

Minutes of the meeting

Workshop on Tribal Health Forum & Celebration of International Day of the World's Indigenous People at RMRC NE Region (ICMR), Dibrugarh (9 -10 August, 2011)

Inaugural Function

The International Day of the World's Indigenous people was celebrated at Regional Medical Research Centre, Dibrugarh on 9th August, 2011. On this occasion a Workshop and meeting of the Tribal Health Forum was organized. The inaugural function was graced by Mr. Pritbi Manjhi, the Honourable Minister of Labour, Govt of Assam as the Chief Guest while Dr. V. M. Katoch, Secretary DHR & DG, ICMR, was the Guest of Honour at the occassion. Mr. Sanjib Datta, Jt Secretary DHR & FA, ICMR and Mr. Arun Baroka, IAS, Sr. DDG (Admn), ICMR were among the galaxy of scientists and Directors of various ICMR institutes who attended the Workshop. In the Workshop research work being carried out by various ICMR institutes in different parts of the country on various tribal health issues was reviewed and deliberated. The inaugural session of the Workshop began with the felicitations of the dignitaries and welcome address by Dr. J. Mahanta, Director, RMRC, Dibrugarh. This was followed by the addresses by Mr. Sanjib Dutta, Mr. Arun Baroka and Dr. V. M. Katoch,. Mr. Prithbi Majhi, the Chief Guest, in his speech elaborated the important role of the indigenous tribal population across the continents in developing the rich knowledge of tribal medicine which needed preservation for the benefit of mankind.

After the brief inaugural session the Workshop on Tribal Health Forum started which was chaired by Dr. V. M. Katoch, Secretary DHR & DG, ICMR, New Delhi. Dr. Neeru Singh, Director, RMRCT, Jabalpur was the Co-chair.

Action Taken Report and comments

Dr. Neeru Singh presented the action taken on the resolutions of the last meeting of the Tribal Health Forum held at Jabalpur. On action taken report following comments were made by the dignitaries.

Dr.V.M. Katoch: Malaria, haemoglobinopathies and hypertension are the common problems across tribal populations in the country. Studies should be taken up on hypertension and tuberculosis in task force mode under the Tribal Health Forum. The control of filariasis should also be taken up. RMRC, Dibrugarh should do validation of JE forecasting module developed by them. RMRC, Bhubaneswar should start collecting samples for Chandipura virus and develop assay for detection of this virus. RMRC, Port Blair should start studies on hypertension risk factors and intervention in A & N islands. All the Centres should sit together to prepare agenda for milestone research. For malaria in pregnancy a policy should be drafted at regional or national level with the sharing of knowledge / experience of indigenous people.

Mr. Sanjib Dutta : Important research studies in indigenous people should be initiated at the institutional level without waiting for extramural fund. An annual calendar for the Tribal Forum meetings, for example 4 times in a year, should be prepared. Further, the state health authorities should also be involved in these meetings.

Dr. Rashmi Arora: Region wise health problems among indigenous people should be identified with the help of local tribal leaders for in depth studies.

Centre wise presentations

(i) RMRC, Bhubaneswar (represented by Dr. Santanu Kar, Dr. G. Bullya and Dr. B. Dwivedi)

The presentation with reference to the work carried out by RMRC, Bhubaneswar in tribal communities covered

- Health indicators in tribal population
- Health strategy for tribals
- CQ & SP drug resistance-changing drug strategy against malaria
- *P. malariae* coinfection
- Vector mapping (GIS)
- Epidemic investigations-Dengue, chikungunya and cholera
- Intervention strategies to control anaemia in tribal adolescent girls
- Diarrhoeal disorders in tribal areas

Their future proposals on Tribal Health Research included

- Identification of Health Priorities
- Control of communicable Diseases
- Non communicable disease control

Chairman appreciated the presentation. Suggested to explore the cause of failure of antimalarials used. He also suggested to develop an immunodiagnostic kit for *P. malariae* by NIMR.

(ii) RMRCT, Jabalpur (represented by Dr. Neeru Singh, Dr. T. Chakma and Mr. Pradip Varde)

The presentations by RMRC, Jabalpur included

Achievements

- Intermediate Reference Lab for TB for Madhya Pradesh
- Apex Referral Lab for Dengue/ Chikungunya
- Bivalent Kit for malaria is being introduced in the program
- Clinic established in Jagdalpur/Bastar.

- The NVBDCP established Jagdalpur as sentinel site for morbidity and mortality.
- Representation in Planning Commission for Tribal upliftment
- Protection of Red Cell genetic markers against *P. falciparum* malaria in a tribal area with intense malaria Transmission
- Fluorosis Mitigation

Future strategy

- Human resource development
- Documentation
- Strengthening of existing facilities

Intervention strategy

- Intervention program for the management of scabies, anemia and malnutrition

Ongoing work

- Prevalence of Pulmonary Tuberculosis in Jabalpur District of Madhya Pradesh
- Role of i-Land Informatics Limited
- Virology work in Jabalpur: H1N1, Dengue

New Initiatives at RMRCT, Jabalpur

- Cancer Biology: Oral cancer
- Virology: H1N1, Dengue

Chairman remarked on taking up vector study and to develop model for prompt diagnosis and treatment of malaria. He further suggested that study should be focussed to find out which critical factors are influencing the malaria epidemiology for taking best control measures. It was also suggested to take up fluorosis prevention study.

(iii) RMRC, Port Blair (represented by Dr. A. N. Sriram)

The presentation with reference to the work carried out by RMRC, Port Blair included

- Viral Hepatitis (Hepatitis-B)
- Tuberculosis
- Lymphatic Filariasis
- Influenza (H1N1)
- Malaria
- Nutritional Disorders
- Hypertension and other NCD risk factors
- Alcoholism
- Genetic Disorders (HLA & cytokine genes)
- Unusual Disorders (Trachoma)
- Generation of traditional knowledge from tribal population on usage of medicinal plants and seaweeds and assessment of antimicrobial potentials

New Initiatives at RMRC, Port Blair

- Infrastructure development

New proposal

- Request for staff like Scientist (Anthropology)

Chairman appreciated the presentation and lauded the study on viral hepatitis done by the Centre. Suggested to take up molecular studies on trachoma and interventional study along with the state health authorities. Study on TB should be continued and sustained. One person from the institute should be trained on TB.

(iv) NIN, Hyderabad (represented by Dr. Mallikarjun)

The presented with reference to the work carried out by NIN, Hyderabad in tribal communities included

- Nutrition profile and Cardio Vascular risk factors among tribal migrant population in Hyderabad city

Proposed Study

- Nutrition profile of Chenchus (A primitive tribe of Andhra Pradesh)

Chairman advised to prepare intervention strategies from the beginning of the proposed study and to involve NGO's in the study. Dr. K. Satyanarayana suggested to see the specificity of population coming from different states with emphasis on analyzing the facts for low calorie intake and obesity.

(v) RMRC, Jodhpur (represented by Dr. P.K. Dam and Dr. S. S. Mohanty)

The presentation with particular reference to the work carried out by RMRC, Jodhpur in tribal communities included

- A study on nutrition and health status of the tribal population of three districts in Rajasthan (in collaboration with Govt of Rajasthan).
- The study on ethnomedicine practices and health seeking behaviour among the tribals of Rajasthan.
- Polymorphisms in Duffy blood group genes of *Plasmodium vivax* malaria patients and control population

New proposals

- A study of ethnicity and diseases in India, Phase-I study among the tribal and non-tribal populations of Rajasthan.
- An in-depth ethnographic study of selected tribal groups of Rajasthan to understand the health seeking behaviour and health related practices pertaining to certain infectious diseases.

- Geographical distribution and virus susceptibility status of mosquito vectors of Japanese encephalitis in tribal districts of Rajasthan
- Threshold serological antibody titre against antigens of *Salmonella typhi* to diagnose the case of typhoid in two major tribes of Rajasthan

Chairman commented that studies on ethnomedicine practices should be encouraged and the proposed new studies in the field on ethnomedicine should be done in collaboration with state health department. Commenting on polymorphisms in Duffy blood group investigation he observed that the study is providing no new idea for diagnosis and management of *P. vivax* cases and suggested to modify the study having clinical application.

(vi) VCRC, Pondicherry (represented by Dr. P. Jamulingam, Dr. S. L. Hoti and Dr. K. Gunasekhran)

The presentation gave details of the past work carried out by the Centre in tribal areas of Orissa and bordering areas which included

- Morbidity status of Koyas
- Morbidity status of upper Bonda tribe
- Causes of deaths (verbal autopsy)
- Persistent malaria
- Vector bionomic studies in Singhbhum hills (2005 -2007)
- Haemoglobinopathies

Their current activities in tribal areas included

- Vector mapping
- Malaria control
- Monitoring drug resistance in *P. falciparum*
- Insecticide resistance and its mechanisms
- Leishmaniasis
- Dengue and Chikungunya

Chairman appreciated VCRC for generating valuable data on malaria problem in tribal areas of Orissa and suggested to pursue the interventional studies. He Advised Director, VCRC, Pondicherry, Director, RMRC, Bhubneswar and Director, NIMR, Delhi to sit together and plan interventional strategies involving the state health department. Dr. Kar commented that for capacity building and assessing the training needs in Orissa there is a need for discussion and cohesive action by VCRC, Pondicherry and RMRC, Bhubaneswar. Chairman agreed to have discussion in Delhi along with other scientists.

(vii) NIIH, Mumbai (represented by Dr. K. Ghosh)

The presentation with particular reference to work carried out by NIIH, Mumbai in tribal areas included

- Population screening for blood groups, G6PD, Abnormal haemoglobins & Thalassemias, HBsAg
- Collaboration with Jigyansu Tribal Research Centre, New Delhi, 1991-93 (hemoglobinopathies - sickle cell anemia and a thalassemia)
- Indo French Collaboration 1992-1995 (Establishment of molecular technology)
- Multicentric Programme on Nutritional Anemia and Hemoglobinopathies in Tribals of 4 states in India 1999-2005
- Iron deficiency anemia among the tribals in 4 states
- Prenatal Diagnosis for haemoglobinopathies in tribals
- Newborn screening for sickle cell Disorders 2009-2011

Activities undertaken under Translational Research

- Establishment of basic red cell serology techniques as a part of pre-transfusion investigations in the north East region
- Development of the training facilities for establishing the cytogenetic laboratory in eastern states of India ie. Assam, West Bengal, Bihar, Jharkhand and Orissa
- Education of laboratory workers for the diagnosis of haemophilia and other bleeding disorders with a view to establish full fledged diagnostics laboratories in selected centers in six states in Central and North East India

New proposed project

- To be undertaken under Studies on Tribal Populations (12th Plan)

Chairman appreciated the presentation. Suggested to explore possibilities for implementing research findings in various health programmes and stressed the need to involve the medical colleges and other health setups.

(viii) RMRC, Dibrugarh (represented by Dr. K. Narain, Dr. R.K. Phukan and Dr. B.J. Borkakoty)

Dr. K. Narain presented the work of the Centre carried out in tribal populations of north-east on paragonimiasis and pulmonary tuberculosis in northeast region of India and highlighted the proposed future studies in these fields which included-

Future studies on paragonimiasis

- Unknown lung fluke metacercariae are to be identified and characterized.
- Studying prevalence of paragonimiasis amongst smear negative pulmonary T.B. suspects who attend designated microscopy centers under routine RNTCP program.
- Development of dipstick test for diagnosis of paragonimiasis.
- Development of antigen detection system using monoclonal antibody for monitoring treatment outcome.

Future studies on MTB

- Completion of studies in Tea tribes and Sikkim samples
- Feasibility of direct detection of rpoB mutation in sputum smear as a marker of rifampicin resistance under DOTS in Sikkim. i.e. using Line Probe Assay
- Further characterization of MTB strains for understanding transmission dynamics of infection in Sikkim

Chairman advised to develop ELISA based test kit for detection of pulmonary paragonimiasis quickly. He opined that very high prevalence of MDR TB in Sikkim is doubtful, hence, suggested to take the history properly.

Dr. R.K. Phukan presented the work of the Centre on cancers and hypertension in the tribal areas of north-east India which included

- Understanding the role of tobacco and pesticides in causing cancers in Mizoram, Manipur & Sikkim
- Cancer in Northeast (): understanding the role of pesticide.
- Study of genetic and molecular epidemiology of oral cancer in Assam & Meghalaya
- Study of genetic and molecular epidemiology of stomach cancer in Mizoram
- Trend of lung cancer NE Region (PBCR) of India
- Hypertension and CHD

Chairman commented that Centre is now expected to commence intervention study in the field of cancer. In this context he also suggested to take up genomic based study involving functional variations/ mutation for better therapeutic approaches. He opined that to bring awareness in community about various risk factors of prevalent cancers in north-east India state health authorities should be involved.

Focus of the presentation of **Dr. BJ Borkakoty** was on the work carried out by the Centre on various communicable microbial diseases which included HIV, HSV-2, hepatitis B, surveillance of measles, human influenza and RSV, outbreak investigations of cholera, pneumococcal infections. Chairman appreciated the presentation and suggested undertaking studies on RSV and pneumococcal infection.

Discussion and adoption of resolutions

Dr. K. Satyanaryana

- Creation of knowledge base in basic or applied research is important.

- Compilation of a document on tribal health and dissemination of the information to GOI and other agencies including public health manager is necessary.
- There is need for a tribal health atlas - ICMR can work on it.

Dr. Rashmi Arora

- Many non-ICMR Institutions are doing good work on tribal health and they should be supported for *funding in project mode*.
- The available information on tribal health should be documented.
- The wealth of herbal medicines practiced by the tribal people should be preserved. We should have some discussion on tribal property rights.

Dr. R.S. Dhaliwal

- Among the communicable diseases malaria and diarrhoeal disease are real problem in tribal areas. Issue of migrant population add another dimension to the existing health problems in tribal areas. Alcohol and tobacco use is alarmingly high in tribal populations
- Some traditional herbs may play protective role against the diseases. This should be looked into
- Low prevalence of DM, low hypertension etc. In some tribal communities need exploration
- Efforts should be made to explore knowledge on ethno medicines.

Mr. S. Dutta

- Within Tribal Health forum there should be incremental evaluation of the activities.
- The ethno-medicine / herbal medicine / traditional medicinal plants etc. should be explored
- Without waiting for external funds activities on tribal health research should be *initiated at institutional level*

Mr. Arun Baroka

- A document to take stock of the tribal health is needed
- Pockets of tribal population have peculiar health problems that can be mapped and documented
- Development of health infrastructure in tribal areas is important

Dr. K. Ghosh

- NIIH has prepared a genetic atlas
- Haemoglobinopathies, malaria and cancers are important health problems among tribals which need in-depth studies
- Progress of the tribal health related projects should be assessed in the meetings of the tribal health forum
- There is a need to involve tribal leaders for the exploration of tribal medicine
- some grant may be required for appointing DEO or Medical statistician to gather tribal real-time data.
- Requested some funding for training of manpower related to haemoglobinopathy & sickle cell anaemia study

Dr. S. Kar

- There is need to Identity the real / specific problem and its mapping
- Manpower strengthening is essential for carrying out systematic research which should be time and target specific
- Generic disorders should be studied keeping therapeutic approach in mind

Dr. Neeru Singh

- A collective approach for dealing with tribal health problems like malaria, haemoglobinopathies etc. Is required
- Next annual meeting of Tribal Health forum proposed on 9th August, 2012 at RMRC, Bhubaneswar
- Next review meeting proposed at Port Blair / Pondicherry / Mumbai

DG, ICMR

- We should have review meetings of Tribal Health Forum on 1st Sunday of every 3rd month
- In future meetings of Tribal Health Forum we should have separate session for interaction involving medical colleges, political leaders, social leaders and non-ICMR scientists to focus on the tribal health problems.
- Dr. G.S.Toteja should collect materials and provide guidance and coordination to prepare the document on tribal health.
- In next Tribal Health Forum meeting detailed discussion should be held on ethno-medicines
- Multicentric projects on diseases related to life style changes are required
- Important genetic disorders such as haemoglobinopathies, sickel cell disease, nutritional disorders in migrant population are priority areas of research. Studies on MCH, hypertension need to be emphasised. Studies on malaria are challenging and should continue. We should take vector born diseases as a whole
- We should select few topics related to tribal health, carry out focused study, come out with solution / application which need to be percolated down to the state for implementation
- Basic science with solution / application is the corner stone ultimately leading to translational research

The meeting ended with the vote of thanks offered by Dr. P. K. Mohapatra.