 and made the following observations:-

(i) The Report of Audit was accepted. The Chairman, however, desired that the issue of irregular transfer of Government funds amounting to Rs. 43.15 lakhs to pension fund may be settled quickly. In this context, he indicated the following plan of action:-

(a) The entire amount transferred to pension fund amounting to Rs. 43.15 lakhs may be transferred back forthwith.

(b) The legal issue of transfer of funds may be examined.

(ii) It may be checked up whether the Research Councils have necessary permission under the Provident Fund Act and Rules for retaining the GPF accumulation rather than transferring it to P.F. Commissioner. There must be necessary permission and that may be linked up.

(iii) Henceforth employees subscription to GPF with interest thereon may be set aside and not to be used for any purpose except for payment of GPF etc.

(iv) All retiring employees will be paid pension out of the Pension Fund.

Proposal for condemnation and replacement of vehicles of RRIUM, Lucknow bearing No. DEP-5232 and of Headquarters bearing No. DL-3C/C-0074 was considered. The Committee desired that a suitable proposal supported with the condemnation certificates from the appropriate authorities under the rules may be referred to the Department of ISM&H for obtaining clearance from the Finance Division of the Ministry.

Proposal for upgradation of post of Survey Officer and upgradation of one post of Photographer at CRIUM, Hyderabad was also considerd. The Committee felt that

although these are genuine cases requiring consideration, we should wait for the outcome of the 5th Central Pay Commission recommendations on the Assured Career Promotion Scheme.

Scientific Advisory Committee

The Scientific Advisory Committee (SAC) of the Council consisted of the following members during the period under report.

1. Prof. Hakim Mohammed Taiyab, Aligarh – *Chairman*
2. Hakim Mazhar Subhan Usmani, New Delhi – *Member*
3. Hakim Ved Prakash Sharma, Punjab – *Member*
4. Hakim (Mrs.) Rani Kesar Mohini, Hyderabad. – *Member*
5. Hakim Zakir Hussain, Muradnagar, Ghaziabad – *Member*
6. Dr. Badri Narayan Saxena, New Delhi – *Member*
7. Dr. B. Suresh, Ootacamund – *Member*
8. Prof. M.S.Y. Khan, Delhi. – *Member*
9. Prof. Wazahat Hussain, Aligarh. – *Member*
10. Hakim Mohammed Khalid Siddiqui, Director, CCRUM, New Delhi. – *Member-Secretary*

During the reporting period the Scientific Advisory Committee of the Council met thrice. In the first meeting held on 28 and 29 April 1997, the Committee considered and recommended various proposals. These included future plan of work during the Ninth Five Year Plan, allotment of programmes for the year 1997-98, formation of small sub-committees having experts in the relevant fields, constitution of local advisory group for local institutes/units which could monitor the functioning of the institutes/units.

The Scientific Advisory Committee also recommended creation of additional post for CRIUM, Hyderabad in view of upgradation of bed strength from 35 to 100 beds, strengthen of pharmacy of CRIUM, Hyderabad, establishment of a separate pharmacy at Delhi to take care of the need of research drugs of the Institutes/units in North. The Committee deferred the proposal of establishment of a Pilot Project at Patna. Allotment of short term projects was also considered and the committee authorised the Director to refer such projects to the Chairman SAC and other concerned members. The Committee also recommended the publication of success stories in respect of all the diseases where significant leads have been achieved. The Committee also considered staff requirement for RRIUM, New Delhi and desired that the RRIUM, New Delhi should be a model Institute of research in Unani Medicine. The Committee considered and recommended the appointment of Honorary Consultants for CRIUM, Hyderabad. The Committee also desired that the Institute should have necessary expertise from local Medical Colleges and therefore recommended two

posts of Honorary Consultants for each RRI. The Committee considered patentization of the drugs and authorised the Director for taking necessary action in this regard. The Committee felt that there was a need for propagation and publicity of the advances in Unani medical research and what Unani system of medicine has to offer. The Committee therefore desired that a full-fledged Information, Education and Communication Centre may be established at CCRUM Headquarters which could take up publication of small health literature, production of video films and take such other steps as may be necessary. As part of the IEC, the Council may have a computerised data bank which could have necessary inputs to show what Unani Medicine has in different fields and what developments are going on in the field of research and development in this system and other allied sciences world over. The Council should develop data bank in the library and should link it to other national and international information system for which the Director was requested to take immediate action. If needed a Committee may be set up to draft the requirement so that the same may be considered by the SAC in their next meeting.

The Scientific Advisory Committee was concerned about the delay in initiating action for holding international seminar on Unani Medicine which the Governing Body had approved last year. The Director informed the Committee that initial action could not be taken because of non availability of funds last year. A project in this financial year has been finalized which, among other things, has a provision of international seminar and that the WHO is being associated as co-sponsor, the Director explained.

The Committee noted with satisfaction that a Herb Garden was being developed at Lucknow in the land allotted by the State Government, and desired that this should be a model Herb Garden in so far as the Unani System of Medicine is concerned and all required inputs may be provided by the Council/Ministry of Health & Family Welfare. The Committee also stressed the need for having a tissue culture lab and glass/ green house attached to this herbal garden. The Director also informed that there was also a possibility of having combined high-tech Herb Garden being established in NOIDA by the Department of ISM&H and we have to have joint ventures for which funds may be available with the Government. Reacting to this, the Committee again desired that whereas participating in good development, the Council should insist on separate cultivation cell for each system whereas other facilities may be common.

The Committee noted that in several places the vehicles used for mobile clinical research and survey of medicinal plants are not in order and in some places they have already been condemned for replacement. The Committee desired that such vehicles may be immediately replaced.

The Committee considered the requests of establishment of new research schemes and felt that although reorganisation of schemes is to take shape early, it is of equal

importance to have some specific Units which can study the habits and traditions and state of different climatic conditions. Similarly, we should also have Units at places where during large congregations, there is no dietary control and chances of epidemic are also high. In this context the Committee recommended establishment of a clinical research unit in Dargah Khwaja Gharib Nawaz, etc. The Director was requested to take some steps for establishment of such Units.

The Committee, considered and agreed to the two short term projects, one for compilation of a book on Unani Single Drugs and the other research project on anti fertility agents by Prof. M.S.Y. Khan. The Director was authorised to sanction the amount of fellowship and contigency/T.A. for operation of these projects.

The Committee appreciated the need for starting some work on Unani drugs in emergent clinical conditions and agreed to assign this work to RRIUM, Delhi and RRIUM, Lucknow. The Director may finalise the modalities and allot the work. It should have a time bound project and should be closely monitored.

The SAC also appreciated the need for starting MD (Unani) courses and PhD courses at RRIUM, Srinagar for which the University of Kashmir has already given recognition.

The SAC considered the question of additional requirement of staff for RRIUM, Calcutta and RRIUM, Lucknow.

The SAC also recommended provision of equipments such as TLC Kit with applicator & scanner, HP TLC, UV–VIS, IR, for Drug Standardisation Research Unit.

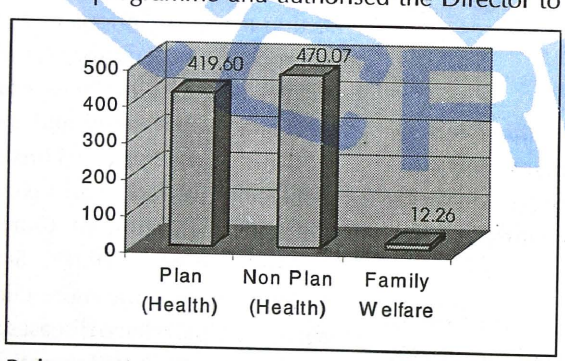
The Committee noted that a National Conference on Unani Medicine is being organised at Bangalore. The Committee desired that in view of importance of the Conference this may be co-sponsored by CCRUM & research workers may be permitted to participate in the event.

While concluding, the SAC desired that the Director may plan out visit of the Committee to some of the Institutes and Units where the work in important areas has been finalised so that the Committee can review this and take a decision. The Director assured the Committee that the meetings of SAC shall be organised at regular intervals and requested the Chairman & members for their valuable suggestions for further development of research projects.

In the 2nd meeting held on 27 September 1997, the Committee confirmed the minutes of the meeting held on 28 and 29 April 1997. Action taken on various recommendations of the Scientific Advisory Committee made in the said meeting was endorsed. The Committee considered and recommended various proposals. These included publication of report on toxicological and clinical evaluation of Qurs-e-Mubarak carried out by RRIUM, Srinagar with supplement of some more clinical studies, survey of tribal related diseases at Burhanpur, study on amoebicidal activity of herbs submitted by Dr. Amir Azam, Jamia Millia

Islamia with modifications. The Committee also considered the research studies and relief programme carried out by the Council during dengue epidemic in Delhi and suberbs, report forwarded by Department of ISM regarding metal toxicity with Unani formulations exported to UK, revised format for application for adhoc research projects, allotment of translation of Kitabul Miah and Khulasat-ul-tajarib. The Committee considered and approved the Annual Report of the Council for the year 1996-97 with certain modifications. The Committee also considered the recruitment rules for the post of Research Officer (Pharmacology) and Research Officer (Clinical Pharmacology).

The third meeting of the Scientific Advisory Committee was held on 9 February 1998. At this meeting the Committee confirmed the minutes of the meeting held on 27 September 1997. Report of the action taken on various recommendations of the Scientific Advisory Committee made in the said meeting was endorsed. The Committee considered publication of literature on MCH programme and authorised the Director to constitute a small group of experts to examine such literatures before its publication. The Committee considered and recommended various proposals including consolidation of the different studies undertaken during the five year plan and getting it finalised in order to publish these studies. The committee also recommended taking up of new formulations for trials in various diseases/new areas of studies in the continuing diseases, printing of revised computerised case sheets for clinical projects, project on study of molecular mechanism action of Unani drugs in induced Vitiligo, undertaking clinical studies on Unani emergency drugs. However proposal for undertaking collaborative study on leprosy was deferred.



Budget provision for the Council for the year 1997-98 (Rs. in Lakh)

Budget

During the period under report the expenditure of the Council was as under.

	Actual Expenditure (Rs. in Lakh)
Plan (Health)	419.60
Non-Plan (Health)	470.07
Family Welfare	12.26

Institutional Network

1. Central Research Institute of Unani Medicine, Hyderabad (Andhra Pradesh).
2. Regional Research Institute of Unani Medicine, Chennai (Tamil Nadu).
3. Regional Research Institute of Unani Medicine, Bhadrak (Orissa).
4. Regional Research Institute of Unani Medicine, Patna (Bihar).
5. Regional Research Institute of Unani Medicine, Lucknow (Uttar Pradesh).
6. Regional Research Institute of Unani Medicine, Aligarh (Uttar Pradesh).
7. Regional Research Institute of Unani Medicine, Mumbai (Maharashtra).
8. Regional Research Institute of Unani Medicine, Srinagar (Jammu & Kashmir).
9. Regional Research Institute of Unani Medicine, Calcutta (West Bengal).
10. Regional Research Institute of Unani Medicine, New Delhi.
11. Literary Research Institute of Unani Medicine, New Delhi.
12. Institute of Unani Medicinal Plants, Lucknow (Uttar Pradesh).
13. Clinical Research Unit, Allahabad (Uttar Pradesh).
14. Clinical Research Unit, Edathala (Kerela).
15. Clinical Research Unit, Bangalore (Karnataka).
16. Clinical Research Unit, Karimganj (Assam).
17. Clinical Research Unit, Kurnool (Andhra Pradesh).
18. Clinical Research Unit, Meerut (Uttar Pradesh).
19. Clinical Research Unit, Bhopal (Madhaya Pradesh).
20. Clinical Research Unit, Burhanpur (Madhaya Pradesh).
21. Clinical Research Unit, Pune (Maharashtra).
22. Clinical Research Pilot Project, Ghaziabad (Uttar Pradesh).
23. Clinical Research Pilot Project, Nautanwa, District Maharaj Ganj (Uttar Pradesh).
24. Drug Standardization Research Unit, New Delhi.
25. Drug Standardization Research Unit, Chennai (Tamil Nadu).
26. Drug Standardization Research Unit, Lucknow (Uttar Pradesh).
27. Drug Standardization Research Unit, Bangalore (Karnataka).
28. Chemical Research Unit (Grant-in-aid), Aligarh (Uttar Pradesh).
29. Family Welfare Research Unit, Hyderabad (Andhra Pradesh).
30. Family Welfare Research Unit, Mumbai (Maharashtra).
31. Information Centre, Headquarters, New Delhi.


CCRUM

TECHNICAL REPORT ⇨


CCRUM

TECHNICAL REPORT

During the reporting period the Council continued its activities in its programmes of clinical research, drug standardization research, survey and cultivation of medicinal plants, literary research and family welfare research. Programme-wise details thereof are as follows.

Clinical Research Programme

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 and prognosis, principles, lines and methods of treatment and the drug and diet therapies peculiar to Unani System of Medicine. Under this programme, clinical and therapeutic studies are being conducted on common and chronic ailments, some of them having national priority, in order to find effective remedies for them. Effectiveness of certain special therapies of Unani Medicine is also being tested in some diseases. Besides, research on some fundamental aspects of Unani Medicine is also being undertaken.

This programme is being undertaken at the following centres:

1. Central Research Institute of Unani Medicine, Hyderabad.
2. Regional Research Institute of Unani Medicine, Chennai.
3. Regional Research Institute of Unani Medicine, Bhadrak.
4. Regional Research Institute of Unani Medicine, Patna.
5. Regional Research Institute of Unani Medicine, Lucknow.
6. Regional Research Institute of Unani Medicine, Aligarh.
7. Regional Research Institute of Unani Medicine, Mumbai.
8. Regional Research Institute of Unani Medicine, Srinagar.
9. Regional Research Institute of Unani Medicine, Calcutta.
10. Regional Research Institute of Unani Medicine, New Delhi.
11. Clinical Research Unit, Allahabad.
12. Clinical Research Unit, Bangalore.
13. Clinical Research Unit, Kurnool.
14. Clinical Research Unit, Karimganj.
15. Clinical Research Unit, Meerut.
16. Clinical Research Unit, Bhopal.
17. Clinical Research Unit, Edathala.
18. Clinical Research Unit, Burhanpur.
19. Clinical Research Unit, Pune.
20. Clinical Research Pilot Project, Ghaziabad.
21. Clinical Research Pilot Project, Nautanwa, District Maharaj Ganj.

Diseasewise details of the studies conducted during the reporting period are as follows.

AMRAZ-E-JILD (SKIN DISORDERS)

BARS (VITILIGO)

Clinical and therapeutic studies on Bars (vitiligo) were continued at Central Research Institute of Unani Medicine, Hyderabad and Regional Research Institutes of Unani Medicine, Bhadrak, Patna, Srinagar, Aligarh, Mumbai, Calcutta and New Delhi. During the reporting period the following studies were undertaken.

Evaluation of the therapeutic efficacy of the coded drugs (BS4 + BSL5) with and without Munzij & Mushil therapy

Therapeutic efficacy of the coded drugs (BS4 + BSL5) with and without Munzij & Mushil therapy was evaluated in 470 cases of Bars attending the out-patient department (OPD) and in-patient department (IPD) at the Regional Research Institute of Unani Medicine, Bhadrak. The cases were divided into two groups. In group I, the drug BS4 was given in the dose of three tablets (500 mg each) twice daily along with the local application of the drug BSL5 on the affected parts once a day whereas in group II, the cases were first subjected to Munzij and Mushil therapy followed by treatment with the drugs (BS4 + BSL5) as in group I. Munzij drugs were given till "Nuzj" appeared in the urine followed by Mushil and Tabreed drugs alternatively for three days. The drugs (BS4 + BSL5) were given for a period of three months in the first instance. The duration of treatment was further extended till the maximum repigmentation was achieved.

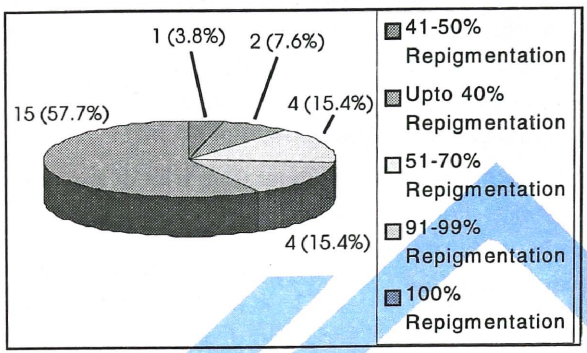
Out of the 315 cases treated in group I, 53 completed the trial. Two (3.8%) cases got 100% repigmentation. In one (1.9%) case repigmentation was 91-99%. Three (5.6%) cases showed 71-90% repigmentation. One (1.9%) case showed 51-70% repigmentation. In one (1.9%) case repigmentation was 41-50%. Forty-five (84.9%) cases showed upto 40% repigmentation. Two hundred and sixty-two cases were under study.

In group II, out of the 155 cases treated, 27 completed the trial. In two (7.4%) cases repigmentation was 71-90%. Four (14.8%) cases showed 51-70% repigmentation. In one (3.7%) case repigmentation was upto 41-50%. Twenty (74.1%) cases showed upto 40% repigmentation. One hundred and twenty-eight cases were under study.

Evaluation of the therapeutic efficacy of the coded drug BS10

Therapeutic efficacy of the coded drug BS10 was evaluated in 195 cases of Bars attending the OPD of the Regional Research Institute of Unani Medicine, Aligarh. The drug BS10 was given in the dose of 1.5 gm twice daily orally along with the local application of the same drug in paste form on the affected parts early in the morning. The treatment was given for a period of three months in the first instance. The duration of treatment was extended till the maximum repigmentation was achieved.

Response of coded drug BS10 in Bars (Vitiligo) cases (No. of cases: 26)



Out of the 195 cases treated, 26 completed the trial. Fifteen (57.7%) case showed 100% repigmentation. In four (15.4%) cases repigmentation was 91-99%. Four (15.4%) cases showed 51-70% repigmentation. One (3.8%) case showed upto 41-50% repigmentation and two (7.6%) cases showed upto 40% repigmentation, One hundred and sixty-nine cases were under study.

No drug toxicity was reported.

Preliminary clinical trial of the coded drug BS20

Preliminary trial of the coded drug BS20 was conducted on 125 cases of Bars attending the OPD of the Regional Research Institute of Unani Medicine, Aligarh. The drug BS20 was given in the dose of 1.5 gm in powder form twice daily along with the local application of the same drug in paste form on the affected parts early in the morning. The treatment was given for a period of three months in the first instance. The duration of the treatment was extended till maximum repigmentation was achieved.

Out of the 125 cases treated, 11 completed the trial. Five (45.4%) cases showed 100% repigmentation. In three (27.3%) cases repigmentation was 71-90%. Two (18.2%) cases showed 51-70% repigmentation. One (9.1%) case showed upto 40% repigmentation. One hundred and fourteen cases were under study.

No drug toxicity was reported.

Comparison of therapeutic efficacies of the coded drugs (BS1 + BSL3) and (BS4 + BSL5) in relation to the temperament of the cases

Therapeutic efficacies of the coded drugs (BS1 + BSL3) and (BS4 + BSL5) were compared in 122 cases of Bars attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Mumbai. The cases were divided into four groups according to their temperaments. The drug BS1 was given in the dose of two tablets (500 mg each) thrice daily after meals along with the local application of the drug BSL3 on the affected parts early in the morning in one group whereas the drug BS4 was given in the dose of two tablets (500 mg) each twice daily along with the local application of the drug BSL5 on the affected parts in another group. In each group the treatment was given for a period of three months in the first instance. The duration of treatment was extended till the maximum repigmentation was achieved.

Out of the 122 cases treated , 73 completed the trial. Three (4.1%) cases showed 100% repigmentation. In three (4.1%) cases repigmentation was 71-90%. Twenty-eight (38.4%) cases showed 51-70% repigmentation. Thirty-seven (50.7%) cases showed upto 40% repigmentation. Two (2.7%) cases showed no response. Forty-nine cases were under study. Fifty-one (69.8%) cases were of Damavi (sanguine) temperament whereas 17 (23.3%) cases were Balghami (phlegmatic), and five (6.8%) cases were Safravi (bilary). While comparing the response in relation to the temperament Damavi (sanguine) cases responded well to the treatment compared to Balghami (phlegmatic) and Safravi (bilary).

Study of the family history of Bars patients

Six hundred and ninety-nine Bars (Vitiligo) patients with a positive family history of Bars were studied. The pedigrees upto four generations were recorded for all the cases and were assessed for possible mode of inheritance. These cases were treated with the drugs (BS4 + BSL5). The drug BS4 was given orally in the dose of two tablets (500 mg) each twice daily along with the local application of the drug BSL5 on the affected parts. The treatment was given for a period of three months in the first instance. The duration of treatment was extended till the maximum repigmentation was achieved.

Out of the 699 cases treated, 374 completed the trial. Seven (1.8%) cases showed 51-70% repigmentation. In 34 (9.1%) cases repigmentation was 41-50%. Three hundred and nineteen (85.3%) cases showed upto 40% repigmentation. Fourteen (3.7%) cases showed no response. Two hundred and thirty-one cases were under study. Ninety-four cases dropped out.

Comparative trial of the coded drugs (BS1 + BSL3) and (BS4 + BSL5)

Therapeutic efficacies of the coded drugs (BS1 + BSL3) and (BS4 + BSL5) were compared with and without Munzij and Mushil therapy in 63 cases of Bars attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Calcutta. The cases were divided into two groups. In group I, the drug BS1 was given in the dose of three tablets (500 mg each) thrice daily along with the local application of the drug BSL3 on the affected parts early in the morning whereas in group II, the drug BS4 was given as in group I along with the local application of the drug BSL5 on the affected parts. In both the groups the cases were first subjected to Munzij and Mushil therapy followed by treatment with the drugs BS1 + BSL3 and BS4 + BSL5 in the respective groups. Munzij drugs were given till the "Nuzj" appeared in the urine followed by Mushil and Tabreed drugs alternately for three days. The duration of treatment of Munzij drug ranged from 21 to 30 days. The oral drugs BS1 and BS4 were given for a period of three months in the first instance. The duration of treatment was extended till the maximum repigmentation was achieved.

Out of the 38 cases treated in group I, seven completed the trial. These cases showed 41-

50% repigmentation. Thirty-one cases were under study.

In group II out of the 25 cases treated, nine completed the trial. These cases showed 51-70% repigmentation. Sixteen cases were under study.

No drug intolerance/toxicity was reported. Further study was in progress.

Project on Avicenna's approach in the treatment of Bars

A project to examine the line of treatment of Bars as enunciated in the Unani classic *Al-Qanoon* by Avicenna was initiated at Central Research Institute of Unani Medicine, Hyderabad. The objective of the project is to test scientifically Avicenna's individualistic approach in the treatment of Bars – treating patients of different temperaments with different drugs. The study was conducted on 28 cases attending the OPD/IPD of the Central Research Institute of Unani Medicine, Hyderabad. The cases were classified according to different temperaments. They were first subjected to Munzij and Mushil therapy followed by treatment with the drugs BS32 and BSL33 in one group and BS36 and BSL37 in the other group. Munzij drugs were given according to their temperaments till "Nuzj" appeared in the urine followed by Mushil and Tabreed drugs alternately for three days. Oral drugs BS32 and BS36 were given in the dose of two tablets (500 mg each) twice daily in group I and II, respectively along with the local application of the drugs BSL33 and BSL37 on the affected parts early in the morning in group I and II, respectively.

Out of the eight cases of Damavi (sanguine) temperament treated in group I, seven (87.5%) responded to the treatment. These cases have shown upto 40% repigmentation. The only case (12.5%) in the Balghami (phlegmatic) group also did not respond to the treatment.

In group II out of the 20 cases treated, 14 (70%) responded to the treatment. Four (28.6%) cases showed 51-70% repigmentatin. In two (14.3%) repigmentation was 41-50%. Eight (57.1%) cases showed upto 40% repigmentation. Six (30%) cases did not respond to the treatment.

Cases in both the groups responded well to the treatment. Repigmentation in the depigmented patches started even during the course of Munzij and Mushil therapy. Progression in the size of the patches was also checked. The cases having Damavi (sanguine) temperament responded well to the treatment compared to cases of Balghami (phlegmatic) and Safravi (bilary) temperaments. Further studies continued.

Pathological Studies

Various pathological investigations including complete blood picture estimations, ESR estimations, stool examinations and urine analyses were conducted in cases of Bars. No significant abnormality in these parameters was detected except worm infestations which was found in 25% of the cases.

Biochemical Studies

Various biochemical parameters including serum total proteins, albumin, globulin, SGOT and SGPT, were studied for base line and after completion of the treatment in different treatment groups. Studies conducted with different drugs showed no elevation in these levels.

General OPD programme for Bars patients

Keeping in view the large flow of Bars patients for treatment at different institutes, the general OPD specially for Bars continued at Central Research Institute of Unani Medicine, Hyderabad and Regional Research Institutes of Unani Medicine, New Delhi, Patna, Srinagar and Bhadrak. A total of 4420 cases were registered and treated with different formulations.

NAR-E-FARSI (ECZEMA)

Therapeutic trials in cases of Nar-e-Farsi (eczema) were continued at Clinical Research Units, Bangalore, Bhopal and Burhanpur. During the reporting period following studies were undertaken.

Double blind comparative trial of the coded drugs (NF1 + NFL2) and (NF1 + NFL4)

A double blind study to compare the therapeutic efficacies of the coded drugs (NF1 + NFL2) and (NF1 + NFL4) was conducted in 44 cases of Nar-e-Farsi attending the OPD/IPD of the Clinical Research Unit, Bangalore. The cases were divided into two groups In group I, infusion (prepared by soaking 17 gm of the drug NF1 in 150 ml of water kept over night) was given empty stomach in the morning. Besides the drug NFL2 was applied locally on the affected parts. In group II, the drug NF1 was given in the same dose of as in group I along with the local application of the drug NFL4 on the affected parts. In each group the treatment was given for a period of three months.

In group I, out of the 36 cases treated, 19 (52.8%) were relieved, 14 (38.9%) cases were partially relieved whereas three (8.3%) cases showed no response.

In group II, out of the eight cases treated, six (75%) were relieved, one (12.5%) case was partially relieved whereas one (12.5%) case showed no response.

Significant reduction in different signs and symptoms were noted. The drugs were found effective in contact, sebhorrhoic, drug induced eczema and lichenification.

No drug toxicity/intolerance was noted.

Comparative trial of the coded drugs (NF1 + NFL2) and (NF1 + NFL3)

Therapeutic efficacies of the coded drugs (NF1 + NFL2) and (NF1 + NFL3) were compared in 133 cases of Nar-e-Farsi attending the OPD of the Clinical Research Unit, Bhopal. The cases were divided into two groups. In group I, infusion (prepared by soaking 17 gm of the drug NF1 in 150 ml of water kept over night) was given empty stomach orally in the morning along with

the local application of the drug NFL2 on the affected parts. In group II, drugs NF1 was used as in group I, along with the local application of the drug NFL3 on the affected parts. The treatment was given for a period of three months.

Out of the 96 cases treated in group I, 61 completed the trial. Twenty one (34.4%) cases were relieved, 28 (45.9%) cases were partially relieved whereas 12 (19.6%) cases showed no response. Thirty five cases were under study.

In group II, out of the 37 cases treated, 26 completed the trial. Four (15.4%) cases were relieved, 10 (38.4%) cases were partially relieved whereas 12 (46.1%) cases showed no response. Eleven cases were under study.

The drugs showed significant response in subsiding different signs and symptoms.

No drug intolerance/toxicity was noted.

Trial of the coded drugs (NF1 + NFL3)

Therapeutic efficacy of the coded drugs (NF1 + NFL3) was evaluated in 37 cases of Nar-e-Farsi attending the OPD of the Clinical Research Unit, Burhanpur. The drug NF1 was given in the form of infusion (prepared by soaking 17 gm of the drug in 150 ml water kept over night) early in the morning on empty stomach along with the local application of the drug NFL3 on the affected parts. The treatment was given for a period of three months.

Out of the 37 cases treated, 25 completed the trial. Ten (40%) cases were relieved, three (12%) cases were partially relieved whereas 12 (48.0%) cases showed no response. Twelve cases were under study.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR estimations, urine analyses and stool examinations were studied for base line and after completion of the treatment. No significant abnormality was detected except for ESR levels which were found raised in 35% cases. These levels returned to normal after completion of the duration of the treatment in the responding cases.

DAUSSADAF (PSORIASIS)

Therapeutic trials in cases of Daussadaf (psoriasis) were continued at Clinical Research Unit, Bangalore and Regional Research Institute of Unani Medicine, Srinagar. During the reporting period following trials were undertaken.

Double blind comparative trial of the coded drugs (NF1 + NFL2) and (NF1 + NFL4)

Therapeutic efficacies of the coded drugs (NF1 + NFL2) and (NF1 + NFL4) were compared in 58 cases of Daussadaf attending the OPD/IPD of the Clinical Research Unit, Bangalore. The cases were divided into two groups. In group I, the coded drug NF1 was given in infusion form (prepared by soaking 17 gm of the drug soaked in 150 ml of water kept over night) empty stomach early in the morning. Besides local application of the

drug NFL2 was also made on the affected parts. In group II, drug NF1 was given as in group I along with the local application of the drug NFL4 on the affected parts. In each group, the treatment was given for a period of one month in the first instance. The duration of the treatment was extended to a maximum of three months where required.

Out of the six cases treated in group I, four (66.6%) were partially relieved, whereas two (33.3%) cases showed no response.

In group II, out of the 52 cases treated. 28 (53.8%) cases were relieved, 16 (30.7%) partially relieved whereas eight (15.3%) cases showed no response.

Significant reduction in different signs and symptoms was noted in the responding cases. The drugs were found effective in guttate, nummular, rupoid, flexular, exfoliative and annular psoriasis.

No drug intolerance/toxicity was noted. Longterm followup of the cases was continued to note any relapse.

Preliminary trial of the coded drugs BS1 & BSL3 (ointment form) in cases of Daussadaf (psoriasis)

Preliminary screening of the coded drugs BS1 & BSL3 in cases of plague, guttate and erythrodermic psoriasis was conducted in 66 cases in the OPD of Regional Research Institutue of Unani Medicine, Srinagar. The drug BS1 was given orally in the dose of one tablet (250 mg) twice daily after meals along with local application of the ointment BSL3 on the affected parts. The treatment was given for a period of four months in the first instance. The duration of treatment was extended upto six months where required.

Out of the 66 cases treated, 54 complete the trial. Three cases (5.5%) were completely relieved, 34 (62.8%) cases were partially relieved whereas 13 (24.2%) showed poor response. Four (7.4%) cases showed no response. Twelve cases were under study.

Pathological Studies

Various pathological parameters including complete blood picture estimations, urine analyses and stool examinations were studied for base line and after completion of the duration of the treatment. No abnormality was detected. ESR levels were found raised in 45% of the cases. These levels return to normal in the responding cases.

AMRAZ-E-TARSEELI (COMMUNICABLE DISEASES)

Clinical and therapeutic studies on Amraz-e-Tarseeli (communicable diseases) including Daul Feel (filariasis), Humma-e-Ijamia (malaria) and Iltehab-e-Kabid (infective hepatitis) were continued at Central Research Institute of Unani Medicine, Hyderabad and Regional Research Institute of Unani Medicine, Chennai, Bhadrak, Patna and Clinical Research Unit, Karimganj. During the reporting period following studies were undertaken.

DAUL FEEL (FILARIASIS)

Double blind trial of the coded drugs DF1, (DF1 + DFL4), DF6, (DF6 + DFL4)

A double blind comparative trial of the coded drugs DF1, (DF1 + DFL4), DF6 and (DF6 + DFL4) was conducted in nine cases of Daul Feel attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Chennai. The cases were divided into four groups. In group I, coded drug DF1 was given orally in the following dose schedule.

Days:	1	2	3	4	5	6	7	8	9	10
No.of capsules:	1	2	3	2	1	2	3	1	2	3

In group II, drug DF1 was given orally as in group I, along with the local application of the drug DFL4 on the affected parts. In group III, drug DF6 was given as in group I whereas in group IV, DF6 was given as in group I, along with the local application of the drug DFL4 on the affected parts.

In each group, the treatment was given for a period of 80 days.

In group I, out of the two cases treated, one (50%) was relieved and one (50%) case showed no response.

In group II, out of the two cases treated, one (50%) was relieved and one (50%) case showed no response.

In group III the single treated case was partially relieved.

In group IV the single treated case was not relieved.

Three cases were under study.

Significant subsidence in different signs and symptoms was noted after completion of treatment. The study was in progress.

No drug intolerance/toxicity was noted.

Comparative trial of the coded drugs DF12 and DF13

Therapeutic efficacies of the coded drugs DF12 and DF13 were compared in 81 cases attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Patna. The cases were divided into two groups. In group I, the coded drug DF12 was given in the dose of one gm twice daily after meals whereas in group II, the drug DF13 was given in the following dose schedule.

Days:	1	2	3	4	5	6	7	8	9	10
No. of capsules:	1	2	3	2	1	2	3	1	2	3

In each group the treatment was given for a period of 80 days in the first instance. The duration of treatment was extended upto a maximum of 120 days in some cases where required.

Out of the 38 cases treated in group I, 27 completed the trial. Seventeen (63.0%) cases were relieved and eight (29.6%) partially relieved whereas two (7.4%) cases showed no response. Eleven cases were under study.

In group II, out of the 43 cases treated, 31 completed the trial. Twenty (64.5%) were relieved and seven (22.5%) partially relieved whereas four (12.9%) cases showed no response. Twelve cases were under study.

No drug intolerance/toxicity was reported.

Trial of the coded drug DF8 with and without Munzij and Mushil therapy

Therapeutic efficacy of the coded drug DF8 was evaluated in 127 cases of Daul Feel attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Bhadrak. The cases were divided into two groups. In group I, the drug DF8 was given in the dose of 500 mg thrice daily whereas in group II, the cases were first subjected to Munzij and Mushil therapy followed by treatment with the drug DF8 as in group I. Munzij drugs were given till "Nuzj" appeared in the urine followed by Mushil and Tabreed drugs alternately for three days. In both the groups, the drug DF8 was given for a period of 80 days in the first instance. The duration of treatment was extended up to a maximum of 120 days.

Out of the 75 cases treated in group I, 60 completed the trial. Twenty two (36.7%) cases were relieved, 14 (23.3%) partially relieved whereas 24 (40.0%) cases showed no response. Fifteen cases were under study.

In group II, out of the 52 cases treated, 35 completed the trial. Eight (22.9%) cases were relieved, 11 (31.4%) partially relieved whereas 16 (45.7%) cases showed no response. Seventeen cases were under study.

No drug intolerance/toxicity was noted.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR estimations, urine analyses, stool examinations and presence of micro filaria in serum were studied for base line and after completion of the duration of the treatment. ESR levels were found raised in some of the cases. These levels returned to normal after completion of the duration of the treatment. Complete blood picture estimations and urine analyses revealed no abnormality. No case was found positive in the night blood smear examinations.

Biochemical Studies

Various biochemical parameters including serum protein, serum albumin, serum globulin, serum urea, SGOT, SGPT, serum alkaline phosphatase were studied for base line and after completion of the duration of the treatment. No significant abnormality in these parameters was found for base line. After completion of the treatment follow-up studies revealed no elevation in these parameters.

HUMMA-E-IJAMIA (MALARIA)

Double blind comparative trial of the coded drugs HE2 and HE4

Therapeutic efficacies of the coded drugs HE2 and HE4 were compared in 129 cases of Humma-e-Ijamia attending the OPD of

Clinical Research Unit, Karimganj. The cases were divided into two groups. In group I, the coded drug HE2 was given in the dose of two tablets (500 mg each) thrice daily whereas in group II, the coded drug HE4 was given in the same dose as in group I. In each group, the treatment was given for a period of seven days in the first instance. The duration of treatment was extended to a maximum of 10 days in some cases where required.

Out of the 87 cases treated in group I, 65 (74.7%) were relieved, 15 (17.2%) partially relieved whereas seven (8.0%) cases showed no response.

In group II, out of the 42 cases treated, 23 (54.7%) were relieved, 13 (30.9%) partially relieved whereas six (14.3%) cases showed no response.

The drugs showed significant response in subsiding different signs and symptoms within 3-10 days of the treatment.

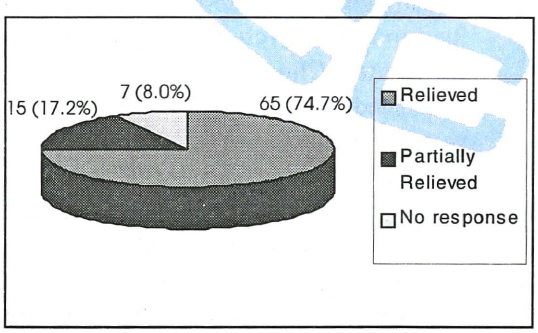
No drug intolerance/toxicity was observed.

Comparative trial of the coded drugs HE2 and HE4

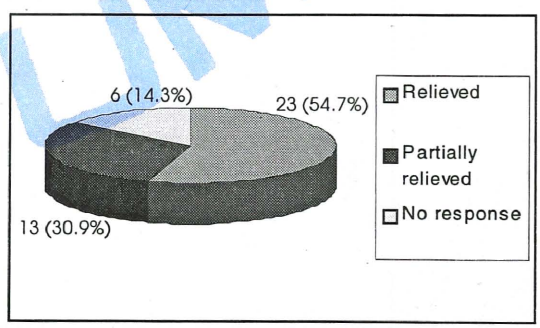
Comparative trial of the coded drugs HE2 and HE4 was conducted in 60 cases of Humma-e-Ijamia attending the OPD of Clinical Research Pilot Project, Nautanwa. The cases were divided into two groups. In group I, the coded drug HE2 was given in the dose of two tablets (500 mg each) thrice daily whereas in group II, the coded drug HE4 was given in the same dose of as in group I. In each group the treatment was given for a period of seven days in the first instance the duration of treatment was extended upto a maximum of 10 days in some cases where required.

Out of the 30 cases treated in group I, 22 (73.3%) were relieved, seven (23.3%) were partially relieved whereas one (3.3%) showed no response.

Out of the 30 cases treated in group II, 20 (66.7%) cases were relieved, six (20.0%) were partially relieved whereas four (13.3%) did not show any response.



Therapeutic response of coded antimalarial drugs HE2 and HE4 (Group I, No. of cases: 87)



Therapeutic response of coded antimalarial drugs HE2 and HE4 (Group II, No. of cases: 42)

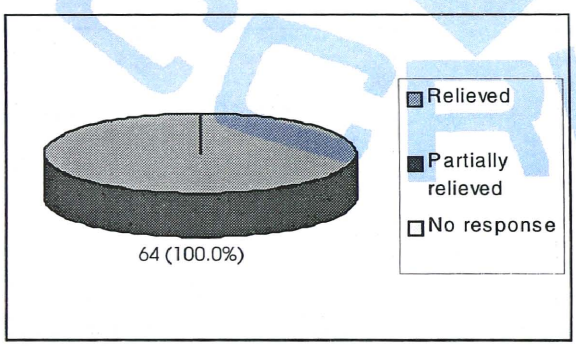
ILTEHAB-E-KABID (INFECTIVE HEPATITIS)

Therapeutic studies on Iltehab-e-Kabid were continued at Central Research Institute of Unani Medicine, Hyderabad and Regional Research Institute of Unani Medicine, Chennai. During the reporting period following studies were undertaken.

Evaluation of the hepatoprotective effect of the coded drug IKH9

Hepatoprotective effect of the coded drug IKH9 was evaluated in 64 cases of Iltehab-e-Kabid attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Chennai. The drug IKH9 was given in the dose of 10 gm in Majoon form thrice daily. The treatment was given for a period of 30 days. The duration of treatment was extended to 60 days in some cases where required.

All the 64 cases were completely relieved. In these cases signs and sympotoms completely subsided. Various biochemical and pathological parameters attained their normal values within 20-60 days of the treatment.



Therapeutic response of coded drug IKH9 in cases of Iltehab-e-Kabid (No. of cases: 64)

Evaluation of therapeutic efficacy of the coded drug IKH5 in chronic cases

The drug IKH5 was tried in eight chronic cases of Iltehab-e-Kabid attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Chennai.

The drug was given in the dose of 10 gm in Majoon form thrice daily for a period of 30 days. The duration of treatment was extended to 60 days in some cases where required.

Out of the eight case treated, five (62.5%) were completely relieved whereas three (37.5%) cases were partially relieved.

No drug toxicity was reported.

Double blind comparative trial of the coded drugs IKH-A and IKH-B

A double blind trial to compare the efficacies of the coded drugs IKH-A and IKH-B was conducted in Iltehab-e-Kabid cases at Regional Research Institute of Unani Medicine, Chennai. The study was conducted on a total of 35 cases. The cases were divided into two groups. In group I, the coded drug IKHA was given in the dose of two capsules (500 mg each) twice daily whereas in group II, the drug IKHB was given in the same dose as in group I. The treatment was given for a period of 30 days in the first instance. The duration of treatment was extended in some cases where required.

Out of the 20 cases treated in group I, 19 (95.0%) cases were completely relieved and one (5.0%) partially relieved, whereas in group II, out of the 15 cases treated 13 (86.6%) cases were completely relieved and two (13.3%) partially relieved.

Clinical signs and symptoms subsided within 20 days of the treatment. HBsAg became negative in 60 days.

Comparative trial of the coded drugs IKHA, IKHB and IKHC

A comparative study to evaluate the therapeutic efficacy of the coded drugs IKHA, IKHB and IKHC was conducted in 87 cases of Iltehab-e-Kabid attending the OPD of the CRIUM, Hyderabad. The cases were divided into three groups. In group I, the coded drug IKHA was given in the dose of two capsules thrice a day, whereas in group II IKHB was given in the same dose as in group I. In groupd III 20 ml syrup was given thrice daily. In each group the treatment was given for a period of three weeks in the first instance. The duration of treatment was extended to 30 days in some cases.

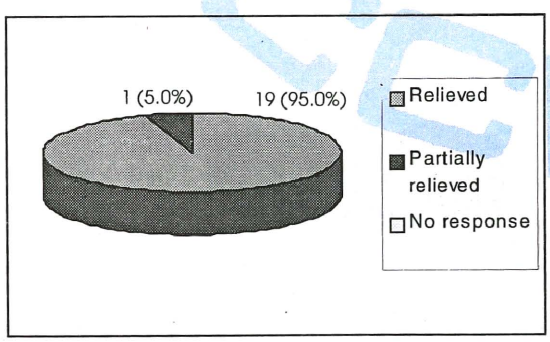
In group I out of the 35 cases treated, 23 (65.7%) were completely relieved. Nine (25.7%) cases partially relieved whereas three (8.6%) cases showed no response.

In group II out of the 10 cases treated, seven (70%) were completely relieved, two (20%) partially relieved whereas one (10%) case showed no response.

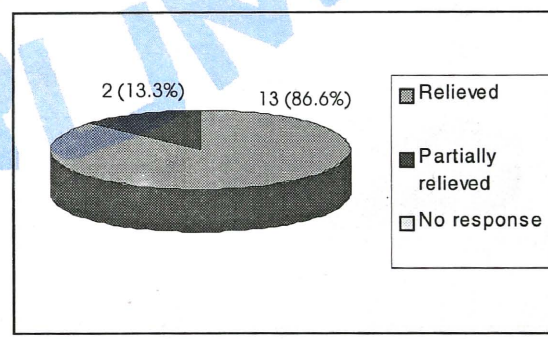
In group III out the 42 cases treated, 23 (54.7%) were completely relieved, seven (16.6%) partially relieved where as 12 (28.6%) showed no response.

Pathological Studies

Various pathological parameters such as complete blood picture estimations, ESR estimations, bile salts, bile pigments and urobilinogen were studied for base line and after every 20 days of the treatment. In most of the cases bile salts, bile pigments and urobilinogen levels returned to normal after



Double blind comparative trial of coded drugs IKH-A & IKH-B in cases of Iltehab-e-Kabid (Group I, No. of cases: 20)



Double blind comparative trial of coded drugs IKH-A & IKH-B in cases of Iltehab-e-Kabid (Group II, No. of cases: 15)

20 days of the treatment. No abnormality in complete blood picture estimations and ESR levels was found.

Biochemical Studies

Various biochemical parameters including serum bilirubin levels, serum proteins, SGOT, SGPT, serum alkaline phosphatase, LDH, thymol turbidity and HBsAg were studied for base line and after every 10 days of the treatment. These levels were found raised in most of the cases. Follow-up studies conducted revealed normalization of these parameters after 30-45 days of treatment with different drugs in the responding cases.

AMRAZ-E-AMA (GASTROINTESTINAL DISORDERS)

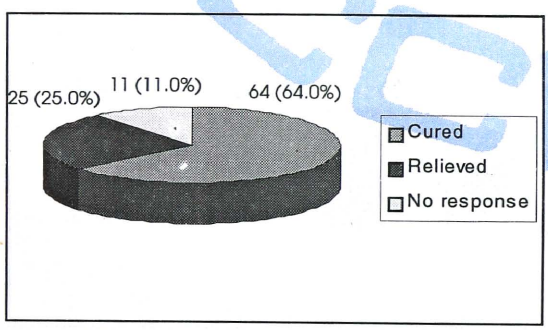
Therapeutic trials on Amraz-e-Meda wa Ama (gastrointestinal disorders) including Ishal-e-Atfal (infantile diarrhoea), Ishal-e-Muzmin (chronic diarrhoea), Zusantaria Mevi (amoebic dysentery), Deedand-e-Ama (helminthiasis) and Qarah-e-Meda wa Asnae Ashari (duodenal ulcer) were continued at different centres. During the reporting period following studies were undertaken.

ISHAL-E-ATFAL (INFANTILE DIARRHOEA)

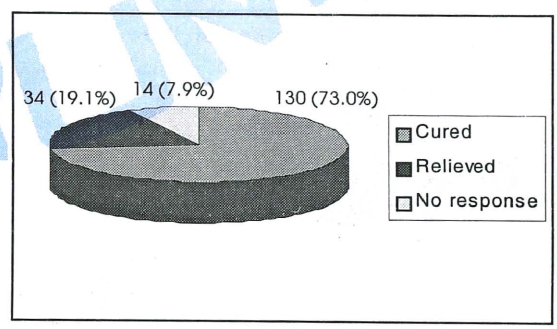
Double blind comparative trial of the coded drugs IA1 and IA2

Therapeutic efficacies of the coded drugs IA1 and IA2 were compared in 278 cases of Ishal-e-Atfal attending the OPD of the Clinical Research Unit, Karimganj (Assam). The cases were divided into two groups. In group I, the drug IA1 was given orally in the dose of one tablet (125 mg) thrice daily whereas in group II, the drug IA2 was given in the same dose as in group I. In each group the treatment was given for a period of five days. The duration of treatment was extended to a maximum of 10 days.

Out of the 100 cases treated in group I, 64 (64.0%) were cured, 25 (25.0%) relieved whereas 11 (11.0%) cases showed no response.



Double blind comparative trial of coded drugs IA-1 & IA-2 in cases of Ishal-e-Atfal (Group I, No. of cases: 100)



Double blind comparative trial of coded drugs IA-1 & IA-2 in cases of Ishal-e-Atfal (Group II, No. of cases: 178)

In group II out of the 178 cases treated, 130 (73.0%) were cured, 34 (19.1%) relieved whereas 14 (7.9%) cases showed no response.

No drug intolerance was noted.

Pathological Studies

Routine and microscopic stool examinations were conducted for base line and after completion of the duration of treatment. Baseline studies revealed presence of *E. coli* in some cases which subsequently became negative after treatment in the responding cases.

ISHAL-E-MUZMIN (CHRONIC DIARRHOEA)

Comparative trial of the coded drugs IM1 and IM2

Therapeutic efficacies of the coded drugs IM1 and IM2 were compared in 1115 cases of Ishal-e-Muzmin attending the OPD of Clinical Research Unit, Karimganj, Assam. The cases were divided in two groups. In group I, the drug IM1 was given in the dose of two tablets (250 mg each) thrice daily whereas in group II, the drug IM2 was given as in group I. In each group the treatment was given for a period of seven days in the first instance. The treatment was extended to a maximum of four weeks in some cases where required.

In group I out of the 473 cases treated, 269 (56.9%) were cured, 175 (36.9%) relieved whereas 29 (6.1%) cases showed no response.

In group II out of the 642 cases treated, 355 (55.3%) were cured, 261 (40.6%) relieved whereas 26 (4.1%) cases showed no response.

No drug intolerance/toxicity was noted.

ZUSANTARIA MEVI (AMOEBIC DYSENTERY)

Double blind comparative trial of the coded drugs ZM1 and ZM2

Therapeutic efficacies of the coded drugs ZM1 and ZM2 were compared in 111 cases of Zusantaria Mevi attending the OPD of the Clinical Research Unit, Karimganj (Assam). The cases were divided into two groups. In group I, the drug ZM1 was given in the dose of two capsules (500 mg each) thrice daily whereas in group II, the drug ZM2 was given in the same dose as in group I. The treatment was given for a period of three weeks.

Out of the 46 cases treated in group I, 29 (63.0%) were cured, nine (19.6%) partially relieved whereas eight (17.4%) cases showed no response.

In group II, out of the 65 cases treated, 45 (69.2%) were cured, eight (12.3%) partially relieved whereas 12 (18.5%) cases showed no response.

No drug intolerance was noted.

Evaluation of the antiameobic activity of the coded drug ZM1

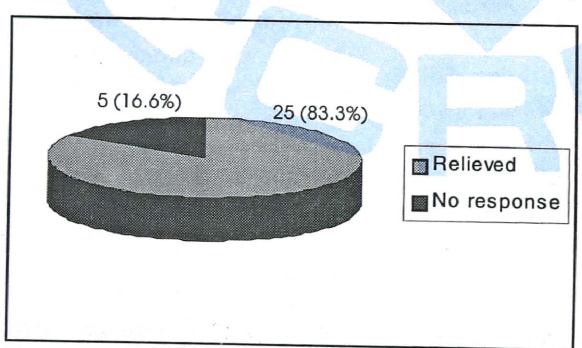
Preliminary screening of the antiameobic activity of the coded drug ZM1 was undertaken in 46 cases of Zusantaria Mevi attending the OPD of Clinical Research Unit, Meerut and Pilot Project Ghaziabad.

The drug was given in the dose of two capsules (500 mg each) thrice daily for a period of three weeks.

Out of the 46 cases treated, 28 (60.8%) were relieved, nine (19.6%) partially relieved whereas nine (19.6%) cases showed no response.

Double blind trial of the coded drugs X,Y and Z

A double blind trial to compare the efficacies of three coded capsules X,Y & Z was conducted on a sample size of 28 cases attending the OPD of the Clinical Research Unit, Burhanpur. The cases were divided into three treatment groups. In each group, the drug was given in the dose of two capsules (250 mg each) thrice daily. The treatment was given for a period of three weeks.



Therapeutic response of coded drugs DA-9 in cases of tapeworm (No. of cases: 30)

Out of the four cases treated in group I, one (25%) case was completely relieved whereas three (75.0%) cases were partially relieved.

In group II, out of the 13 cases treated, five (38.5%) were completely relieved whereas five (38.5%) partially relieved. Three (23.0%) cases showed no response.

In group III out of the 11 cases treated, nine (81.8%) were completely relieved whereas two (18.2%) showed no response.

No drug intolerance/toxicity was noted.

Pathological Studies

Routine stool examinations were conducted for base line and after completion of the duration of treatment. Presence of *E. histolytica, Giardia lambia* and *E. coli* were found in these cases. These stool findings became negative after completion of the duration of treatment in the responding cases.

DEEDAN-E-AMA (HELMINTHIASIS)

Evaluation of the antihelmintic property of the coded drug DA9

Antihelmintic property of the coded drug DA9 was evaluated in 30 cases of tapeworm attending the OPD of the Clinical Research Unit, Kurnool. The drug was given in the dose of three gms with 100 gm curd at bed time for three consecutive days.

Out of the 30 cases treated, 25 (83.3%) cases were relieved whereas 5 (16.6%) cases showed no response.

No drug intolerance/toxicity was noted.

Pathological Studies

Routine and microscopic stool examinations were conducted for base line and after completion of the duration of the treatment. Base line study revealed presence of adult worms and ova which became negative after treatment in the responding cases.

QARAH-E-MEDA WA ASNA-E-ASHARI (DUODENAL ULCER)

Evaluation of the therapeutic efficacy of the coded drug QAH-A

The study was undertaken in collaboration with Department of Gastroenterology, Osmania General Hospital, Hyderabad.

Therapeutic efficacy of the coded drug QAH-A was evaluated in 13 endoscopically confirmed cases of duodenal ulcer attending the OPD of the Department of Gestroenterology, Osmania General Hospital, Hyderabad. The cases were investigated endoscopically for detecting the presence and the size of the ulcer in the base line study. The size of the ulcer ranged from 1/2 cm to 2 cms. The drug was given in the dose of two capsules (500 mg each) twice daily for a period of eight weeks.

Out of the 13 cases treated, four (30.8%) were cured, seven (53.8%) relieved whereas two (15.4%) cases showed no response.

The drug showed significant effect in subsiding different signs and symptoms. In the responding cases the ulcers were completely healed. No relapse has been noted during long term followup of the cases.

No drug intolerance/toxicity was noted.

Pathological Studies

Pre- and post-treatment pepsinogen levels were studied which showed a significant reduction in these levels after completion of the duration of treatment in the responding cases. The cases positive for *C. pylori* also became negative after completion of the duration of treatment.

MARZ-E-MAFASIL (MUSCULO-SKELETAL DISORDER)

Clinical and therapeutic trials on Wajaul Mafasil (rheumatoid arthritis) were continued in the Regional Research Institutes of Unani Medicine, Chennai, Bhadrak, Srinagar, Lucknow, Mumbai, New Delhi and Clinical Research Unit, Bangalore. During the reporting period following studies were undertaken.

WAJAUL MAFASIL (RHEUMATOID ARTHRITIS)

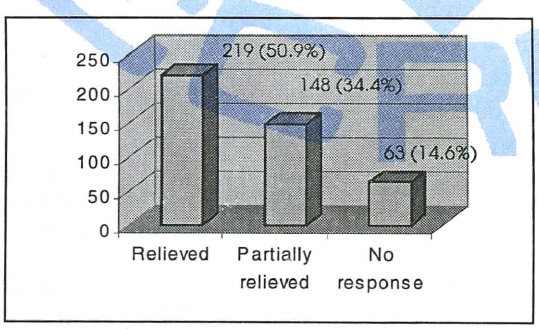
Comparative trial of the coded drugs (WM3 + Gul-e-plas) and (WM3 + WML7)

Therapeutic efficacies of the coded drugs (WM3 + Gul-e-plas) and (WM3 + WML7) were compared in 49 cases of Wajaul Mafasil attending the OPD/IPD of the

Regional Research Institute of Unani Medicine, Chennai. The cases were divided into two groups. In group I, the coded drug WM3 was given in the dose of one gm thrice daily along with the hot fomentation of the drug Gul-e-Plas on the affected joints whereas in group II, the drug WM3 was given as in group I along with the local application of the drug WML7 on the affected joints. In each group, the treatment was given for a period of one month in the first instance. The duration of the treatment was extended to a maximum of three months in some cases where required.

Out of the 28 cases treated in group I, 19 completed the trial. Twelve(63.2%) cases were relieved, five (26.3%) partially relieved whereas two (10.5%) cases showed no response. Nine cases were under study.

In group II, out of the 21 cases treated, 16 completed the trial. Eight(50.0%) cases were relieved, three (18.7%) partially relieved whereas five (31.2%) cases showed no response. Five cases were under study.



Therapeutic response of coded drugs (WM3 + WML4 + WML7) in cases of Waja-ul-Mafasil (No. of cases: 430)

The drugs showed significant effects in subsiding different signs and symptoms. Significant improvement in the parameters like walking time, hand grip strength, functional index etc; was noted after treatment. The drugs were found effective both in sero positive and sero negative cases.

No drug intolerance/toxicity was noted. Longterm followup of cases is continued to note any relapse.

Evaluation of the therapeutic efficacy of the coded drugs (WM3 + WML4 + WML7)

Therapeutic efficacy of the coded drugs (WM3 + WML4 + WML7) was evaluated in 430 cases of Wajaul Mafasil attending the OPD of the Regional Research Institute of Unani Medicine, Srinagar. The drug WM3 was given in the dose of two tablets (500 mg each) thrice daily along with the hot fomentation of the drug WML4 and local application of the drug WML7 on the affected joints. The treatment was given for a period of one month in the first instance. The duration of treatment was extended to a maximum of three months in some cases where required.

Out of the 430 cases treated, 219 (50.9%) showed complete relief whereas 148 (34.4%) cases were partially relieved. Sixty three (14.6%) cases showed no response.

Significant effects of the drugs were observed in subsiding pain, inflammation, tenderness in joints and morning stiffness etc.

No drug intolerance/toxicity was noted.

Comparison of the therapeutic efficacies of the coded drugs (WM3+WML4 +WML7) with and without MM therapy and cupping

Therapeutic efficacies of the coded drugs (WM3+WML4+WML7) were compared with and without Munzij and Mushil therapy in 158 cases of Wajaul Mafasil attending the OPD/IPD of the Regional Research Institute of Unani Medicine, Lucknow. The cases were divided in to three groups. In group I, the drug WM3 was given in the dose of three tablets (500 mg each) thrice daily along with the hot fomentation of the drug WML4 at bed times. Besides local application of the drug WML7 was also made on the affected joints at bed times and early in the morning. In group II, the patients were subjected to Munzij and Mushil therapy followed by treatment with the drugs as in group I. In group III the cases were first subjected to cupping on the affected joints followed by Munzij and Mushil therapy and treatment with the drugs as in group I. In each group the treatment was given for a period of 90 days excluding the Munzij and Mushil therapy period. Munzij was given till the Nuzj appeared in the urine followed by Mushil and Tabreed drugs alternately for three days.

Out of the 26 cases treated in group I, 11 (42.3%) were relieved, nine (34.6%) partially relieved whereas six (23.1%) showed no response.

In group II out of the 58 cases treated, 16 (27.6%) were relieved, 27 (46.6%) partially relieved whereas 15 (25.8%) showed no response.

In group III out of the 74 cases treated, 11 (14.8%) were relieved, 40 (54.1%) partially relieved whereas 23 (31.1%) showed no response.

No drug intolerance/toxicity was noted. Longterm followup of cases is in progress to note any relapse.

Comparative trial of the coded drugs (WM3 + WML4 + WML5) and (WM3 + WML4 + WML7)

Therapeutic efficacies of the coded drugs (WM3 + WML4 + WML5) and (WM3 + WML4 + WML7) were compared in 70 cases of Wajaul Mafasil attending the OPD/IPD of the Clinical Research Unit, Bangalore. The cases were divided into two groups. In group I, drug WM3 was given in the dose of three tablets (500 mg each) twice daily along with the hot fomentation of the drug WML4 and local application of the drug WML5 on the affected joints whereas in group II, drugs WM3 and WML4 were given as in group I, along with the local application of the drug WML7 on the affected joints. In each group the treatment was given for a period of three months.

Out of the 47 cases treated in group I, three (6.4%) were relieved, 29 (61.7%) partially relieved whereas 15 (31.9%) cases showed no response.

In group II, out of the 23 cases treated, one (4.5%) case was relieved, nine (39.1%)

partially relieved whereas 13 (56.4%) cases showed no response.

No drug intolerance/toxicity was noted.

Evaluation of the therapeutic efficacy of the coded drugs (WM3 + WML7) in chronic cases

Therapeutic efficacy of the coded drugs (WM3 + WML7) was evaluated in 82 chronic cases of Wajaul Mafasil attending the OPD of the Regional Research Institute, Bhadrak. The drug WM3 was given in the dose of two gms thrice daily along with the local application of the drug WML7 on the affected joints. The treatment was given for a period of 90 days.

Out of the 82 cases treated 51 completed the trial. Twenty three (45.1%) cases were relieved, 24 (47.1%) partially relieved whereas four (7.8%) cases showed no response. Thirty one cases were under study.

Significant reduction in different signs and symptoms such as pain, tenderness, swelling and morning stiffness has been noted.

No drug intolerance/toxicity was noted. Longterm followup is in progress to note any relapse.

Trial of the coded drugs (WM3 + WML4 + WML7) in chronic cases of Wajaul Mafasil

Therapeutic efficacy of the coded drugs (WM3 + WML4 + WML7) was evaluated in 42 chronic cases of Wajaul Mafasil attending the OPD of Regional Research Institute of Unani Medicine, New Delhi and Mumbai. The drug WM3 was given in the dose of two capsules (500 mg each) twice daily along with the hot fomentation of the drug WML4 at bed times and local application of the drug WML7 on the affected joints. The treatment was given for a period of 90 days.

Out of the 42 case treated, 27 (64.3%) were relieved, nine (21.4%) partially relieved whereas six (14.3%) cases showed no response.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR estimations, packed cell volume estimations, RA tests, urine analyses and stool examinations were done for base line and after completion of the duration of the treatment. The studies revealed an increase in ESR levels in most of the cases. These levels return to normal after completion of the treatment in the responding cases. Other parameters showed no significant abnormality.

Biochemical Studies

Various biochemical parameters including, serum protein, serum albumin, serum globulin, serum urea, SGOT, SGPT, serum cholesterol, serum alkaline phosphatase and C-reactive proteins were studied for base line and after completion of the duration of the treatment. The study revealed no significant change in these parameters except for C-reactive protein which became negative after completion of the treatment.

MARZ-E-RIYA (PULMONARY DISORDER)

Therapeutic trials on Zeequn Nafas (Bronchial asthma) were continued at Regional Research Institutes of Unani Medicine, Bombay, Srinagar, Patna and Clinical Research Units, Allahabad and Edathala (Kerela). During the reporting period following studies were undertaken.

ZEEQUN NAFAS (BRONCHIAL ASTHMA)

Double blind comparative trial of the coded drugs (ZN5 + ZN7) and (ZN6 + ZN7)

Therapeutic efficacies of the coded drugs (ZN5 + ZN7) and (ZN6 + ZN7) were compared in 69 cases of Zeequn Nafas attending the OPD/Mobile OPD of the Regional Research Institute of Unani Medicine, Mumbai. The cases were divided into two groups. In group I, the drug ZN5 was given in the dose of 10 gm in Majoon form thrice daily whereas in group II, the drug ZN6 was given same as in group I. The drug ZN7 was given in the form of a capsule (250 mg) at the time of Bronchial attack. In each group, the treatment was given for a period of four months.

Out of the 37 cases treated in group I, 17 (45.9%) were partially relieved whereas 20 (54.0%) cases showed no response.

In group II, out of the 32 cases treated, 19 (59.4%) partially relieved whereas 13 (40.6%) showed no response.

No drug intolerance/toxicity was noted.

Evaluation of the anti-asthmatic effect of the coded drug ZN5

Anti-asthamatic effect of the coded drug ZN5 was evaluated in 150 cases of Zeequn Nafas attending the OPD of the Regional Research Institute of Unani Medicine, Srinagar. The drug was given in the dose of 10 gm in Majoon form twice daily. The treatment was given for a period of one month in the first instance. The duration of the treatment was extended to a maximum of three months.

Out of the 150 cases treated, 44 (29.3%) were completely relieved, 70 (46.6%) partially relieved whereas 36 (24%) showed no response.

The drug showed significant response in subsiding different signs and symptoms.

No drug intolerance/toxicity was noted.

Trial of the coded drugs (ZN6 + ZN7)

Therapeutic efficacy of the coded drugs (ZN6 + ZN7) was evaluated in 87 cases of Zeequn Nafas attending the OPD of the Clinical Research Unit, Allahabad. The drug was given in the dose of 5 gm in Majoon form along with 2 gm of the drug ZN7 thrice daily.

The treatment was given for a period of three months in the first instance. The duration of treatment was extended to one more month in some cases where required.

Out of the 87 cases treated, 65 completed the trial, 47 (72.3%) cases were relieved, 18 (27.7%) partially relieved. Twenty two cases were under study.

The drug was found to be effective in both extrinsic and intrinsic type of bronchial asthama.

No drug intolerancy/toxicity was reported.

Comparative trial of the coded drugs ZN1 and ZN5

Therapeutic efficacies of the coded drugs ZN1 and ZN5 were compared in 11 cases of Zeequn Nafas attending the OPD/mobile OPD of the Clinical Research Unit, Edathala (Kerala). The cases were divided into two groups. In group I, drug ZN1 was given in the dose of 10 gms in Majoon form thrice daily whereas in group II, ZN5 was given in the same dose as in group I. In each group, the treatment was given for a period of three months.

Out of the six cases treated in group I, five (83.3%) completed the trial. All these cases were relieved. One (16.7%) case was under study.

In group II out of the five cases treated, one (20.0%) was relieved and four (80%) cases were partially relieved.

No drug intolerance/toxicity was noted.

Evaluation of the therapeutic efficacy of the coded drugs (ZN5 + ZN7)

Therapeutic efficacy of the coded drugs (ZN5 + ZN7) was evaluated in 16 extrinsic cases of bronchial asthama attending the OPD of the Regional Research Institute of Unani Medicine, Patna. The drug ZN5 was given in the dose of 10 gm in Majoon form thrice daily along with 250 mg coded drug ZN7 at the time of bronchial attack. The treatment was given for a maximum period of 90 days.

Out of the 16 cases treated, eight (50%) completed the trial. In these cases significant reduction in the symptoms such as cough and breathlessness, wheezing, ronchi, cryptation and vascular marking was noted. Reduction in eosinophils counts and ESR levels was also noted. Eight cases were under study.

No drug intolerance/toxicity was noted. Further study was in progress.

Comparative trial of the coded drugs (ZN5 + ZN7) & (ZN6 + ZN7) in the cases of Zeequn Nafas

Therapeutic efficacies of the coded drugs (ZN5 + ZN7) & (ZN6 + ZN7) were compared in 13 cases attending the OPD of Clinical Research Pilot Project, Ghaziabad. The cases were divided into two groups. In group I, the coded drugs ZN5 was given in the form of Majoon 10 gm twice daily along with one capsule (500 mg) of ZN7 whereas in group II, the coded drugs (ZN6 + ZN7) were given as in group I. In each group the treatment was given for a period of three months.

Out of the eight cases treated in group I, two (25%) were relieved, five (62.5%) partially relieved whereas one (12.5%) case showed no response.

In group II, all the five cases treated were relieved.

Pathological Studies

Various pathological parameters including complete blood estimations, ESR estimations, absolute eosinophils counts, urine analyses and stool examinations were studied for base line and after completion of the treatment. The studies revealed reduction in the eosinophils level in the responding cases. Other parameters showed no abnormality.

MARZ-E-KULIYA (RENAL DISORDER)

Therapeutic trial on Hasatul kuliya wa masana (Urolithiasis) was continued at the Central Research Institute of Unani Medicine, Hyderabad. During the reporting period following study was undertaken.

HASATUL KULIYA WA MASANA (UROLITHIASIS)

Evaluation of the antiurolithic effect of the coded drugs (HKM4 + HKML5 + HKML6)

Preliminary trial to assess the therapeutic efficacy of the coded drugs (HKM4 + HKML5 + HKML6) in 17 radiologically confirmed cases of urolithiasis was conducted at Central Research Institute of Unani Medicine, Hyderabad. The drug HKM4 was given in the dose of one gm in powder form with 1/2 cup decoction of the drug HKM6 twice daily. Besides, the cases were also subjected to Abzan with the drug HKML5 for fifteen minutes every day for five days when required. The treatment was given for a period of three months.

The trial was completed only on three cases. These cases were partially relieved.

No drug toxicity was reported.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR estimations, urine analyses and stool examinations were studied for base line and after completion of the duration of the treatment. The studies revealed presence of microscopic haematuria in most of the cases. Presence of Calcium oxilate and pus cells was also found in few cases in the base line study. These parameters became negative after completion of the duration of the treatment.

Biochemical Studies

Biochemical parameters including serum creatinine and blood urea were studied for base line and after completion of the duration of treatment. No significant change in these parameters was noted.

MARZ-E-ANF (DISEASE OF SINUS)

Therapeutic trial on Iltehab-e-tajaweef-e-Anf (Sinusitis) was continued at Central Research Institute of Unani Medicine, Hyderabad. During the reporting period following study was undertaken.

ILTEHAB-E-TAJAWEEF-E-ANF (SINUSITIS)

Evaluation of the therapeutic efficacy of the coded drugs ITA5 and ITA6

Therapeutic efficacy of the coded drugs ITA5 and ITA6 was evaluated in 380 cases of Iltehab-e-Tajaweef-e-Anf attending the OPD of the Central Research Institute of Unani Medicine, Hyderabad. The cases were divided into two groups. In group I, 300 mg coded drug ITA5 was given empty stomach twice daily whereas in group II, three gms coded drug ITA6 was given in two divided doses. In each group, the treatment was given for a period of 60 days.

Out of the 188 cases treated in group I, 125 (66.5%) were relieved, 40 (21.3) partially relieved. Twenty-three (12.2%) cases showed no response.

In group II, out of the 192 cases treated, 122 (63.5%) were relieved, 61 (31.8%) partially relieved whereas nine (4.7%) cases showed no response.

The drugs were found effective in all types of involvement of Sinuses i.e frontal, right maxillary, left maxillary and both maxillaries. Long-term follow-up of cases revealed no relapse.

No drug intolerance/toxicity was noted.

Evaluation of the beneficial effects of Munzij and Mushil therapy in cases of Iltehab-e-Tajaweef-e-Anf

Beneficial effects of the Munzij and Mushil therapy were evaluated in five radiologically confirmed cases of Iltehab-e-Tajaweef-e-Anf in the IPD of Central Research Institute of Unani Medicine, Hyderabad. The cases were first subjected to Munzij and Mushil therapy followed by treatment with the drug ITA5. Munzij drugs were given till the "Nuzj" appeared in the urine followed by Mushil and Tabreed drugs alternately for three days. The oral drug ITA5 was given in the dose of one capsule 500 mg twice daily.

The treatment was given for a period of 60 days.

All the five cases responded well to the treatment and were relieved. In these cases signs and symptoms subsided completely.

Evaluation of the therapeutic effect of the coded drugs (ITA5 + ITA7) in radiologically confirmed cases of Iltehab-e-Tajaweef-e-Anf

Therapeutic effects of the coded drug ITA5 along with the drug ITA7 were evaluated in 30 radiologically confirmed cases of Iltehab-e-Tajaweef-e-Anf attending the OPD of Clinical Research Unit, Pune. The drug ITA5 was given in the form of one capsule (500 mg) twice daily along with steam inhalation of the drug ITA7 once or twice daily. The treatment was given for a period of 60 days.

Out of the 30 cases treated, 18 (60.0%) were relieved, one (3.3%) partially relieved whereas 11 (36.7%) cases showed no response.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR

estimations, nasal smear examinations and X-ray of the sinuses were studied for base line and after completion of the duration of the treatment. ESR levels were found raised in 30% of the cases. These levels returned to normal after completion of the duration of treatment in the responding cases. Nasal smear examinations revealed presence of predominance of lymphocytes in almost all the cases. Pus cells were also present in 45% of the cases. Follow-up studies revealed normalization of these parameters in the responding cases.

ZIABETUS SUKKARI (DIABETES MELLITUS)

Therapeutical trials on Ziabetus Sukkari (diabetes mellitus) were continued at Regional Research Institutes of Unani Medicine, Chennai, Aligarh and Mumbai. During the reporting period following studies were undertaken.

Evaluation of the antidiabetic effect of the coded drugs ZS5 and ZS9

Antidiabetic effects of the coded drug ZS5 was evaluated in 19 cases of Ziabetus Sukkari attending the OPD of the Regional Research Institute of Unani Medicine, Chennai. The drug was given in the dose of two gms in powder form twice daily before meals. The treatment was given for a period of six months.

Out of the 19 cases treated, 11 completed the trial. In one (9.1%) the disease was controlled, in six (54.5%) it was partially controlled whereas in four (36.4%) cases the disease was not controlled.

In the responding cases subsidence in different signs and symptoms was noted. Reduction in the glucose level was also stable.

The drug ZS9 was tried in 17 cases attending the OPD of Regional Research Institute of Unani Medicine, Aligarh. The drug was given in the dose of six gm in powdered form in two divided doses after meals. The treatment was given for a period of 180 days.

Out of the 17 cases treated, five completed the trial. In three (60%) cases the disease was completley controlled whereas in two (40%) cases the disease was partially controlled. Twelve cases were under study.

Subsidence in different signs and symptoms was noted in the responding cases. The blood sugar levels were also found stable even after withdrawal of the drug in the responding cases in the followup of study.

No drug intolerance/toxicity was noted.

Preliminary trial of the coded drugs (ZS5 + ZS7)

Preliminary trial of the coded drugs (ZS5 + ZS7) was conducted in 15 cases of Ziabetus Sukkari attending the OPD of Regional Research Institute of Unani Medicine, Mumbai . The drug ZS5 was given in the dose of two gm thrice daily in powder form along with one gm coded drug ZS7. The treatment was given for a period of three months in the first instance. The duration of

treatment was extended in some cases where required.

Out of the 15 cases treated, three (20%) showed complete control whereas six (40%) partially control, in six (40%) cases no response was achieved.

Pathological Studies

Various pathological parameters including complete blood picture estimations, ESR estimations, urine analyses, stool examinations were studied for base line and after completion of the duration of treatment. No significant change in these parameters was noted.

Biochemical Studies

Various biochemical parameters including estimations of blood sugar levels, serum protein, serum albumin, serum globulin, serum urea, SGOT, SGPT, serum cholesterol, serum alkaline phosphate were studied for base line and after completion of the duration of the treatment. The blood sugar levels returned to normal after completion of the duration of treatment in the responding cases. The serum cholesterol level also reduced in some cases. Other parameters showed no significant change.

MARZ-E-QALB (CARDIAC DISORDER)

Clinical studies on chronic stable angina were continued at Central Research Institute of Unani Medicine, Hyderabad. During the reporting period following study was undertaken.

Preliminary screening of the coded drugs (AQH7 + AQH9 + AQH13) in cases of chronic stable angina

Therapeutic effects of the coded drugs (AQH7 + AQH9 + AQH13) were evaluated in 13 cases of chronic stable angina with the presenting signs and symptoms of the diseases. The drug AQH7 was given in the dose of two tablets (500 mg) each twice daily. The drug AQH9 was given in the form of decoction in the dose of 100 ml on empty stomach. The drug AQH13 was given in the form of one capsule (500 mg) twice daily. The drugs were given for a period of 90 days.

Out of the 13 cases treated, 12 completed the trial. In these cases various signs and symptoms subsided completely. One case was under study.

STUDIES ON FUNDAMENTAL ASPECTS OF UNANI MEDICINE

THEORY OF AKHLAT (HUMORS) PROJECT

The objective of the project is to test scientifically the concept of Akhlat (Humors) and its relevance to the states of health and diseases. This project is being undertaken at the Central Research Institute of Unani Medicine, Hyderabad.

The project aims at studying the clinical, physiological, pathological and biochemical parameters of subjects of different temperaments and establishing scientifically the correlation between them. During the reporting period 1912 cases of Bars (Vitiligo)

were studied . One thousand three hundred and ninety-five cases were found to be Damvi (sanguine), 517 Balghami (phlegmatic). No case was found to have Saudavi (melancholic) and Safravi (bilary) temperaments. Thirty-eight cases of Bars were studied for various bio-chemical, pathological and clinical parameters such as blood viscosity, blood sugar, blood urea, serum cholesterol, total proteins, serum albumin, serum globulin, serum bilirubin, serum creatinine, serum iron, serum electrolytes (Na^{++} and K^{++}), hormones (T3 and T4), insulin, pH of sweat and saliva, complete haemogram, tidal volume, vital capacity, expiratory capacity, inspiratory capacity, expiratory reserve volume, inspiratory reserve volume, expiratory flow rate, basel matabolic rate, electro cardiogram were studied for the base line. The cases were subjected to Munzij and Mushil therapy. After completion of this therapy all the base line investigations were repeated under the controlled conditions to note any change in the values. Reduction in the levels of blood urea, serum cholestrol, blood sugar, blood viscocity, serum globulin, SGPT, SGOT, serum cretine,serum iron was noted after the completion of the MM therapy. Haemoglobin level remained same in Damvi cases. However, it decreased significantly in Balghami cases. RBC count increased significantly in Damavi cases but in Balghami cases it decreased significantly. There was no change in the WBC count. Neutrophils decreased significantly in Damavi cases but increased in Balghami cases. Lymphocytes also increased in Damavi cases. Eonophils decreased in both types of temperaments. There was no significant change in the monocytes. ESR levels also decreased significantly in Damavi cases but increased in Balghami cases. The peak expiratory flow rate and chest expansion were significantly increased in both Damavi and Balghami cases. The hand grip strength also improved in both Damavi and Balghami cases after the MM therapy.

STUDIES ON REGIMENTAL THERAPY

Apart from the simple physical and clinical methods to the diseases Unani Medicine also offers regimental therapies such as Hajamat (cupping), Qai (vomiting), Riyazat (exercise), Taleeq (leeching) etc. for certain conditions. The Council plans to scientifically establish the relevance of these therapies in successfully combating various chronic diseases.

HAJAMAT (CUPPING)

The Council has initiated the work on Hajamat (Cupping) at Regional Research Institute of Unani Medicine, Lucknow where the patients of Wajaul Mafasil with different joint involvements were subjected to cupping. During the reporting period benefical effects of this technique were evaluated in 86 cases.

These cases were of chronic nature with different joints involvement. These cases were first subjected to Munzij and Mushil therapy followed by cupping on the affected joints once in a week for consecutive five

weeks. The oral drug WM3 in the dose of two capsules (500 mg each) twice daily along with the local application of the coded drug WML7 was also given for period of 90 days.

Out of the 86 cases treated, 74 completed the trial. Eleven (14.9%) cases were relieved, 40 (54.0%) partially relieved whreas 23 (31.1%) cases showed no response. Twelve cases were under study.

Pharmacological Studies

Pharmacological studies on the drugs under clinical evaluation were continued at the Central Research Institute of Unani Medicine, Hyderabad and Regional Research Institute of Unani Medicine, Aligarh. During the reporting period following studies were conducted:

1. General pharmacological screening of the coded drug BS1

Aqueous extract of the drug was used for the study. The extract was prepared by soaking the drug (100 g) in the acidulated distilled water (q.s.) and warming over the water bath. After twenty-four hours the water soaked mass of the drug was strained through a fine linen cloth and the drug infusion, thus obtained was filtered and heated over water bath to dryness. The effect of the extract was evaluated on the following intact and isolated preparations.

(i) anaesthetised rat blood pressure

(ii) rectus abdominis muscle of frog

(iii) rabbit intestine

(iv) isolated frog heart

(v) frog heart perfusion

(vi) rabbit heart perfusion (Langerdorff's preparation). The findings were as follows:

(i) The aq.ext. injected intravenously to an anaesthetised rat produced transient fall in b.p. which was found to be dose dependant. The fall (15 mm Hg approx.) produced by a dose of 20 mg of the extract was equivalent to that produced by 100 mg Ach. Pre-treatment of tthe animal preparation with atropine sulphate completely blocked the hypotensive response of the aq.ext. of BS-1.

(ii) On the rectus abdominis muscle, it was observed that the ext. upto a dose level of 30 mg/10 ml bath, produces neither any effect of its own nor does it potentiate or antagonise the Ach (10 mg/10 ml bath) induced contractile response.

(iii) The ext. did not exhibit any effect of its own on rabbit intestine but on this preparation, it did show an antagonistic effect on Ach induced contractions. It was observed that, the Ach (1 mg/10 ml bath) induced contractile response was reduced by 22% and 47% with 10 mg and 30 mg/10 ml bath of the aq. ext.

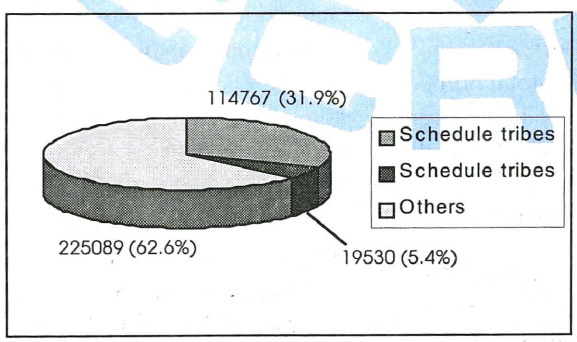
(iv) On isolated frog heart (Straub's preparation), the ext. produced a negative inotropic effect at doses of 100 mg and 300 mg with complete blockage of heart beating at 1 mg dose of the ext.

(v) Negative inotropic effect was also observed on frog heart perfusion with 300 mg and 1 mg doses of the extract with complete stoppage of the heart at a dose of 3 mg with recovery in a few seconds.

(vi) On Langendorff's preparation too, a negative inotropic effect was observed at doses of 10 mg and 30 mg of the ext. without any modification in the coronary output. There was complete blockage of the heart at a dose of 50 mg with recovery in a few seconds.

2. Acute toxicity of Aq. ext. of BS-1 on albino mice

The study was conducted in three groups of six mice each (either sex) weighing from 25 to 30 g at doses of 1 g/kg, 3 g/kg and 10 g/kg respectively, administered orally. A close watch for the first six hours did not show any untoward sign and symptom in the animals. There was no mortality within an observation period of 24 hours.



Medicare-cum-clinical Research Programme for Scheduled Castes, Scheduled Tribes and other weaker sections

3. Protective effect of IKHA against CCl_4 induced liver injury

Aqueous extract of the coded Unani formulation, IKHA was screened for evaluation of its effect against carbon-tetra chloride induced liver injury in albino rats. The extract administered orally for eight days along with CCl_4 for the first three consecutive days exhibited a marked protective effect against the CCl_4 induced liver injury as was evident from the findings.

MEDICARE-CUM-CLINICAL RESEARCH PROGRAMME FOR SCHEDULED CASTES, SCHEDULED TRIBES AND OTHER WEAKER SECTIONS

The community based medicare-cum-clinical research programme of the Council caters to the medical needs of common people especially the Scheduled castes, Scheduled tribes and other under-privileged sections of the population in rural areas and urban slums. Besides, research cases are also registered for studying different diseases. The Mobile Clinical Research Units functioning under this programme serve as a good source of health care delivery at a place nearer to the door-steps of the suffering people. Presently, 14 mobile Units attached to different Institutes and Units of the Council

are functioning in different parts of the country.

During the reporting period, 22 villages were covered under this programme. A total population of 3,59,386 (including 1,14,767 persons belonging to scheduled castes and 19,530 to scheduled tribes) was covered. A total of 15,360 cases of common ailments were registered and treated with Unani kit medicines.

GENERAL OPD PROGRAMME

With a view to providing free medicare for common ailments General OPD is also being conducted at 15 centres of the Council. The objective of the programme is to provide free medicare through Unani medicines to Scheduled castes, Scheduled tribes and weaker sections of the society in urban areas and also to get research cases.

The General OPD programme was continued at Regional Research Institutes of Unani Medicine, Chennai, Bhadrak, Patna, Lucknow, Mumbai, Calcutta, Srinagar and New Delhi, Clinical Research Units, Allahabad, Karimganj (Assam), Edathala (Kerela), Meerut (U.P.) and Burhanpur(M.P). During the reporting period, a total number of 1,16,540 cases for common ailments were treated at different centres of the Council.

UNANI TREATMENT CENTRE

A Unani treatment centre was opened at the Capital's Ram Manohar Lohia Hospital on January 14 by Mr. S.A.T. Rizvi, Secretary to Government of India, Ministry of Parliamentary Affairs.

The centre run by the Central Council for Research in Unani Medicine (CCRUM), has been set up by the Department of Indian Systems of Medicine and Homoeopathy of the Union Ministry of Health & Family Welfare in accordance with a recent decision of the Ministry to introduce Indian Systems of Medicine in the Central Government's hospitals in the city.

Besides the general out patient department (OPD) facilities, the centre also provide services of leading specialists of Unani Medicine for the treatment of some selected disorders like leucoderma, rheumatoid arthritis, bronchial asthma, sinusitis, filaria etc. for which the Unani system offers successful treatment.

Among those present on the occasion were Mrs. Shanta Shashtri, Secretary Indian Systems of Medicine & Homoeopathy (ISM&H), Ministry of Health & Family Welfare & Mr. Pradeep Bhargava, Joint Secretary, ISM&H, along with Hakim Saifuddin Ahmad; Hony. Advisor (Unani) to Government of India; Hakim Mohammad Khalid Siddiqui, Director, CCRUM, Hakim Mrs. Aliya Aman, Deputy Advisor (Unani) to Government of India, Department of Indian Systems of Medicine, Ministry of Health & Family Welfare; Hakim Jamil Ahmad, Dean, Faculty of Unani Medicine at Jamia Hamdard; and Hakim S.M.S. Usmani, A&U Tibbia College, New Delhi.

SCHOOL HEALTH PROGRAMME

School health programme is another component of this programme in which health check-ups of schools children are conducted and those found suffering from various common ailments are treated with Unani kit medicines. Besides, health education is also provided to the students to create health awareness among them.

Under this programme during the reporting period, health check-ups of 3000 students were performed in different schools. One thousand six hundred and five children were found to be suffering from various common ailments and were treated with Unani kit medicines.

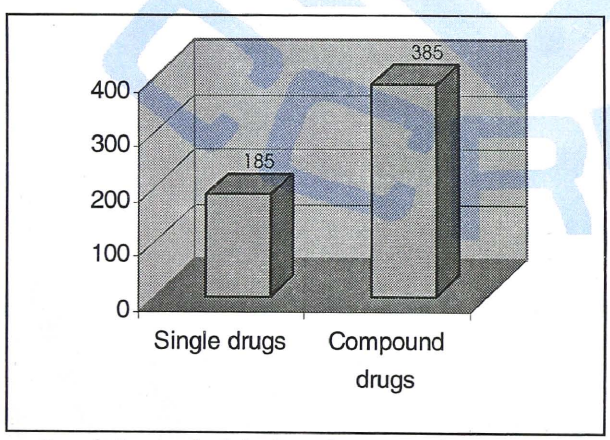
Significant response of the kit medicines was observed in the problems such as, Nazla (cold), Ramad (conjunctivitis), Ishal (diarrhoea), Qabz (constipation) and Jerbo Hikka (scabies).

Drug Standardization Research Programme

The programme of drug standardization is mainly concerned with evolving standards of single and compound Unani drugs of proven efficacy included in the National Formulary of Unani Medicine and simultaneously the drugs under trial in Council's Clinical Research Units/Institutes.

Standardization of single drugs include Unani and scientific documentation, pharmacognosy and phytochemistry of the drugs. Similarly the standardization of Unani formulations has been undertaken in order to establish standards for the drugs as well as the methods of the manufacture. The work is being carried out through the network of seven drug standardization and one Chemical Research Unit of the Council. The units are functioning at;

(1) Department of Medicinal Chemistry, Jamia Hamdard, New Delhi.



Cumulative total of single and compound Unani drugs standardized

(2) Department of Chemistry, New College, Chennai.

(3) Department of Chemistry, Central College, Bangalore.

(4) Regional Research Institute of Unani Medicine, Lucknow.

(5) Regional Research Institute of Unani Medicine, Aligarh.

(6) Regional Research Institute of Unani Medicine, Srinagar.

(7) Central Research Institute of Unani Medicine, Hyderabad.

(8) Clinical Research Unit, Department of Research in Unani Medicine, Aligarh Muslim University, Aligarh.

A. During the reporting period chemical studies on following drugs with respect to one or the other parameters in accordance with the requirements of Unani Pharmacopoeia Comittee were carried out.

(1) Afsanteen (stem and flowers) (*Artemisia absinthium* Linn).

(2) Aftimoon Hindi (Stem) (*Cuscuta reflexa* Roxb).

(3) Aftimoon Vilayati (Stem and seeds) (*Cascuta chinensis* Lam).

(4) Amaltas (Leaves) (*Cassia fistula* Linn).

(5) Kasni (Leaves) (*Cichorium intybus* Linn).

(6) Madar (Leaves) (*Calotropis procere* (Ait) R. Br).

(7) Mako (Leaves) (*Solanum nigrum* Linn).

(8) Neem (Leaves) (*Azadirachta indica* A. Juss).

(9) Shahatra (Leaves) (*Fumeria parviflora* Lam).

(10) Bartang (Seeds) (*Plantago major* Linn).

(11) Aspaghol (Seeds) (*Lavandula officinalis* Chaik).

(12) Aqarqarha (Root) (*Anacyclus pyrethrum* DC).

(13) Afsanteen (Root) (*Artemisia absinthium* Linn).

(14) Kasni (Root) (*Chichorium intybus* Linn).

(15) Biranjasif (Whole plant) (*Artemisia vulgaris* Linn).

(16) Bel(Leaves) (*Aegle marmelos* Corr).

(17) Chiraita (Leaves) (*Swertia chirata* Buch.-Ham).

(18) Dhawa (Flowers) (*Woodfordia fruticosa* Kurz).

(19) Afsanteen (Leaves) (*Artemisia absinthium* Linn).

(20) Khella (Fruits) (*Ammi visnaga* Lam).

(21) Khurfa (Whole plant) (*Portulaca oleracea* Linn).

(22) Khurfa Khurd (Whole plant) (*Portulaca quadrifida* Linn).

(23) Zoofa Yabis (*Hyssopus officinalis* Linn).

(24) Tukhm-e-Katan (*Linum usitatissimum* Linn).

(25) Parsioshan (*Adiantum capillus-veneris* L).

(26) Ustukhuddus (*Lavandula stoec, as* Linn).

(27) Maghz-e-Bel (*Aegle marmelos* Corr).

(28) Jadwar (*Delphinium denudatum* Wall).

(29) Gul-e-Gaozaban (Flowers) (*Borago officinalis* Linn).

(30) Mur Makki (*Commiphor myrrha* (Nees) Engl).

(31) Kamela (Powder) (*Mallotus philippinensis* Muell. Arg).

(32) Gul-e-Tesu (Flower) (*Butea monosperma* (Lam.) Taub).

(33) Kabab Chini (*Piper cubeba* Linn. f.)

(34) Kalonji (Seeds) (*Nigella sativa* Linn).

(35) Gul-e-Banafsha (Flowers) (*Viola odorata* Linn).

(36) Musli Safaid (Roots) (*Chlorophytum arundinaceum* Baker).

(37) Asl-e-Baladur (*Semecarpus anacardium* Linn).

(38) Irsalris (*ensata Thunb).*

(39) Karsana (*Pisum sativum* Linn).

(40) Katai (*Solanum surattense* Burm.f.)

(41) Tukhm-e-Karafs (*Apium graveolens* Linn).

(42) Kunjad Siyah (*Sesamum indicum* DC).

(43) Tukhm-e-Kahu (*Lactuca sativa* Linn).

(44) Mocharas (*Salmalia malbarica* (DC.) Schott. & Eng).

(45) Raal (*Vateria indica Linn).*

(46) Rasaut (*Berberis aristata* DC).

(47) Sadkufi (*Cyperus rotundus* Linn).

(48) Salab (*Orchis latifolia* Linn).

(49) Seer (*Allium sativum* Linn).

(50) Tukhm-e-Balangu (*Lallemantia royleana* Benth).

(51) Tukhm-e-Sambhalu (*Vitex negundo* Linn).

(52) Berg-e-Gheekawar (*Aloe barbadensis* Mill).

(53) Bekh-e-Kasni (Roots) (*Chichorium intybus* Linn).

(54) Berg-e-Madar (Leaves) (*Calotropis procera* (Ait) R. Br.)

(55) Ghungchi Safaid (Seeds) (*Abrus precatorius* Linn).

(56) Gul-e-Babnoonah (*Matricaria chamomilla* Linn).

(57) Gul-e-Madar (*Calotropis procera* (Ait) R. BC.)

(58) Maghz-e-Amaltas (*Cassia fistula* Linn).

(59) Musli Siyah (Rhizome) (*Curculigo orchioides* Baertn).

(60) Post-e-Amaltas (*Cassia fistula* Linn).

(61) Tukhm-e-Kasoos (*Cuscuta reflexa* Roxb).

B. Two coded compound drugs NFL2 and NFL3 were prepared for standardization of method of manufacture of these formulations.

C. Studies on pharmacognosy of two drugs viz. Anjabar and Khubbazi were also carried out.

D. Work on standardization of Cap. Mubarak and some of the ingredients of ZN5 and ZN6 was also carried out.

E. Work on root bark of *Ailanthus excelsa*, for structure elucidation of pure compound isolated from the plant, was carried out.

F. Besides, chemical studies on various samples of 11 single drugs and their parts were under progress.

G. Hydro-alcoholic extract of single drugs viz Asgandh, Khulanjan, Suranjan and Zanjabeel was also prepared.

Survey and Cultivation of Medicinal Plants Programme

The survey of medicinal plants programme of the Council envisages systematic survey of various forest areas/ranges of the country for the collection of medicinal plants in general and those used in unani system of medicines in particular. Gathering folk claims for the treatment of different diseases from tribals inhabiting the forest areas, experimental cultivation of such drug plants as are rare or imported at present but can be cultivated in India, and field scale cultivation of important medicinal plants used in Unani system of medicine, are other components of this programme.

This programme is being carried out at the following centres of the Council.

1. Central Research Institute of Unani Medicine, Hyderabad.
2. Regional Research Institute of Unani Medicine, Bhadrak
3. Regional Research Institute of Unani Medicine, Aligarh
4. Regional Research Institute of Unani Medicine, Chennai
5. Regional Research Institute of Unani Medicine, Srinagar
6. Institute of Unani Medicinal plants, Lucknow.

ETHNOBOTANICAL EXPLORATION OF FOREST AREAS

During the reporting period a number of survey tours were conducted in different forest divisions viz. Hyderabad, Medak (Andhra Pradesh), Baripada (Orrisa), Attur, Salem, Hasur, Harur (Tamil Nadu), Lucknow, Siddharth Nagar (Uttar Pradesh) and Pirpanjal and Kashmir Valley (Jammu & Kashmir). These tours resulted into collection of 1590 plants taxa. 124 folk medicinal claims for various ailments were recorded by interviewing tribal herbal medicine men. Out of the plants collected, 1159 have been identified and remaining are in the process of confirmation. Over 250 photographs of the medicinal plants were taken and 50 Index cards prepared. At the Herb garden in Lucknow 34 plant species of prime medicinal value were maintained.

EXPERIMENTAL AND FIELD SCALE CULTIVATION OF UNANI MEDICINAL PLANTS

Experimental cultivation trials on 13 plants species of medicinal importance were under progress during the reporting period. These species are; Abhal (*Juniperus communis* L.), Ajwain Khurasani (*Hyoscyamus niger* L.), Asgandh (*Withania somnifera* Dunal), Atees (*Aconitum heterophyllum* Royle), Bach (*Acorus calamus* Linn.), Gul-e-Abbas (*Mirabilis jalapa* Linn.), Konch (*Mucuna purita* Hook.), Mushkdana (*Abelmoschus moschatus* Medic.), Satawar (*Asparagus racemosus* Willd.), Sonf (*Foeniculum vulgare* Mill.), Sudab (*Ruta graveolens* Linn.) and Papra (*Podophyllum hexandrum* Royle variety *emodii* Chatt. & Mukh).

Under field scale cultivation programme following plant species were taken up to

meet the partial requirement of manufacturing research drugs. These species are Aatrilal (*Ammi majus* Linn.), Gulnar farsi (*Punica granatum* L. abortive variety), Brinjasif (*Achillea millefolium* Linn.), Banafsha (*Viola odorata* Linn.), Halyoon (*Aspoaragus filicinus* Ham.), Hakbul (*Hercleum candicans* Wall. ex Dc.), Karanjwa (*Caesalpinia crista* L.), Kasni (*Chichorium intybus* L.) Rasan (*Inula racemosa* Hook. f).

During the period under report 528 kg of raw drugs were harvested/collected, out of which 428 kg were supplied to different Institutes/Units of the Council.

Literary Research Programme

Literature relating to the Unani system of medicine is scattered in private and public libraries and, at times, is not within the reach of scholars and research workers. A good numbers of manuscripts are available in various libraries. Some manuscripts are in dilapidated condition and valuable information therein has got to be obtained before they got completely destroyed. Some manuscripts are very rare and old. The responsibility to make full use of the information contained therein rests with the scholars of today. Further, there has been a handicap in the field of Unani medical education due to the lack of standard text books dealing with various subjects. The scholars who can understand and interpret the concepts laid down in the classics of Unani Medicine are also becoming fewer as most of the literature is in Persian/Arabic.

To get full advantage of the rich experience of ancient scholars, to get all the valuable knowledge of Unani system of medicine rendered into Indian languages and to have standard books, the Council has taken up the programme of literary research. The project aims at rendering in simple and lucid language the medical knowledge of the manuscripts for the benefit of the posterity.

This programme is being carried out through a Literary Research Institute of Unani Medicine functioning at New Delhi. During the reporting period, revision of the 452 pages of the Urdu translation of Kitab-al-Jamili Mufaradat Volume-IV was completed. Besides, vetting of these pages was also done. The work of enlistment of compound drugs mentioned in the National Unani Formulary Vol. I was completed. A bibliography of physicians as mentioned in the Kitab-al-Jamili Muffaradat Vol. III was also compiled. Compilation of literature on Iltehab-e-Kabid from Unani classics was also undertaken during the reporting period.

Family Welfare Research Programme

The Council has taken up the work of evaluation of the contraceptive efficacy of certain Unani drugs described in the classical literature as oral contraceptive agents with a view to finding out an effective, cheap and potent oral contraceptive agent free from side effects. The work has hitherto been taken up at Family Welfare Research Units, Hyderabad and Mumbai. The objective of the study is not only to achieve 100%

contraceptive efficacy of the drug but also to reduce the total number of pregnancies during a reproductive life span. Besides taking up clinical screening, the researchers also motivate people to adopt small family norms. It is considered that through this programme the Council will be able to contribute its share in the national family welfare programme.

Based on the references available in the Unani classics the Council has undertaken trial of a coded Unani drug "MH 18". The objective of the study was to assess the efficacy of the drug in enhancing the period of lactation. As lactation creates hyperprolactinemia and hyperprolactinemia is associated with novulatory cycles thereby indirectly exerting antifertility effect thus helping birth spacing.

The subjects were either selected from the OPD of the units or through mobile visits made by the researchers and social workers in urban slums/rural areas. The Family Welfare Research Unit, Hyderabad covered urban slums namely Talab Katta whereas the Family Welfare Research Unit, Mumbai covered urban slums in the Madanpura area. A total of 2269 cases were contacted by these units. One hundred and fifty-eight cases were studied during the reporting period. These cases were given the drug "MH18" one gm twice daily for a period of 12 cycles. After completion of the 12 cycles the cases were followed up for another 12 cycles to note the occurance of the unplanned pregnancies. The drug showed significant effect in increasing the lactation in 89% of the cases. The period of lactation increased from six months to 12 months. The drug not only showed its effect in increasing the lactation period but also increased the milk secretion. The symptoms associated with postpartum period such as backache, leucorrhoea, anorexia, fatigue, malaise were also subsided with the use of this drug. The subjects felt more energetic hence the acceptability of the drug was more. Lactational amenorrhoea was also reported in 20% of the cases. The drug was found to be completely safe. Observations on the effect of the drug on the infants was also fully recorded. General growth of the infants and episode of sickness were also noted. The drug did not show any adverse effect on infants health and growth.

Further studies were in progress.

Collection and dissemination of information

In order to gather the scattered literature on Unani Medicine and allied sciences and to make available at one place the recent advances in these disciplines, an Information Centre is functioning at the Headquarters of the Council. The Council's library which is basically a research and reference library has a collection of 6408 books on Unani Medicine and allied sciences. During the reporting period 242 books including 145 rare Unani books were added to the library. Besides, there are 16 rare Unani manuscripts. The library is also having photocopies of 24 rare books and eight micro films of rare Unani books. Twenty six books were

received on complementary basis while the library also received six Unani journals on complementary basis consisting of 18 issues. Dr. S.J. Kulkarni, Librarian, Doctors Library India Ltd., Bombay donated one manuscript to the Council's library.

The library continued subscription to WHO publications and Medical Library Association of India (MLAI) membership and subscribed four journals. It also continued subscription to some general magazines and newspapers.

The Publication Division undertakes the publication of monographs, newsletters and reports on the Council's research work.

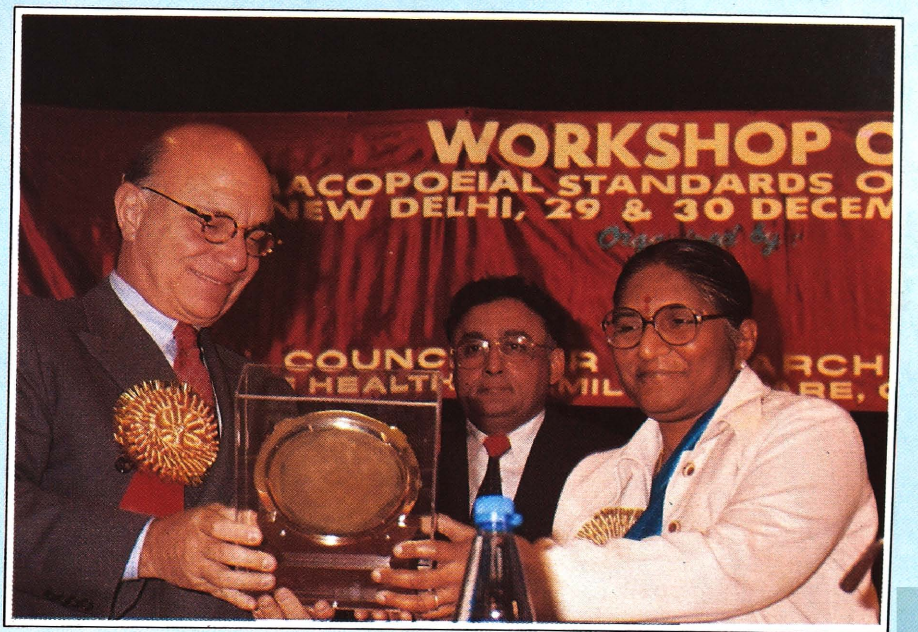
During the reporting period, the following publications were brought out.

1. Kitab-ul-Hawi Vol. I, II & III
2. Moilejat-e-Buqratia Vol. II & III
3. Standardization of Single Drugs – part III
4. Unani Medicine – An Introduction

MISCELLANEOUS ⇨


CCRUM

At the inaugural ceremony of Workshop on Pharmacopoeial Standards of Unani Drugs, organized by Central Council for Reseach in Unani Medicine (CCRUM) in New Delhi on 29 and 30 December 1997, Mrs. Shanta Shastry, Secretary, Department of Indian Systems of Medicine and Homoeopathy (ISM&H), Ministry of Health and Family Welfare, Government of India presenting a memento to Greek Ambassador to India, Mr. Yannis-Alexis Zepos (left) while Hakim Mohammed Khalid Siddiqui, Director, CCRUM looks on.



At the valedictory session of the Workshop on Pharmacopoeial Standards of Unani Drugs, Mrs. Shanta Shastry, Secretary, Department of Indian Systems of Medicine and Homoeopathy (ISM&H) presenting a kit of Unani medicines developed by the CCRUM to Union Minister of State for Health and Family Welfare, Mrs. Renuka Chowdhury (extreme left). Behind Mrs. Shastry is Mr. Pradip Bhargava, Joint Secretary (ISM&H) and to his left are Hakim Mrs. Aliya Aman, Deputy Advisor (Unani) to Government of India and Hakim Mohammed Khalid Siddiqui, Director, CCRUM.

Union Minister of State for Health and Family Welfare, Mrs. Renuka Chowdhury having a word with the CCRUM Director Hakim Mohammed Khalid Siddiqui at the Council's pavilion at Mystique India '97 — an exhibition of various Indian systems of medicine and other ancient Indian philosophies, arts and sciences organized in New Delhi from 20 to 26 October 1997. Behind Mrs. Chowdhury is Mrs. Shanta Shastry, Secretary, Department of Indian Systems of Medicine and Homoeopathy (ISM&H).

Mrs. Shanta Shastry, Secretary, Department of Indian Systems of Medicine and Homoeopathy (ISM&H) giving away prizes to the winners of health related contests organized by the CCRUM as part of the Unani Medicine Day on 25 October 1997 at Mystique India '97.

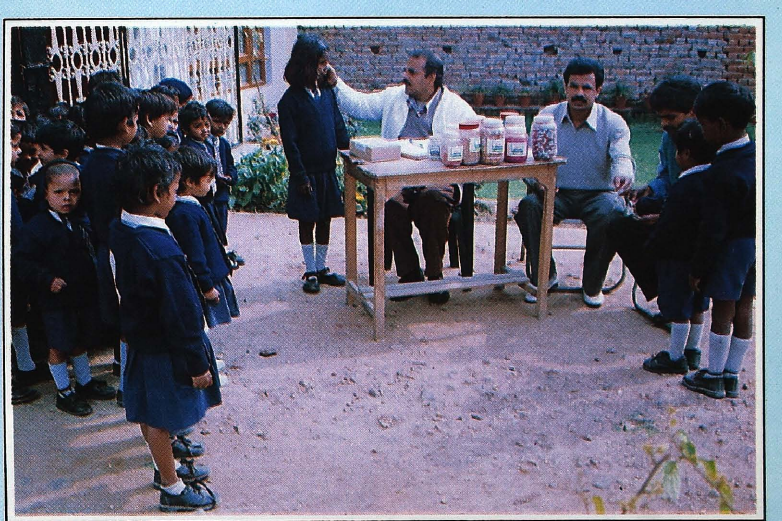
Mr. S.A.T. Rizvi, Secretary to Government of India, Ministry of Parliamentary Affairs inaugurating the Unani Treatment Centre at Ram Manohar Lohia Hospital, New Delhi on 14 January 1998. To Mr. Rizvi's right is Mrs. Shanta Shastry, Secretary to Government of India, Department of Indian Systems of Medicine and Homoeopathy, Ministry of Health & Family Welfare.

Hakim Mohammed Khalid Siddiqui, Director, CCRUM taking Mrs. Shastry, Mr. Rizvi and other guests round the Unani Treatment Centre, RML Hospital, New Delhi after the opening of the Centre.

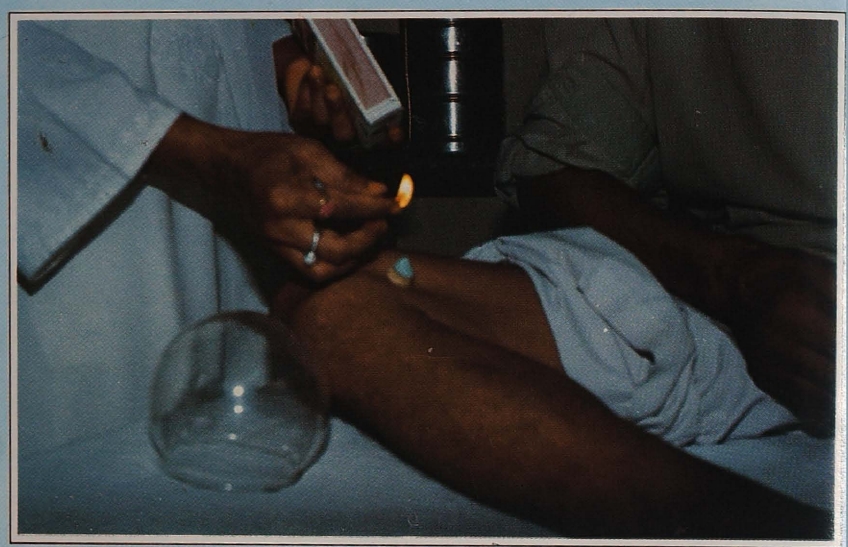
Mrs. Shanta Shastry, Secretary, Department of Indian Systems of Medicine & Homoeopathy, Ministry of Health & Family Welfare, Government of India being taken round the Council's Regional Research Institute of Unani Medicine (RRIUM) in Lucknow by Hakim Mohammed Khalid Siddiqui (extreme right), Director, CCRUM and Hakim Idris Ahmad, Officer-in-charge of the Institute on 17 October 1997. In the backdrop Hakim Abdul Jabbar Khan of Ayurvedic & Unani Tibbia College, New Delhi can also be seen.

At the RRIUM, Lucknow from left to right: Hakim Mohammed Khalid Siddiqui, Hakim Idris Ahmad, Mrs. Shanta Shastry and Mr. P.K. Jain, Director, Ayurvedic and Unani Services, Uttar Pradesh.

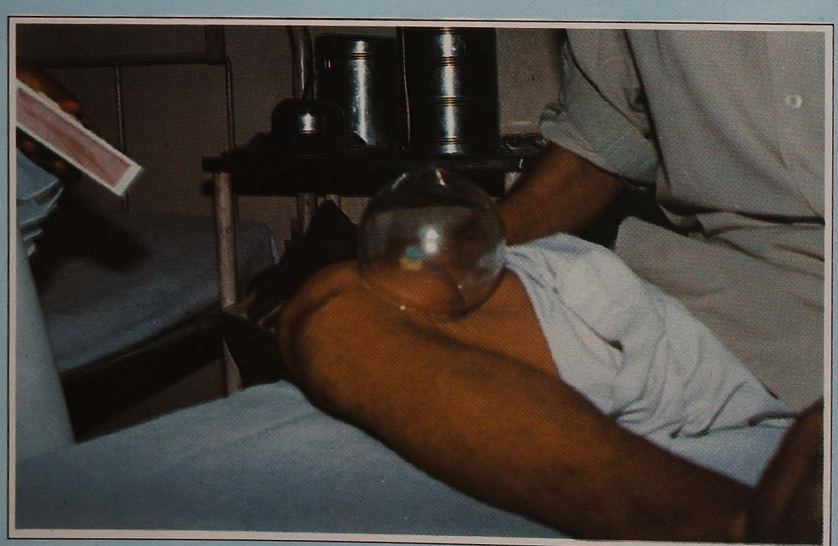
Under the Mobile Clinical Research Programme, the Council's physicians providing health care to the people at their doorsteps.



Under the School Health Programme, the Council's physician examining school children in Lucknow.



Hajamat (cupping) - a regimental therapy of Unani Medicine being given to a patient of Wajaul Mafasil (rheumatoid arthritis) at the Council's Regional Research Institute of Unani Medicine at Lucknow.



Cultivation of **Asgandh** (*Withania sominifera* Dunal).

Cultivation of **Kasni** (*Chicorium intybus* Linn.)

Ajwain Khurasani (*Hyoscyamus niger* Linn.)

Karanjwa (*Caesalpinia crista* Linn.)

MISCELLANEOUS

Workshop on Pharmacopoeial Standards

The Council organized a two-day worshop on pharmacopoeial standards of Unani drugs on 29-30 December 1997 in New Delhi.

Mrs. Shanta Shastry, Secretary, Department of ISM&H, Ministtry of Health & Family Welfare, Government of India, while inaugurating the workshop, stressed that quality control of Unani drugs and those used in other Indian Systems of Medicine is the major concern of the Department of Indian Systems of Medicine and Homoeopathy (ISM&H) in the Union Ministry of Health & Family Welfare.

Mrs. Shastry said that standardization of Unani drugs is essential to make these drugs acceptable to the modern world.

She informed that the Department of ISM&H would be able to prepare Indian Pharmacopoeia of Unani medicines by the end of 9th Five Year Plan period. She added that Unani Medicine though originated in Greece and initally developed in Arab and Persian land came to India with Arabs to find here a permanent home. Now it has deep roots in India and is an essential part of the health care delivery system. The government is providing funds and support for multi-pronged development of Unani and other Indian systems of medicine.

Commending the research work carried out by the CCRUM Mrs. Shastry said that the Council's work on vitiligo has attained international repute. The Council has also developed very good treatment for rheumatoid arthritis, malaria, filaria, asthma and some other common disorders.

On this occasion Greek Ambassador to India Mr. Yannis-Alexis Zepos said that Unani Medicine may be a point of emphasis in the Indo-Greek relations. The Ambassador, impressed by the intricate network of Unani education, health care and research institution in the country said that he may take up the matter of some collaborative ventures on Unani Medicine between Greece and this country with the President of Greece who is scheduled to visit India in January 1998.

Addressing the gathering, the WHO representative to India Dr. T. Walia said that the Organization attaches great emphasis to the use of potentialities of Unani Medicine and other traditional medicines in Primary Health care delivery.

Among those who addressed the workshop included Drug Controller General of India Dr. P. Das Gupta, Joint Secretary (ISM&H) Mr. Pradeep Bhargava and Vice-Chancellor of Jamia Hamdard Prof. Allauddin Ahmed.

Earlier, Hakim Mohammed Khalid Siddiqui, Director, CCRUM, highlighted the achievements of the Council and the research that was being carried out on some specific diseases under its auspices. The

Council has developed a database of Physio-Chemical Standards of 385 compound and 185 single drugs.

The inaugural ceremony of the workshop was presided by Hakim Abdul Hamid, Chancellor, Jamia Hamdard and Aligarh Muslim University.

In the valedictory session Union Minister of State for Health & Family Welfare, Mrs. Renuka Chowdhury said that today AIDS forms the biggest challenge towards the medical world and appealed to all Unani researchers and physicians to find cure for this dreaded disease. The Unani researchers and practitioners should also pay their attention in the areas of human health like maternal and child health, diarhoeal diseases, family welfare, drug de-addiction, cancer and diseases resulting from environmental pollution.

Mrs. Chowdhury, in her valedictory address, said that the traditional systems of medicine including Unani, Ayurveda, Siddha and others play an important role in preventing diseases. These systems consider man in his totality and his relationship with his environment and increase body vitality to combat the disease and minimize the chances of relapse. The practitioners of these systems popularly known as Hakims and Vaids have high local acceptance and influence on health beliefs and practices.

The Government of India is extending increasing support and funds for the all round development of Unani Medicine as well as other Indian Systems of Medicine, she added. She said that recently a separate Department of Systems of Medicine & Homoeopathy has been established in the Union Ministry of Health & Family Welfare with the sole intenion of furthering and accelerate the pace of development in all these systems.

Mrs. Chowdhury said that government was also focussing its attention on the maintenance of the quality of ISM&H products produced in the country, besides research and development for the production and standardization of drugs used in these systems. Efforts for cultivation, conservation and regeneration of medicinal plants are also being geard up, she said.

Mrs. Chowdhury praised the Council's Central Research Institute of Unani Medicine, Hyderabad which has attained international repute fame for the successful treatment of leucoderma. She said besides this CCRUM has also achieved very good results in the trials on the problems of filariasis, sinusitis, hepatitis, and guineaworm. She said that the physico-chemical standards of 385 compound drugs and 185 single drugs have been accepted by the Unani Pharmacopoeia Committee in the Union Ministry of Health & Family Welfare. She said that the government was seriously considering the involvement of the practitioners of Indian Medicine including Unani in the family welfar and other national programmes.

Earlier while giving details of the recommendations of the workshop Hakim

Mohammed Khalid Siddiqui, Director, CCRUM said that it was necessary for Unani medicine to engage itself in the good quality management and good laboratory practices. He stressed that attempts be made to conserve the rare Unani plants, which are on the verge of extinction.

Prof. Allauddin Ahmad, Vice-Chancellor, Jamia Hamdard presided over the function.

Special Health Camp

Council's compaign against malaria at Nautanwan

The Council launched a one month drive against malaria and a crash study on leucorrhoea and anaemia in an around Nautanwa Tehsil in Maharaj Ganj District of Uttar Pradesh in June 1997. The campaign was co-ordinated by the Council's clinical research pilot project at Nautanwan.

During the campaign the Council's researchers and technicians made door to door surveys to record incidence of the diseases and educate the people about their control and prevention in 36 villages of the District. The team carried out medical checkups and blood tests of the patients and provided them with free Unani medicines. The researchers also registered 60 cases of anaemia, 65 cases of leucorrhoea and 40 cases of suspected malaria. Ninety per cent cases of suspected malaria treated with coded Unani drug HE11 for five days were completely releived. The cases of leucorrhoea were treated with the drug SR6 and those suffering from anaemia were given the drug FD1 for 21 days. In these cases the therapeutic response was 80 and 65 per cent, respectively.

The team consisted of Hakim Saghir Ahmad Siddiqui, Hakim Mrs. Salma Khatoon, Hakim Nusrat Hameed Khan, Hakim Mohammad Arshad and Hakim Mohammed Fazil, all Assistant Research Officers (Unani), Mr. Israil Jamal, Lab Technician and Mr. Mobin Khan, Pharmacist, Mr. Rajeev Sharma, General Duty Assistant and Mr. Shamshad, Attendant assisted the team.

Participation in Exhibition

The Central Council for Research in Unani Medicine (CCRUM) participated in Mystique India 1997 — an exhibition of various Indian systems of medicines and other ancient Indian philosphies, arts and sciences which was organized at Pragati Maidan, New Delhi from 20 to 26 October, 1997. The exhibition was held under the aegis of Indian Trade Promotion Organization in collaboration of the Ministry of Health and Family Welfare and Khadi Village Commission.

The Council also participated in Perfect Health Mela organized by Government of Delhi during 25.9.97 and 4.10.97.

Visitors

During the reporting period several distinguished persons visited at the different Institutes/Units of the Council. These include :

1. An Egyption delegate visited Central Research Institute of Unani Medicine, Hyderabad on 12 April 1997.

2. A delegation from Board of Nutrition of Palmar C University, U.S.A. visited, Central Research Institute of Unani Medicine, Hyderabad on 20th October 1997 while on an international education mission to explore the various non traditional health care systems of India.

3. Dr. Gerard Bodekar from Green College, Oxford University, Oxford U.K. visited Central Council for Research in Unani Medicine, Headquarters, New Delhi on 23 February 1998.

COUNCIL'S PARTICIPATION IN SEMINARS, SYMPOSIA AND WORKSHOPS

The council's research workers participated in a number of National and International Seminar and conferences. During the reported period 36 research papers in various disciplines were presented details are as fellows :

LIST OF PAPERS PRESENTED IN SEMINARS/CONFERENCES

S.No.	Title of the paper	Name of Author(s)	Name of Instt./Unit	Event
1.	Unani Medicinal Plants of Tamil Nadu, Carnatic	S.R. Nayar & Sayed Khaleefathullah	RRIUM, Chennai (Tamil Nadu)	International conference on Medicinal Plants, FRLHT, Bangalore, 16-19 Feb. 1998.
2.	Collection and supply of crude drugs of ISM & H.	S.R. Nayar	RRIUM, Chennai (Tamil Nadu)	Workshop on quality control of drugs 29-30 December 1997 at CCRUM, New Delhi.
3.	DF-1 (A Coded Compound formulation of Unani System of Medicine in Comparision with Diet-hylcarbamizine.	M. Ahmad	RRIUM, Bhadrak (Orissa)	National conference on Unani Medicine 12-13 April 1997 at Bangalore.
4.	Compound Unani herbal formulation in the treatment of Filariasis – A Clinical Study	M. Ahmad	RRIUM, Bhadrak (Orissa)	South Asian Countries Seminar on Medicinal Plants, 9-12 November 1997 at Taramondal, Patna.
5.	Potential antimalarial plants from South Eastern India.	R.D.Girach Aminuddin M. Alam & M. Ahmad	RRIUM, Bhadrak (Orissa)	South Asian Countries Seminar on Medicinal Plants, 9-12 November 1997 at Taramondal, Patna.
6.	Clinical trial of Itrifal Zamani and Qurs Taskeen in the case of peptic Ulcer	Mohd Arshad	RRIUM, Patna (Bihar)	National Conference on Unani Medicine 12-13 July 1997, Bangalore.
7.	Characterisation of Dengue Fever according to Hummiyat-its Management – A CCRUM Approach.	Shariq A. Khan I.U. Khan A. Abbas S. Abbas	RRIUM, Aligarh (U.P.)	National Conference on Unani Medicine 12-13 July 1997, Bangalore.

S.No.	Title of the paper	Name of Author(s)	Name of Instt./Unit	Event
8.	'Gandana' A Crude drug of disputed nomenclature	S. Parveen S. Hashmi V.K. Singh	RRIUM, Aligarh (U.P.)	South Asian Countries Seminar on Medicinal Plants. 9-12 November 1997, at Taramandal, Patna
9.	Contribution of Hakim Ajmal Khan towards research in Unani Medicine	Shariq A. Khan	RRIUM, Aligarh (U.P.)	National Conference of Unani Medicine, 15 December 1997.
10.	"Folk herbal remedies of the Kheri district forest (U.P.), India.	V.K. Singh Zaheer A. Ali M.K. Siddiqui	RRIUM, Aligarh (U.P.)	South Asian Countries Seminar on Medicinal Plants, 9-12 November 1997, Patna (Bihar)
11.	"Unani Medicine" Past, Present and Future (Part I, II, III, IV)	M. Yousuf	RRIUM, Srinagar,	Orientation programme organised by Indian Population Project, Ministry of Health & Family Welfare, Government of India October-November 1997, Srinagar.
12.	Ethnomedicinal uses of plants among the Tribals of district Hazaribagh (Bihar)	Aminuddin R.D. Girach & M.K. Siddiqui	DSRU, New Delhi	South Asian Countries seminar on Medicinal plants, 9-12 November 1997, Patna (Bihar)
13.	"Unani Medicine at a glance"	M. Yousuf	RRIUM, Srinagar	CCIM, Educational Committee Meeting at Srinagar, on 28 March 1998.
14.	Potential and prospects of Medicinal plants in the Valley.	M. Iqbal	RRIUM, Srinagar	State Orientation Programme organised by Indian Population Project. Ministry of Health & Family Welfare, Government of India, October 1997, Srinagar.

S.No.	Title of the paper	Name of Author(s)	Name of Instt./Unit	Event
15.	Wajaul Mafasil an ancient disease in problem of Modern World.	S.A. Siddiqui S. Khatoon A. Hannan	RRIUM, New Delhi	National conference of Unani Medicine, Bangalore, April 1997.
16.	Effect of Bukhoor in prevention of Dengue Fever.	Zakiuddin A. Hannan K.M. Siddiqui M.K. Siddiqui	RRIUM, New Delhi	National conference of Unani Medicine, Bangalore, April 1997.
17.	'Aids' problem and solution according to Unani System of Medicine.	K.A.S. Azmi G. Mehadi M.K. Siddiqui	LRIUM, New Delhi	National seminar and workshop on Aids 12-13 July 1997, Bangalore.
18.	Tissue culture studies on some common Unani Medicinal Plants.	R.U. Ahmad Wasiuddin I. Ahmad	DSRU, Lucknow (U.P.)	National Conference on Unani Medicine 12-13 July 1997, Bangalore.
19.	Biodiversity and Herbal Drug Standardisation	S.A. Siddiqui J. Lal I. Ahmad	DSRU, Lucknow (U.P.)	National Seminar on Biodiversity and Human Welfare, 28-30 September 1997, Rishikesh.
20.	Medicinally Important Avenue Trees	S.A. Siddiqui J. Lal I. Ahmad	DSRU, Lucknow (U.P.)	National Seminar on Biodiversity and Human Welfare, 28-30 September 1997, Rishikesh.
21.	Marghsakhyon Ka Udhyogikaran (Hindi)	S.A. Siddiqui J. Lal I. Ahmad	DSRU, Lucknow (U.P.)	National Science Seminar, CIMAP & NBRI, 6-7 November 1997, Lucknow.
22.	Standardization of some Antitubercular Unani drugs	S.A. Siddiqui J. Lal S.H. Siddiqui Raisuddin & I. Ahmad	DSRU, Lucknow (U.P.)	South Asian Countries Seminar on Medicinal Plants, 9-12 November 1997, Patna (Bihar).
23.	Indigenous Drugs formulation and their standardization	S.A. Siddiqui (U.P.)	DSRU, Lucknow	National Seminar on Management of Fungal Diseases. 14-16 November, 1997, ITRC, Lucknow.

S.No.	Title of the paper	Name of Author(s)	Name of Instt./Unit	Event
24.	Role of Avenue Trees in Fortification of Health, Environment & Rural Economy	S.A. Siddiqui	DSRU, Lucknow (U.P.)	Seminar on Commercialisation and Cultivation of Medicinal Plants, 15 December 1997, NBRI, Lucknow.
25.	Effect of Environment on Standardization of Unani Drugs	S.A. Siddiqui	DSRU, Lucknow (U.P.)	International Symposium on New Drug Development, 6-8 February 1998, New Delhi.
26.	Chamak–Damak Ya swasthya (Hindi)	S.A. Siddiqui	DSRU, Lucknow (U.P.)	National Science Seminar 27-29 February 1998, ITRC, Lucknow
27.	Some Common Unani Medicinal drugs used in Helminthic infestation of India (Vermicides and Vermifuges Medicine)	Mohd Ayub Khan Muzzat Usmani Zaki Ahmad Siddiqui	CRU, Allahabad	National Conference on Unani Medicine, 12-13 July 1997, Bangalore.
28.	Management and control of Aids by Unani Medicine	M. Aslam S. Arfin & I. Ahmad	RRIUM, Lucknow (U.P.)	National Conference on Unani Medicine, 12-13 April 1997, Bangalore.
29.	Clinical Evaluation of Unani Drug IKH4 in the treatment of Infective Viral Hepatitis	M.A. Khan Idris Ahmad	RRIUM, Lucknow (U.P.)	National Conference on Unani Medicine, 12-13 April 1997, Bangalore.
30.	Family Planning according to Unani classics – A Literary Approach	Z.H. Siddiqui S.M. Hassan & I. Ahmad	RRIUM, Lucknow (U.P.)	National Conference on Unani Medicine, 12-13 April 1997, Bangalore.
31.	Common Unani Medicinal Plants of India	S. Arfeen M. Aslam & I. Ahmad	RRIUM, Lucknow (U.P.)	National Conference on Unani Medicine, 12-13 April 1997, Bangalore.
32.	An easy and effective devise of crude drug preservation	J. Lal, A. Rauf S. Khair, S.A. Siddiqui I. Ahmad	IUMP Lucknow (U.P.)	National Conference on Unani Medicine, 12-13 July 1997 (abstract), Bangalore

S.No.	Title of the paper	Name of Author(s)	Name of Instt./Unit	Event
33.	Biomas buildup in some Usar land weeds under the stress of environmental pollution.	S. Khair, N.R. Usmani A. Rauf	IUMP Lucknow (U.P.)	National Seminar on Biodiversity and Human Welfare, 28-30 Sept. 1997 (Abstract) Rishikesh.
34.	A report on the Vegetational Cover in and around a distillary plant at Lucknow.	S. Khair(as guide)	IUMP Lucknow (U.P.)	National Children Science Congress
35.	Comparative clinical study of coded drug, X,Y&Z in the cases of Amoebiasis (Zaheer)	Zubair A. Khan	CRU Burhanpur	National Conference on Unani Medicine 12-13 July 1997 at Bangalore.
36.	Botanical and phytochemical standardisattion of Badam seeds (*Prunus amygdlns* Linn.) A patent Unani drug.	Shamima Hashmi F. Ahmad & Wazahat Hussain	RRIUM Aligarh	South Asian Countries Seminar on Medicinal plants, 9-12 November, 1997, Patna (Bihar)
37.	Acquisition problems in Unani Medicine literature	Syed Shoaib Ahmad	Hqrs, CCRUM	National Convention of Medical Libray Association of India. 27-29 November 1997, Sanjay Gandhi Post Graduate Institute of Medical Science, Lucknow.

PUBLICATION OF RESEARCH PAPERS IN NATIONAL AND INTERNATIONAL SCIENTIFIC JOURNALS

During the reporting period 18 research papers were published in various scientific journals. Details are as follows :

LIST OF RESEARCH PAPERS PUBLISHED IN THE JOURNALS

S.No.	Title of paper/ Book	Author(s)	Name of Instt./ Unit	Name of the Journal/Book	Vol. No. and page	Year of publi-cation	Publisher/ Place of publication
1.	Some less known plant foods from Bhadrak, District, Orissa.	R.D. Girach	RRIUM, Bhadrak (Orissa)	Journal of Economic & Taxonomic Botany.	21(1): 107-111	1997	Jodhpur
2.	Observation of Ethnomedicinal plants of Bhadrak District, Orissa.	R.D. Girach Aminuddin	RRIUM, Bhadrak (Orissa)	Ethnobotany	9:44-47	1997	Lucknow
3.	"Pharmacognostical standardization of Jadwar – "A cardiotonic drug"	Shamima Hashmi & Faizan Ahmad	RRIUM, Aligarh (U.P.)	Hamdard Medicus	40,1997 No.2, p.37-40	1997	Karachi (Pakistan)
4.	"Identification and standardization of commercial sibr (Aloes). "A cancer aggluting drug"	Faizan Ahmad & M.A. Rashid	RRIUM, Aligarh (U.P.)	Hamdard Medicus	40,1997 No.3, p.44-53	1997	Karachi (Pakistan)
5.	"Phamacognostical Standardization of jaiphal – A Multiaction drug"	Shamima Hashmi & Faizan Ahmad	-do-	Hamdard Medicus	40,1997 No. 4, p.89-93	1997	Karachi (Pakistan)

S.No.	Title of paper/ Book	Author(s)	Name of Instt./ Unit	Name of the Journal/Book	Vol. No. and page	Year of publi-cation	Publisher/ Place of publication
6.	"Medicinal plants used by the forest ethnics of Gorakh-pur Distt., (U.P.) India."	V.K. Singh Z.A. Ali & M.K. Siddiqui	RRIUM, Aligarh (U.P.)	International journal of Pharmacognosy.	35(3)	July 1997	Swets & Zeitlinger publisher Netherlands
7.	"Folk Medicinal plants Garhwal & Kumaon forests of Uttar Pradesh, India."	V.K. Singh Z.A. Ali & M.K. Siddiqui	RRIUM, Aligarh (U.P.)	Hamdard Medicus	XL(4)	Oct.-Dec. 1997	Karachi (Pakistan)
8.	"Cultural aspects of illness and related folk medicinal practices in Kashmir."	M. Iqbal et al	RRIUM, Srinagar	Aspects of folklore with special reference to Kashmir.	I	March 1998	Centre for Central Asian studies, Kashmir University Srinagar.
9.	Medicinal potential of *Andrographis paniculata* (Bhuineem) – A less known medicinal plant in Unani Medicine	Aminuddin, R.D. Girach & Wasiuddin	DSRU, New Delhi	Hamdard Medicus	XL	April-June 1997	Karachi (Pakistan)
10.	"A clinical study of traditional prophylactic and curative treatment of Frost-bite in Kashmir."	Y.I. Munshi et al.	RRIUM, Srinagar	Aspects of folklore with special reference to Kashmir.	1	March 1998	Centre for Central Asian studies Kashmir University Srinagar.

S.No.	Title of paper/ Book	Author(s)	Name of Instt./ Unit	Name of the Journal/Book	Vol. No. and page	Year of publi-cation	Publisher/ Place of publication
11.	"Traditional management of post-natal care in Kashmir; A Heritage"	Irfat Ara et al	RRIUM, Srinagar	Aspects of folklore with special reference to Kashmir.	1	March 1998	Centre for Central Asian studies, Kashmir University Srinagar.
12.	Pithedulosides A-G, Oleanane Glycosides from pithecellobium dulce	S.K. Nigam Misra, Raisuddin Yoshikawa, M. Kawamoto, & S. Arihara	DSRU, Lucknow (U.P.)	Phyto-chemistry	44: 1329-34	July 1997	Great Britain
13.	Chemical Investigations on seeds of sarcostigma Kleinii	Raisuddin G.J. Mishra, S.A.Siddiqui & S.K. Nigam	DSRU, Lucknow (U.P.)	Indian Chemistry Society	74:736 & 737	Sept. 1997	Calcutta
14.	Sachche Mitr (Hindi) popular article	S.A.Siddiqui	DSRU, Lucknow (U.P.)	Vigyan Vani	3:50	1997	Lucknow
15.	Blieve it or Not popular article	S.A.Siddiqui	DSRU, Lucknow (U.P.)	Enviro News	3:8	August 1997	Lucknow
16.	NEEL – A Neglected plant of Great Medicinal and Tinctorial Value	S.A.Siddiqui & S. Khair	DSRU, Lucknow (U.P.)	Hamdard Medicus	XLI(1) 105-108	Jan-March 1998	Karachi (Pakistan)
17.	Enumeration of the Drug Kanghi (Abutilon Indicum)	S. Khair	IUMP Lucknow	Herbarl Bull.	I(i), 7-8	1997	Pune
18.	"Bars" (Urdu)	S.T.H. Zaidi	IUMP Lucknow	Al-Shefa		March 98 17-20	

PARTICIPATION IN TRAININGS/WORKSHOP

Short term orientation training programmes in different disciplines were continued during the reporting period. A number of research workers participated in these training programmes. Details are as follows :

S.No.	Name of the Employer	Name of Instt./ Unit	Title training/workshop	Period	Place & date
1.	Hkm. Ghazala Javed	RRIUM, New Delhi	Re-orientation training programme in Moalijat & Ilmul Amraz	26.3.98 to 31.3.98 (Contd.)	Min. of H & F.W., Govt., of India conducted by Jamia Hamdard University, Delhi.
2.	Hkm. Anwarul Islam	RRIUM, New Delhi	Re-orientation training programme in Jarahiyat	14.5.1997 to 13.6.1997	Jamia Humdard New Delhi
3.	Hkm. S. Parveen	LRIUM, New Delhi	Re-orientation training programme in Jarahiyat	14-5-1997 to 13-6-1997	Jamia Hamdard, New Delhi.
4.	Hkm. S. Parveen	LRIUM, New Delhi	Re-orientation training programme in Moalijat & Ilmul Amraz	26.3.1998 continued after 31.3.1998	Jamia Hamdard, New Delhi.
5.	Hkm. M. Saleem Siddiqui	LRIUM, New Delhi	Re-orientation training programme in Moalijat & Ilmul Amraz	26.3.1998 continued after 31.3.1998	Jamia Hamdard, New Delhi.
6.	Hkm. Ziaul Haque	RRIUM, Lucknow (U.P.)	Re-orientation training programme in Moalijat & Ilmul Amraz	26.3.1998 to 31.3.1998 (Contd.)	Jamia Hamdard, New Delhi.
7.	Hkm. Shamsul Arfin	RRIUM, Lucknow (U.P.)	Re-orientation training programme on the subject "Ilmul Advia"	26.3.1998 to 31.3.1998 (Contd.)	Jamia Hamdard, New Delhi.
8.	Hkm. Zaki Ahmad	DSRU, New Delhi	Re-orientation training programme on the subject "Ilmul Advia"	26.3.1998 to 31.3.1998 (Contd.)	Jamia Hamdard, New Delhi.

S.No.	Name of the Employer	Name of Instt./ Unit	Title training/workshop	Period	Place & date
9.	Hkm. S.M. Asim	C.C.R.U.M., Headquarters	Re-orientation training programme on the subject "Ilmul Advia"	26.3.1998 to 31.3.1998 (Contd.)	Jamia Hamdard, New Delhi.
10.	Mr. Rahat Usmani	C.C.R.U.M., Headquarters	Orientation in Health Science Librarianship	19.1.98 to 20.2.98	National Medical Library, New Delhi
11.	Mr. Mohd Hashim	C.C.R.U.M., Headquarters	National workshop on evaluation and improvement of training programmes in Health Science Librarianship	5-7 May 1997	National Medical Library, New Delhi

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