

Tribal Health

Proceedings of National Symposium
October 19-20, 2006



Organised by
Regional Medical Research Centre for Tribals
(Indian Council of Medical Research)
Nagpur Road, Jabalpur - 482 003, India

National Symposium on Tribal Health

© 2007 Copyright, Regional Medical Research Centre for Tribals (ICMR)
Jabalpur

Responsibility for information provided in this publication rests with the individual authors.

Proceedings compiled and edited by

Dr. Neeru Singh
Dr. S. R. Qamra
Dr. Jyothi Bhat
Dr. R. K. Sharma
Sh. K. V. K. Rao
Dr. J. Roy
Sh. A. Kavishwar

Chief Editor
Editor
Sub Editor
Sub Editor
Asstt. Editor
Asstt. Editor
Asstt. Editor

Published by
Regional Medical Research Centre for Tribals
(Indian Council of Medical Research)
Nagpur Road, PO - Garha, Jabalpur - 482 003 (Madhya Pradesh)
Tel: +91-761-2370800, 818; Fax: +91-761-2672835
Email: rmrctjabalpur@rediffmail.com

Printed at M/S Amrit Offset , A.B. Complex, Jabalpur.

Financial support extended by Indian Council of Medical Research; Department of Science & Technology; National Vector Borne Disease Control Programme; Madhya Pradesh Council of Science & Technology; Ministry of Tribal Affairs, Government of India; Tribal Welfare Department, Government of Madhya Pradesh; United States America Embassy; United States Agency for International Development and WHO India for organizing the symposium and publication of symposium proceedings is sincerely acknowledged. The support and encouragement received from Director General, ICMR; Sh Shivraj Singh Chouhan, Chief Minister, Govt. of Madhya Pradesh; Dr. Anbumani Ramadoss, Union Minister of Health & Family Welfare, Govt of India; Dr. R. K. Shrivastava, Directorate General of Health Services, Govt. of India and Shri Madan Mohan, IAS, principal Secretary, health are whole heartedly appreciated.

Dr. Neeru Singh
Officer Incharge
Regional Medical Research
Centre for Tribals (ICMR)
Jabalpur

Contents

Foreword

vii

Malaria Epidemiology and Control in South-East Asia <i>Krongthong Thimasarn</i>	01
Molecular Markers for Tracking the Origin and Spread of Sulfadoxine and Pyrimethamine Resistant Mutations <i>Venkatachalam Udhayakumar, Andrea M. McCollum, Sean Griffing, Zhiyong Zhou, John Barnwell, Ananias A. Escalante</i>	09
Intermittent Preventive Treatment: A New Approach to Reduce the Burden of Malaria <i>Daniel Chandramohan</i>	17
Prospects of Malaria Control in Northeastern India with Particular Reference to Assam <i>V.P. Sharma, Vas Dev</i>	21
Mosquitoes and Strategies to Control Malaria <i>Abhinav Sinha</i>	33
Tribal Malaria, an Update on Changing Epidemiology <i>Neeru Singh</i>	47
Tribal Malaria and its Effects on Air Force Station Amla and Surrounding Areas: An Ecological Study <i>Dr. A. Banerjee</i>	55
Perception of a Tribal Dominated Population towards use of Impregnated Bed Net for the control of Malaria in Dungarpur District, Rajasthan <i>Karam V. Singh, S. K. Bansal, R. C. Sharma</i>	65
Knowledge Attitude and Practice towards Malaria in Tribal Community of Baiga Chak area, Dindori District (M.P.) <i>V. Soan, Gyan Chand</i>	75
Malaria Outbreak in District Korea, Chhattisgarh <i>A.K. Mishra, S.K. Chand</i>	79
Hydrocele Estimation: A Parameter for Filariasis Prevalence <i>S. Kumar, L. K. Sahare, S. K. Das, D. Das</i>	85
Bacterial Profile of Blood and Burn Wound Infections in Burn Patients <i>Herjinder Kaur, Jyothi Bhat, Anup Anvikar, Savinder Rao, Vijay Gadge</i>	89
HIV Infection and Sexually Transmitted Diseases in Central India <i>Atul Karkare, Anup R. Anvikar, Vikas G. Rao, Jyothi Bhat, Tapas Chakma, S.R. Qamra, V. Gadge, P. Dour, Mahendra Ukey, Canina Luke, Arvind Kavishwar</i>	97

Epidemiology of Sickle Hemoglobin in India <i>Ajit C. Gorakshakar</i>	103
Sickle Cell Disease in Central India - Need for Micro Level Planning <i>R.B. Gupta</i>	109
Genetic Modulation on the Phenotypic Diversity of Sickle Cell Disease <i>Malay B. Mukherjee</i>	117
Prevalence of Common Haemoglobinopathies among Scheduled Castes and Scheduled Tribes of Shahdol and Khandwa (East Nimar) Districts of Madhya Pradesh <i>M.P.S.S. Singh, R.B. Gupta, Rajiv Yadav, V.S. Gadge, Ujwala Das, S. Godbole, A. Gupta, A. Gwal, C.P. Vishwakarma</i>	123
High Prevalence of Sickle Haemoglobin in Mehra Caste of District Betul, Madhya Pradesh <i>R.B. Gupta, Subhash Godbole, Rajiv Yadav, M.P.S.S. Singh, Ujwala Das, V.S. Gadge, Ashok Gupta, Anil Gwal, C.P. Vishwakarma</i>	129
Morbidity Profile of Sickle Cell Disease in Central India <i>Rajiv Yadav, R.B. Gupta, V.K. Bharadwaj, M.P.S.S. Singh</i>	135
Nutrition and Genetic Variation among Central Indian Tribes <i>Rajesh K. Gautam, Dipak K. Adak</i>	141
Tribal Health: Perspective Issues <i>P.K. Jangid</i>	155
Tribal Health Problems, Disease Burden and Ameliorative Challenges in Tribal Communities with Special Emphasis on Tribes of Orissa <i>R. S. Balgir</i>	161
Studies on Indigenous Herbal Remedies in Cure of Fever by Tribals of Madhya Pradesh <i>Rajiv Rai</i>	177
Functioning of the Sub Health Centers (SHCs) in Mandla District <i>D.K. Pal, R. Tiwari, P.K. Kasar, A. Sharma, S. Verma, P. Gautam, Y. Jain, M. Bansal</i>	183
Studies on the Nutritional Status of Rural population in Desert Area of Rajasthan <i>Madhu B. Singh, J. Lakshminarayana and Ranjana Fotedar</i>	191
Health and Nutrition Status of Tribals of Madhya Pradesh and Chhattisgarh <i>Tapas Chakma, P. Vinay Rao, P.K. Meshram, S.B. Singh</i>	197

Food Consumption Pattern and Associated Habits of the Bhil Tribe of Dhar District of Madhya Pradesh <i>Suneel R. Qamra, J. Roy, D.K. Mishra</i>	211
Health And Nutrition Status Of Warli Tribal Children in Thane District of Maharastra <i>N.S. Tekale</i>	221
Breastfeeding Practices and Nutritional Status of Preschool Children among the Shabar Tribal Community in Orissa, India <i>Suman Chakrabarty, Rohini Ghosh, Premananda Bharati</i>	227
Prevalence of Iodine Deficiency Disorders among Dongria Kondh Primitive Tribal Community in Niyamgiri Mountain area of Rayagada District, Orissa <i>G.Buliyya, G.Mallick, P.G.S.Sethy, S.K Kar</i>	235
Utilization of Health Services and RCH Status in Madhya Pradesh: A District Level Analysis <i>Ravendra K. Sharma, Rajiv Ranjan, Ashok Kumar, Arvind Pandey</i>	251
Men's Involvement in Reproductive Health: A study among the Khairwar Tribe of Central India <i>Kalyan B. Saha, Neeru Singh, D.C. Jain, Uma C. Saha</i>	265
Reproductive Tract Infections in Tribal Women of Central India <i>Vikas Rao, Deepali Savargaonkar, Anup Anvikar, M.K. Bhondeley, B.K. Tiwary, Mahendra Ukey, Alpana Abbad, Shraddha Srivastava</i>	275
Demographic and Socioeconomic Correlates of Infant Health in Primitive Tribe of Chhattisgarh <i>D. Kumar, C.K. Dolla, A. Verma, A.K Goel, V.K. Sehgal</i>	279
Family Planning Use and its Determinants among Gond Tribe of Madhya Pradesh: A Case Study of Gonds of Jabalpur District <i>D.C. Jain</i>	285
Operational Studies in TB Control Programmes: Data Collection and Analysis <i>P.G. Gopi</i>	293
Contributors List	307

FOREWORD



Tribal constitute eight percent of the total population of our country with largest share accommodated in the central region. These sections of the population by and large linger with poor socio-economic condition in inhospitable areas and faces major health problems. Their vulnerability is well reflected in the burden of disease and poor quality of life they lead, coupled with underutilization of the health services. Regional Medical Research Centre for Tribals (RMRCT) is doing a noble work by working in close with these vulnerable people for more than two decades to bring to light the minute intricacies of health problems and health needs for a better tomorrow.

It is indeed a pleasure for me to mention that during this need of the hour the centre has organized successfully the National Symposium on Tribal Health during 19th and 20th October 2006 with the financial support from Indian Council of Medical Research, New Delhi, Directorate of Biotechnology, National Vector Borne Disease Control Program, Ministry of Tribal Affairs, Madhya Pradesh Council of Science and Technology, United States of America Embassy, United States Agency for International Development and W R. India.

The symposium focused on multifaceted health problems particularly in malaria, filaria, fluorosis, tuberculosis, HIV, hepatitis, haemoglobinopathies, nutritional disorder, reproductive health and related demographic issues. The symposium had provided a forum for the scientists, academicians, scholars and even planners and administrators from all over the country and abroad to share knowledge, interact and address on issues crucial to tribal health. The standard it set can be make out from the participation of the eminent personalities and delegates from USAID, WHO, LSTMH, LSTM, CDC Atlanta etc. During the course of two days deliberations a good number of interesting papers were presented and I believe these can contribute immensely in recommending the health needs of the tribals. The brainstorming interaction and discussions on the above theme raises pertinent issues for better management and strategic planning for future researches on key issues which in turn would help improving life of hundreds of tribals in the country who absorb the life shock silently.

I congratulate Dr. Neeru Singh and her entire team of RMRCT for doing this uphill task of organizing the community specific symposium and publishing its proceeding. I also express my heartfelt thanks and appreciate to all those who provided different help and financial support to RMRCT for organizing this unique event.

A handwritten signature in black ink, appearing to read 'N.K. Ganguly'.

(Prof. N.K. Ganguly)
Director General
ICMR, New Delhi

