

**Minutes of the meeting of ‘ICMR Tribal Health Research Forum’ held at
the
National Institute of Nutrition, Hyderabad on 4th March, 2012**

A meeting on Tribal Health Research Forum (THRF) was organized by NIN in association with the ICMR at the NIN Conference Hall on 4th March, 2012. The meeting was chaired by Dr. V.M. Katoch, Secretary DHR and DG, ICMR, New Delhi. The following members attended the meeting:

1. Dr. V.M. Katoch *Chairperson*
Director-General, ICMR and DHR,
Government of India
2. Shri Sanjiv Datta *Chief guest*
Financial Advisor, ICMR
3. Dr. Neeru Singh *Coordinator*
Director, RMRC(T), Jabalpur, MP
4. Dr. B. Sesikeran
Director, NIN, Hyderabad, AP
5. Dr. G.S. Toteja
Scientist & Head
Nutrition, ICMR.
6. Scientists from different RMRC Centers and other ICMR institutes also attended the meeting (please see annexure).

Dr. G.M. Subba Rao, Scientist at NIN welcomed the Secretary, DHR and DG, ICMR, Dr. V.M. Katoch, Mr. Sanjiv Datta, Jt. Secretary, DHR and FA, ICMR and other participants for the Tribal Health Forum meeting and requested Dr. V.M. Katoch to chair the meeting and conduct the proceedings.

In his opening remarks Secretary, DHR and DG, ICMR Dr. V.M. Katoch has given a brief account about the current scenario of double burden of disease in the country (under nutrition and over nutrition). In this context, he quoted that there is a rise in the prevalence of diabetes among Indian population as some of the National programmes were not dynamic to control these NCDs at the community level. Further, he stressed that the research activities carried out by ICMR institutes/centers are not active in the area of tribal health as it was quite evident from the recent reports on the prevalence of hypertension among the tribal population. He addressed the scientists of ICMR who are involved in the tribal health research to be proactive to monitor the changes occurring during the transition in socio-economic, diet and nutrition in relation to the cultural habits of the community in particular with tribal population. This would help in identifying risk factors of NCDs among the tribal population. Further, he suggested to rope in medical colleges as active partners to take up this area of research in collaboration with ICMR. Also DG suggested that there should be more focus on malaria in tribal dominant areas and stressed that to create a special website for tribal health forum and link may be given to ICMR website.

Mr. Sanjiv Datta, Financial Advisor, ICMR suggested to all the members of the participating centres should submit an ***action taken report*** based on the minutes generated in every meeting of the Tribal health forum. Further he advised the scientists to disseminate the outcome of the studies to the beneficiaries. In addition, an institutional mechanism should be built up for accountability and responsibility for the projects that are being undertaken by the scientists.

Dr. Neeru Singh, Director, RMRCT, Jabalpur, Chief Coordinator of the Tribal Health Research Forum (THRF) reviewed the outcome of previous meetings on tribal health forum held at different Institutions. She informed that Dr. Toteja has taken a lead in forming a special task force forum on Tribal hypertension. She also informed the formation of task force for Fluorosis to adopt the Nutritional model based on studies conducted by RMRCT, Jabalpur. Further NIIH, Mumbai has undertaken multicentre studies on hemoglobinopathies relating to prenatal diagnosis for thalassemia and sickle cell diseases and newborn screening have been submitted and awaiting funding.

At this juncture Dr. Katoch has suggested to Dr. Toteja to develop a nutrition intervention (risk reduction) model in association with NIN which can go as a national programme for tribal population.

Dr. S.K. Kar, Director, RMRC, Bhubaneswar, indicated that future proposals on tribal population should be need-based and the action taken report should provide the information how these programmes have helped in utilization of health care system in tribal areas.

Dr. B. Sesikeran, Director, NIN, Hyderabad suggested that the scientists to follow code of ethics and confidentiality of the outcome of these projects till completion.

PRESENTATIONS ON THE WORK DONE BY DIFFERENT INSTITUTES, ESPECIALLY ON TRIBALS

The project presentations from the participating institutes and the recommendations are as follows.

1. National Institute of Nutrition, Hyderabad

Dr. B. Sesikeran, Director, presented current diet and nutritional status and time trends of the tribal population carried out by the National Nutrition Monitoring Bureau (NNMB) since 1985-89.

Comments/ Suggestions

Dr. V. M. Katoch and other members of the Tribal health forum appreciated research studies carried out on tribal with regard to their diet and nutritional status and time trends over a period of 3 decades (1985-2010).

Dr. B. Sesikeran has informed to the members of the forum that currently, NNMB is in operation in only 10 states and he stressed the need for expansion of the NNMB units in non-NNMB states to provide national representative data. He requested Dr. A. Laxmaiah, Scientist E, NIN to present the expansion proposal of NNMB in Non-NNMB states, where ICMR Institutes are already existed.

Shri Sanjiv Datta informed that funds will not be a constraint for this.

Dr. A. Laxmaiah presented NNMB expansion proposal to the forum including its budgetary requirements of Rs.30lakhs for each NNMB unit to be established, where ICMR Institutes are

already existed in Non-NNMB states. DG, ICMR and heads of various ICMR units have agreed in principle to establish NNMB units in Non-NNMB states.

He also presented a new initiative project titled "Effect of nutrition and health education on blood pressure level among tribal adult population. He has presented various studies carried out on Tribal population during 2005-10 and the following are few of the observation:

- Prevalence (%) of under nutrition (< Median \pm 2SD) among preschool children was high and Diet and Nutritional status of Tribal population in ITDA areas of Khammam district, was also carried out.
- Diet and Nutritional status of Tsunami affected population in Andman and Nicobar Islands
- Distribution (%) of Adults according to Nutritional Status (BMI grades) by Gender: Nicobarese & Settlers \pm Pooled

Comments/ Suggestions

The DG, ICMR Dr. V. M. Katoch and Financial Advisor, ICMR, Mr Sanjiv Datta have agreed in principle to set-up NNMB units in ICMR Institutes, where NNMB is not in operation in that particular state and also agreed to sanction the required budget of Rs.30 lakhs for each unit in the initial year and they suggested Dr. A. Laxmaiah, to submit a detailed proposal in this regards.

2. Division of Non-Communicable of Diseases (NCD), ICMR

Dr. Prashant Mathur, Scientist "D" presented the risk factors of non-communicable diseases (NCDs) among tribal population.

The following aspects were discussed during the presentation.

- Tribal Health related activities supported by the Division of NCD as Extramural Funding
- Telemedicine project for RF/RHD/HT in Wyanad, Amrita Institute of Medical Sciences, Kochi
- NCD related Tribal Research Activities viz., hypertension, diabetes, cancers, Overweight/obesity, mental ill-health, and addressing chronic care and related health system research.

Comments/ Suggestions

DG has suggested having telemedicine project on a centralized research project mode. Further he suggested developing a health system project which can address the hypertension, diabetes and other chronic diseases for the tribal population. The Directorate of Health and the State governments should include as part of the forum and ICMR should coordinate with the Directors of the Public Health in order to transfer the outcome of the Tribal Health Research Forum (THRF) for the benefit of the tribal and as well as general public. Representations from Medical colleges functioning around the tribal areas should also be involved in the Tribal Health Research Forum (THRF).

3. Division of Epidemiology and Communicable Diseases (ECD), ICMR

Dr. Ayan Jha, Scientist C, and Programme Officer for Tribal Health, represented the Division of ECD. He briefly presented the various projects funded under the Tribal Sub Plan and list of projects approved for funding. Currently, there are 19 ongoing projects, and the funds allocated (Rs 1 crore 20 lakhs) to the division under the TSP during the financial year 2011-2012 has been fully utilized.

It was suggested that Tribal forum should be appraised of the projects which are approved /funded by ICMR under the head Tribal Sub Plan (TSP).

4. ICMR, New Delhi

Dr. Toteja, Scientist 'F' & Head, Nutrition, ICMR, presented the formation of Task Force on Tribal Hypertension and also informed about the invitation of proposal on "Role of diet and lifestyle on hypertension. The Effect of nutrition and health education on blood pressure level among tribal adult population under Dr.B.Sesikeran/Dr. A. Laxmaiah, Director, NIN, Hyderabad.

- Impact of community based dietary salt restriction in the reduction of blood pressure among tea garden workers of Assam- under *Dr. P.K.Borah, Scientist-'C', RMRC, Dibrugarh*
- Assessment of urine sodium output in relation to hypertension among tribals of Madhya Pradesh ó *Dr. Tapas Chakma, Scientist- 'F', RMRCT, Jabalpur*
- Prevention of hypertension towards control in tribal population- *Dr. S.K.Kar, RMRC, Bhubaneswar.*
- Further Dr. Toteja enumerated the preparation of a compendium on research carried out by ICMR on tribals. The outline of the compendium presented was accepted and is expected to be completed by August 2012. All institutes will be required to provide information on the work done in 11th Five year plan along with proposed activities/vision for 12th plan. Various Divisions at ICMR HQRS will provide information on extramural research supported by them. The proforma for information will be provided to institutes by 15th March 2012 and are returnable by 15th May 2012.
- Lastly he also mentioned that Dr Pradeep Das will prepare and submit a study protocol on Hypertension in collaboration with Ranchi Medical College. The study is expected to be carried out in a tribal district of Jharkhand and it will be on the lines of common protocol developed for a multisite study.

Comments/ Suggestions

DG, ICMR suggested that the project should be sanctioned within a given timeframe and suggested for a common national protocol so as to get the project proposals in uniform to tackle the similar health problem in various regions of the country. All the projects should be developed with an aim to give a solution to the problem as an outcome of the study. In addition, set the deadline of May 15, 2012 for preparation of compendium on Tribal proposed by Dr. Toteja.

5. National Institute of Immunohaematology, (NIIH)

Dr. Ghosh, Director presented the following aspects:

- Newborn Screening and Natural history of sickle cell disorders

- Prenatal Diagnosis of Thalassemia and Sickle Cell Disorders
- **The following two project proposals were presented for funding :**
- Newborn screening and comprehensive care for sickle cell disorders in different regions
- Establishment of Prenatal Diagnosis of Hemoglobinopathies at RMRC, Jabalpur and RMRC, Bhubaneswar

6. Regional Medical Research Centre (RMRC), Jabalpur

Dr. Chakma, Scientist 'F' presented on major health problems of Tribal in Madhya Pradesh. Further, he also presented new initiatives to tackle the problems sickle cell disease and related disorders. He presented the following aspects:

- Hemoglobinopathies screening in Central India
- Management of sickle cell disease and related disorders in MP
- Status of Filariasis in Madhya Pradesh and need for proper evaluation
- Multiple Dengue virus serotypes and malaria in a sickle cell disease patient
- Drug resistance surveys in Sahariya of Guna and Gwalior districts
- Prevalence of malaria with special reference to cerebral malaria and severe malaria in Chhattisgarh
- Assessment of the effectiveness of intensive intervention measures on malaria control programme in tribal district, Balaghat, Madhya Pradesh
- Time for shift from LLIN to Durable Lining for better results

Comments/ Suggestions

DG suggested carrying out studies to find out the causes for high prevalence of Mf rate despite several rounds of MDA. Dr. Kar suggested developing different methods involved in Information Education and Communication (IEC) in order to educate the community. DG also suggested looking into the quality of bed nets supplied in the area.

7. Rajendra Memorial Research Institute of Medical Sciences (RMRIMS), Patna

Dr. Pradeep Das, Director, RMRC, Patna presented the following new project proposals for funding.

- a. Study of Abnormal Hemoglobin in tribal population
- b. Prevalence of hypertension and associated risk factors among tribal of Bihar/Jharkhand
- c. Study on nutritional status involved with the severity of vector and water borne disease

- d. Exploration and experimental validation of ethno-medicine used to cure infectious diseases by tribal population
- e. Research component based on the habitat of tribal community in Bihar
- f. Study of Haemoglobinopathies and anaemia of Kala-Azar in Bihar.

Comments/ Suggestions

DG appreciated the presentations of on-going studies and the new project proposals presented by NIIH and RMRIMS and also suggested to develop a multi centric study on sickle cell anaemia, haemoglobinopathies etc.. However he pointed out that assessment of the clinical situations/nutritional status of the population will not help until and unless a solution can be worked out to solve the problem of the community.

8. Regional Medical Research Centre, Orissa

Dr.Bullaya, Scientist ‘D’ discussed on the progress made in tribal health. The following aspects were presented:

- Improved regimen for control of anaemia in adolescent tribal girls
- Efficacy of nutrition education modules with IFA+B12+Albendazole
- Anaemia amongst haemoglobinopathy disorders Vs normal tribal adolescent girls
- Severity of undernutrition vs Vit.A & Vit.E deficiencies in preschool children
- Assessment of reproductive and sexual health among tribal adolescents in Kalahandi district
- Etiology of severe diarrhoea among tribals

Dr. Kar, Director, RMRC, Bhubaneswar presented the following new initiatives:

- 1) Oral cholera vaccine- Community application by State Health Department in tribal areas & Feasibility assessment.
- 2) Strategy for Hypertension Control
- 3) Development of a situation specific vector control strategy in Tribal district of Odisha (Kalahandi).
- 4) Community-based management of severe acute malnutrition among children under-five years in Kalahandi district, Orissa
- 5) Protein-energy malnutrition and micronutrient deficiencies in relation to malaria among preschool children in Kalahandi district.
- 6) G-6 PD deficiency status in tribal population: multi-centric study (NIIH)
- 7) Neonatal screening for Sickle cell disease and morbidity follow up

Comments/ Suggestions

DG appreciated the progress made by the institute and suggested that a protocol need to be developed to investigate tribal fever. Further he suggested building up a health system which can empower the local system through the state government so that the strategies can sustain at the community level to tackle the problems related to health in the tribal population.

9. Regional Medical Research Centre (RMRC), Port Blair

Dr. A N Shriram, Scientist "B" presented the data for the following

- Risk factors of chronic non-communicable diseases-reanalysis of NCD risk factor data with current reference values and intervention of risk reduction jointly with Directorate of Health Services, A&N administration
- Nutritional status preschool children of Nicobarese
- Hepatitis B infection-Seroprotection among vaccine recipients 10 years after vaccination and infection with mutant strains of hepatitis B
- Tuberculosis- culture and drug sensitivity testing services under DOTs plus
- Vector Borne Diseases- Prevalence of Aedes spp in Car Nicobar, Situation Analysis- Current status of DspWB in Nancowry Islands
- Traditional knowledge of healing and community biodiversity registers-preparation of CBDRs for Nicobar (Nicobarese) and Mayabunder (Karens) and compilation of traditional knowledge of healing of tribal communities of A & N islands
- Trachoma among Nicobarese-Detection and Treatment
- Cardiomyopathies among Nicobarese

Comments/ Suggestions

DG suggested monitoring emergence of hepatitis infection with vaccine escape mutants, which may be helpful for overall assessment of the hepatitis vaccination programme. In general, DG further suggested that a national protocol should be developed for addressing various health issues related to tribal population and also solution based projects should be encouraged so that the solutions derived as an outcome of the project would be utilized by the community.

10. National Institute of Malaria Research (NIMR), New Delhi

Dr. Neelima presented Drug Resistance Monitoring and discussed the following aspects:

- Progress since last ICMR Tribal Health Research Forum held on 6th December 2011
- Multivariate predictors of *P. falciparum* treatment failure and delayed parasite clearance
- Effective and safe interventions for prevention of malaria in pregnancy in India
- Effective and safe treatment for malaria in pregnancy in India: a randomised Controlled trial

New initiatives

- Epidemiology of malaria in India: Impact of new control tools and changing patterns
- Comparison of different regimens of primaquine as antirelapse therapy in vivax malaria

- Comprehensive Case Management pilot in Orissa
Molecular Markers for drug resistance at study sites (2010-11)

Comments/ Suggestions

The presentation was appreciated by the members of the forum and there were no major suggestions with regard to the presentation. However Dr.V.M.Katoch suggested for development of studies for mapping all etiological factors causing fever/ pyrexia and further suggested that RMRC, Bhubaneswar to build a composite programme and to prepare a format to resolve this issue.

11. Vector Control Research Centre (VCRC), Puducheri

Dr. K. Gunasekaran, Scientist 'F' presented the results of the study on vector prevalence and bionomics in relation to transmission of malaria and its containment in Southern districts of Odisha State. The following aspects were discussed:

- Relative density of *An. fluviatilis* & *An. culicifacies* and malaria incidence in the southern districts
- Density of the malaria vectors and malaria parasite incidence per 1000 population (MPI) in relation to space and time
- Proportion of vector species obtained from different methods of collection
- Indoor resting density of the malaria vectors and MPI per 1000 population
- *An. culicifacies* and *An. fluviatilis* response to DDT, malathion and deltamethrin

In addition, he also presented the results on

- Sensitivity and specificity of RDK against microscopic results in the southern districts and
- Therapeutic efficacy of ACT in Dasamantapur PHC of Koraput district

Dr. L. K. Das, Scientist 'E' presented the following aspects:

- Disease profile among tribes of the two PHCs, Dasamantapur and Laxmipur of Koraput district (Odisha State)
- Malaria situation in the two PHCs
- Types of complications of malaria cases admitted in the District Head Quarter Hospital, Koraput.
- The proposed malaria study by the VCRC on tolerability and efficacy of ACT in Koraput district of Odisha state as approved by the ICMR Tribal Health Forum for funding.

Comments/ Suggestions

While appreciating the usefulness of the study results on vector bionomics in helping the state government for malaria control, the DG suggested that the three ICMR institutes (NIMR, RMRC & VCRC) working in Odisha state should put their results together and finally it should go in one voice ie ICMR's voice to the state government for necessary action. Pointing out the high mortality due to fever among tribes in Odisha, the DG suggested undertaking studies on fever causing mortality through syndromic approach including pyrexia

of unknown origin. He also suggested to test and monitor the sensitivity and specificity of all types of rapid detection test kits for malaria available in the area.

FA indicated the need for approval of all five year plan projects by the Tribal Health Research Forum.

Finally, next meeting of the forum was decided to be held in June, 2012 at RMRC, Port Blair, followed by the annual meeting in August, 2012 to be held at RMRC, Bhubaneswar.

Dr. A. Laxmaiah, Scientist E & HOD, Division of Community Studies, NIN proposed a vote of thanks.

Annexure I

LIST OF THE SCIENTISTS ATTENDED THE MEETING

1. Dr.K.Ghosh, Director, National Institute of Immunology, Mumbai,
2. Dr.S.K.Kar, Director, RMRC, Bhubaneswar, Orissa
3. Dr.J.Mahanta, Director, RMRC, Dibrugarh, Assam
4. Dr. Pradeep Das, Director, Rajendra Memorial Research Centre, Patna
5. Dr.P.Vijayachari, Director, RMRC, Port Blair, A&N
6. Dr.P.K.Mohapatra, Scientist F
7. Dr.T.Longvah, Scientist F
8. Dr.Tapas Chakma, Scientist F
9. Dr.K.Gunasekaran, Scientist F
10. Dr. A. Laxmaiah, Scientist E
11. Dr.L.K.Das, Scientist, E
12. Dr.Neena Varma, Scientist E
13. Dr.D.Raghunatha Rao, Scientist E
14. Dr.Balakrishna, Scientist D
15. Dr.M.Bullaya, Scientist D
16. Dr.J.J.Babu, Scientist D
17. Dr.Neena Valecha, Director, NIMR, New Delhi
18. Dr.Neelima Mishra, Scientist D
19. Dr. Prasanth Mathur, Scientist D
20. Dr.Raja Subramaniam, Scientist D
21. Dr.Ayan Jha, Scientist C
22. Dr. C. S. Lal, Scientist C
23. Dr.Meshram, Scientist C
24. Dr.Subba Rao, Scientist C
25. Dr.A.N.Shriram, Scientist B