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# India International Science Festival 2019

## Health Research Conclave

### Report



**Indian Council of Medical Research**  
Department of Health Research  
Ministry of Health & Family Welfare,  
Govt of India

# Health Research Conclave

7-8<sup>th</sup> November, 2019

Biswa Bangla Convention Centre, Kolkata

Health Research Conclave was organized with an aim to provide a platform where eminent health scientists and researchers can interact with each other as well as with media, policy makers and general public. The theme of the conclave was 'Translating Research in to Action for Improving Health of the Population' where eminent health experts spoke on Tribal Health, Nutrition, Medical Innovations and Emerging Infections.

## Day I

### Inaugural Session

The event initiated with a welcome and introductory address by **Dr. Rajni Kant**, Director, RMRC, Gorakhpur & Head, Research Management, Policy, Planning and Coordination, ICMR Hqrs, New Delhi. He explained the history and growth of health research in the country from the time of Charak and Sushrat to modern time with successes achieved and challenges ahead. He also gave a bird's eye account of ICMR activities and contributions over the last century and spoke about the institutional and technical (VRDL, MRU & MRHRU) network of ICMR panning across the nation. He also briefed about the achievements in the area of outbreak investigation, communicable and non-communicable diseases, reproductive health, nutrition and innovations. He further apprised the audience about the policy influences of ICMR research outcome.



**Dr. Neeraj Tandon**, Head, Medicinal Plants and Publication and Information, ICMR Hqrs, talked about the ICMR Expo set up at IISF 2019. She explained in detail about the highlights and components of exhibition and informed that activities and achievements of ICMR and its Institutes across the nation have been depicted in the form of attractive posters and stressed audience to have a glimpse of the same.

**Dr. Kamalesh Sarkar**, Director, ICMR- National Institute of Occupational Health, Ahmedabad talked about the studies undertaken by ICMR and its Institutes in Kolkata highlighting the major research outcomes and its effect on betterment of lives of masses.



**Prof. (Dr.) Puneet Mishra**, Centre for Community Medicine, AIIMS, New Delhi talked about the health challenges of the nation. He explained that the nation is currently struggling with the double burden of communicable and non-communicable diseases along with implementation lacunae in the health care system. He gave a comprehensive account of gaps in the public health and highlighted the rural-urban divide in terms of the availability of health care facilities and trained manpower.

**Prof. (Dr.) Uma Kumar**, Head, Department of Rheumatology, AIIMS, New Delhi gave a motivational talk to young researchers thus igniting their minds with curiosity and passion to undertake health research with full vigour and vitality. She cited many examples from her research studies on autoimmune diseases to explain how health research can be translated to public use.





**Dr. D. T. Mourya**, ICMR- Chair for Virology and Zoonoses and Former Director, ICMR- National Institute of Virology, Pune delivered the keynote lecture entitled, “Emerging & re-emerging zoonotic viral diseases”. He explained the criteria of identifying public health importance of emerging and re-emerging infectious disease and assessing global/regional risks. The talk enticed the audience and provided enough material for exercising the scientific aptitude. The keynote lecture set the tempo for the upcoming technical session on the same topic.



### **Session I: Emerging & Reemerging Diseases**

Emerging and Re-emerging Infections like dengue, Chikungunya, ZIKA, NIPAH are matter of much concern. Their control and management is a big challenge. ICMR has made a tremendous progress and have been able to control these infections quickly in recent past. This session showcased the knowledge about the strategies deployed in tackling emerging and re-emerging infectious diseases and the way ahead.

**Dr. B.N. Nagpal**, Senior Scientist, ICMR- National Institute of Malaria Research, New Delhi gave a very informative talk on, “Dengue: Global Burden and Complications in Control”. He gave an excellent overview of Dengue along with the bionomics of its vector. He highlighted

the characteristics of *Aedes* (Dengue vector) that establishes its adaptability to urban ecosystems thus contributing to rising burden of the disease. He also explained the major breeding sites in common households. He stressed that the knowledge of these habits and habitats of *Aedes* is essential from the point of view of controlling them as well as the part they play in transmission of disease.

**Dr. Debjit Chakraborty**, Scientist, ICMR- National Institute of Cholera and Enteric Diseases, Kolkata talked about “Emerging Challenges in Infectious Diseases: Anti- Microbial Resistance”. He described the chronology and advent of AMR and the dangers that it ensues. He presented the trends in antimicrobial resistance of important pathogens over the last decade. He also explained the public health determinants of AMR and the need for inter-sectoral approach to fight against this emerging challenge. He then apprised that ICMR is coming up with Centre for One Health at Nagpur to fight against this issue in collaboration with partners from different sectors.



## Session II: Nutrition

Nutrition is an important area and need special focus in view of achieving the sustainable Development Goals. Under Health Research Conclave there was a special emphasis to discuss the achievements made in this area and the means and ways to fight malnutrition, hidden hunger, anemia and support ‘Poshan Abhiyan’ of Govt of India.

**Dr. Hemalatha**, Director, ICMR- National Institute of Nutrition, Hyderabad talked about on very interesting topic, “The Inter-generational cycle of low birth weight - Microbiota and inflammation”. She presented the results of a very comprehensive study demonstrating the effect of microbiota population in the bodies of pregnant ladies on the newborns. She reiterated that pro-biotic and balanced diet with lots of intake of fruits and green leafy vegetables can help in fighting the nutritional issues of Indian population.

**Dr. Sanghamitra Pati**, Director, ICMR-Regional Medical Research Centre, Bhubaneswar presented a very relevant study undertaken under her leadership, “Effectiveness of Food

supplementation on Treatment Outcomes and Nutritional status of Adults with Pulmonary Tuberculosis in Tribal Odisha: An Implementation Research”. She first described the magnitude of problem of TB and malnutrition in tribal population then explained in detail the research outcomes of the study which showed that nutritional supplementation have positive effect on cure rate. This study provides the research evidence to the policy implemented by Govt. of India.



### **Session III: Tribal Health**

Tribals constitute about 10% of the population. They live in remote inaccessible areas with inadequate healthcare facilities and suffer from major health problems like tuberculosis, malaria, malnutrition, G6PD, sickle cell anemia, etc. Tribal health is an important area and initiatives undertaken across the nation are meant to bring perceptible changes in the lives of tribal population. The platform of Health Research Conclave provided researchers to discuss various health issues of tribals as well as to find suitable solutions.

**Dr. Manisha Madkaikar**, Director, ICMR- National Institute of Immunohaematology, Mumbai delivered a talk entitled, “ICMR-NIIH: Contribution to Tribal Health Research”. She provided a comprehensive account of tribal health and the relevance of haemoglobinopathies. She explained the major haemoglobinopathies in detail and the contribution of NIIH in fight against each of them. She described all the services and research studies undertaken to address the issues such as Antenatal screening, prenatal diagnosis and prevention of hemoglobinoathies; Understanding genetic basis of phenotypic heterogeneity; Hydroxyurea therapy for SCD. She also highlighted the efforts undertaken by institute towards human resource development.

**Dr. Aparup Das**, Director, ICMR- National Institute for Research in Tribal Health, Jabalpur talked on “Health Research in Indian Tribes: Current Perspectives and Future Directions”. He provided the details of the Particularly Vulnerable Tribal Groups (PVTGs) of India and the major health issues in Indian Tribes. He also showed a comparison of major illnesses in tribes vs. general population and the healthcare facilities that the tribes have access to. He also explained the contributions towards the major disease elimination programs of the

country. Also, he showed the novel way of strengthening Public Health System in Tribes by inclusion of traditional healers in the system.



#### **Session IV: Holistic Health**

The conclave also touched upon the topic of holistic health that included the topics that are different from mainstream health like palliative care. Also, a talk was kept on alternative medicine to assess its relevance and evidences that needed to be generated in scientific ways to establish their efficacy and role in medicine niche.

**Prof. (Dr.) Naresh Dua**, Ganga Ram Institute for Postgraduate Medical Education and Research (GRIPMER), Delhi gave a talk on palliative care. He explained in detail about the field of palliative care and its relevance. He talked about the role of palliative care givers and the effect of their early presence in the lives of terminally-ill patients.

**Dr. A. K. Gupta**, OVIHAMS, Delhi spoke on “Homeopathy and Motor Neuron Disease Patients”. He talked about the relevance of homeopathy in treatment of Motor Neuron Disease Patients. He cited several cases that he has studied and the results bore by the given treatment.

All the sessions on Day I invoked the interests of the audience and there were a plethora of queries that were addressed by the experts.







## **Day II**

The day II of the Conclave had two parallel sessions: a) Young Scientists Talks along with oral and poster presentations by Ph.D. and post doc research scholars; b) Special Session on Gandhi & health @150 with the title "Mission SHAKTTI"

### **Young Scientists Session**

**Dr. Harpreet Kaur**, Senior Scientist, ECD Division, ICMR Headquarters, New Delhi talked about the Tribal Health Research Consortium. She elaborated the activities of ICMR for tribal health that were undertaken under Tribal Health Research Forum. She also highlighted that major studies have been undertaken to resolve the issues of tribal health and proactive steps have been taken to identify various research gaps in THR.



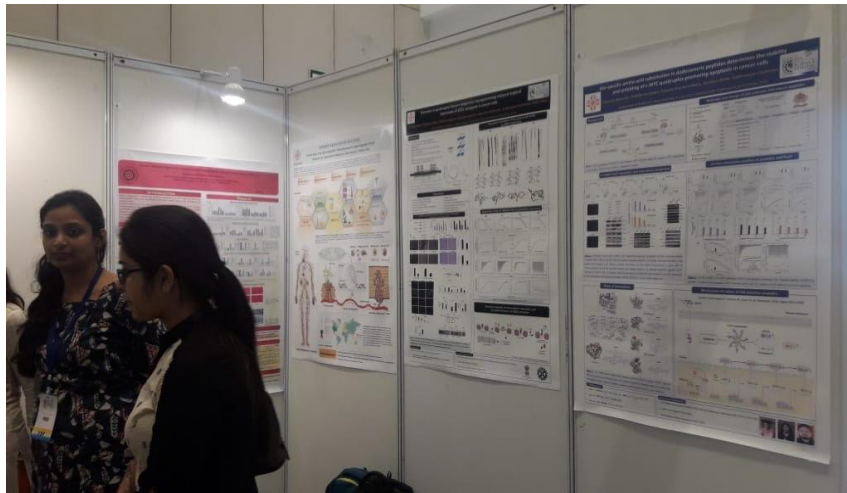
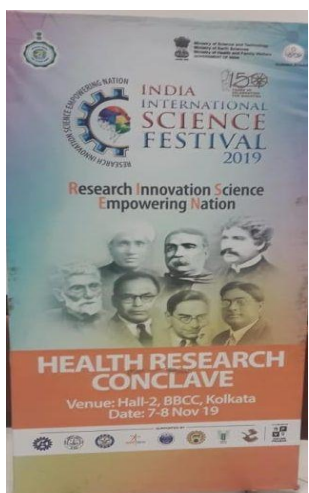
**Dr. Ipsita Pal-Bhowmick**, Scientist, ICMR- Regional Medical Research Centre, North East, Dibrugarh presented her work on “Tailor-made and targeted additional interventions for accelerated malaria control in Tribal hot foci areas of North East India”. She explained the process of identifying hot foci and targeting them in intensified control phase. She apprised that the modified intervention package resulted in improved supervision, accelerated and real time surveillance, detection of acute fever aetiologies other than malaria, improved communication for behaviour change *etc.*

**Dr. Hemanta Koley**, Senior Scientist, ICMR- National Institute of Cholera and Enteric Diseases, Kolkata presented his study, “A Tale of Shigella Vaccine Development :Lab Scale to Industry”. He diligently explained step by step procedure including the initial studies in lab animals that led to the development of Shigella vaccine. He apprised that at present the technology has been transferred to Hilleman laboratories and the phase I trial is expected to begin in 2020.

**Dr. Kamran Zaman**, Scientist, ICMR- Regional Medical Research Centre, Gorakhpur presented the talk entitled, “Effectiveness of presumptive treatment of acute febrile illness with Doxycycline/ Azithromycin in preventing Acute Encephalitis Syndrome, Gorakhpur, India, 2018”. He explained that Empiric Doxycycline/Azithromycin strategy is effective in preventing progression from AFI to AES and Govt of UP has to strengthen their implementation plan of EDA strategy to ensure effective AES control.



Fifty delegates (Ph.D. and post-doctoral scholars) from various institutions across the nation presented their work through oral and poster presentations. The oral and poster presentations were evaluated by jury for three best oral and poster award presentations.



### **Mission SHAKTTI (Special Session on Gandhi & Health@150)**

Health research Conclave (HRC) was one of the flagship event of the IISF which aimed for translating research into action for improving health of the population. Mission SHAKTTI (School based Health Awareness, Knowledge Test and Training Initiative) in collaboration with National Gandhi Museum was conducted at HRC, IISF 2019. Through this mission, ICMR created health awareness among school children.

This year to commemorate 150th birth anniversary of Mahatma Gandhi, Gandhi ji was projected as the ambassador of health. The Gandhian virtues and philosophy of good health, which he himself preached & practiced, is relevant even in today's times. The theme of activity was "Healthy diet, Healthy habits, Healthy environment". More than 200 school students from local schools from Kolkata along with their teachers as well few students from Atal Tinkering Lab attended the program at Science Village Dome, Biswa Bangla

Convention Centre, New town, Kolkata on 8<sup>th</sup> November . The whole activity was crafted keeping the interests of children in mind and to give them a break from traditional classroom learning. It consisted of four components: pre and post assessment questionnaire, a short animation film, an interactive talk by eminent experts and an exciting quiz. The element of fun was included to keep the students motivated and curious.



The audio-visual animation film deployed a school set-up where conversation between a teacher and her students is being carried regarding the upcoming occasion of Gandhi Jayanti. In the animation film, teacher beautifully explains the reason behind the fit Mahatma. She decodes his source of energy (physical as well as mental) that he invested in gaining Swaraj for the country. The script of the film ensured that all the aspects of health: cleanliness, diet, refraining from substance abuse, physical fitness and mental well-being is taken into account.





**Sh. A. Annamalai**, Director, National Gandhi Museum presented a talk on Gandhi and his virtues. He talked about his indomitable will and teachings citing instances from his life to motivate students and make them understand Gandhi's perspective.

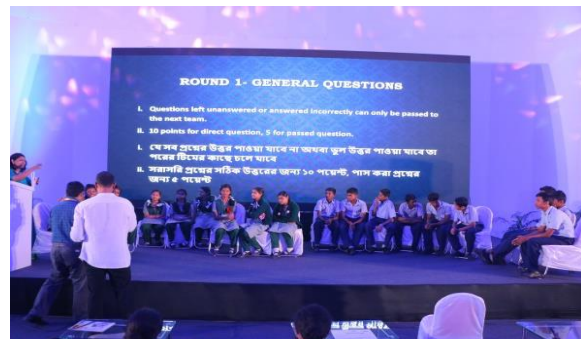


**Dr. Rajni Kant**, Director, ICMR-Regional Medical Research Centre, Gorakhpur and Head, Policy & Planning, ICMR Hqrs, New Delhi talked about Gandhi and Health through an interesting presentation. He elaborated four major mantras of Gandhi: Physical fitness, Balanced diet, Cleanliness and Mental health. Each concept was elucidated giving introduction and its benefits or ill-effects by linking it to Gandhi's life of his teachings. Students were involved through extending the take-away message through their daily life. They were encouraged to incorporate healthy habits like planning their diet, limited consumption of junk food, avoiding over-eating, restricting salt intake, saying no to substance abuse, regular physical exercise. Along with this, they were also educated about maintaining personal hygiene, clean surrounding, preventing stagnation of water, reducing & segregating waste and help in plummeting air pollution by planting more trees, walking, using bicycles and public transportation. The talk culminated with a clear message to develop a core value system for good health.





The talk was followed by a fun quiz majorly on health awareness conducted by Dr. Enna Dogra Gupta, Dr. Abhik Sinha, Mr. Kaushik and Mirza Shadan (the last two from Global Health Strategies). Six teams each consisting of three participants were formed. The format of the quiz included four rounds: Question- answer, spell bee, visual and rapid fire. The participants were asked to read between lines, connect dots and make conclusions. It was ensured that students understand the concept of each question and a fun fact was provided after each answer was given so that information stays longer.







An exhibition inside the hall was displayed on theme Gandhi and health where interesting instances from Gandhi's life were displayed on posters. Also, posters emphasizing on Gandhi's mantra to health were placed.







In conclusion, the complete event of Health Research Conclave garnered positive response from all the participants. The event ended with a valedictory function where the oral and poster presentation winners and quiz winners were awarded.

**Program**  
**Health Research Conclave**

Date: 7-8 November 2019

Venue: Hall No. 2, Biswa Bangla Convention Centre

<b>Timings</b>	<b>Topic</b>	<b>Speakers</b>
<b>Day 1 : 7<sup>TH</sup> November, 2019</b>		
<b>Inaugural Session</b>		
<b>9.30 AM-11.00 AM</b>	<b>Inauguration</b>	<b>Inauguration of the Conclave</b>
09.30 AM-09.45 AM	Welcome Address	Dr. Rajni Kant, Director RMRC, Gorkakhpur and Head, RMPPC, ICMR Hqrs, New Delhi
09.45 AM-09.55 AM	Introduction to ICMR Expo 2019	Dr. Neeraj Tandon, Scientist G & Head, Medicinal Plants and P&I, ICMR Hqrs
09.55AM -10.05 AM	ICMR activities at Kolkata	Dr. Kamalesh Sarkar, Director, NIOH, Ahmedabad
10.05 AM -10.15 AM	Health Challenges	Dr. Puneet Mishra, Prof, Centre for Community Medicine, AIIMS, New Delhi
10.15 Am -10.25 AM	Holistic Health	Dr Uma Kumar, AIIMS, New Delhi
10.25 Am -11.00 AM	Keynote Address	Dr. DT Mourya, Chair, Public Health and Former Director, ICMR-NIV, Pune
11:00 Am -11.05 AM	Vote of Thanks	Dr. Abhik Sinha, Scientist, NICED, Kolkata
11.05 Am -11.15 AM	Tea Break	
<b>Session I</b>		
11.15 AM - 12.15 PM	Emerging and Re-emerging Disease	Dr. B. N. Nagpal, Scientist G, NIMR, Delhi Dr. Debjit Chakraborty, Scientist D, NICED, Kolkata(on behalf of the Director)
12.15 PM -13.15 PM	Nutrition	Dr.Hemalatha, Director, NIN, Hyderabad Dr. Sanghamitra Pati, Director, RMRC, Bhubaneswar
13.15 PM - 14.15 PM	Lunch Break	
<b>Session II</b>		
14.15 PM -15.15 PM	Tribal Health	Dr ManishaMadkaikar, Director, NIIH, Mumbai

		Dr.Aparup Das, Director, NIRTH, Jabalpur
15.15PM- 15.30 PM	Tea Break	
<b>Session III</b>		
15.30 PM –16.30 PM	Holistic Health	Prof (Dr) AK Gupta, OVIHAMS, New Delhi Dr Naresh Dua, SGRH, New Delhi
16.30 PM - 17.30PM	Health Concerns	Young Scientists Presentations
18.00 PM -19.30 PM	Cultural Programs	
19.30 PM - 21.30PM	Dinner	
<b>Day 2 :8<sup>th</sup> November, 2019</b>		
<b>Session IV</b>		
9.30AM-11.00AM		Dr. Harpreet Kaur <i>Invited talk</i>  Dr Kamran Zaman Scientist C, RMRC, Gorakhpur  Oral Presentations Selected oral talk – Student presentation (4)  Poster Presentation Session Selected Posters (20)
11.00AM - 11.15 AM	Tea Break	
<b>Session V</b>		
11.15 AM- 12.30PM		Dr Hemanta Koley <i>Invited Talk</i>  Oral Presentations Selected oral talk – Student presentation (6)  Poster Presentation Session Selected Posters (20)
12:30 PM – 12: 45 PM	Valedictory	Award Distribution: Best Oral Presentation Best Poster Presentation



## Mission SHAKTTI

Date: 8<sup>th</sup> Nov 2019

Venue: Hall No. 1, Student Science Village, Next to BBCC

9.30AM-11.00AM	Mission SHAKTTI (School based Health Awareness, Knowledge Test & Training Initiative)	Sh. A. Annamalai, Director, National Gandhi Museum, New Delhi  Dr.Rajni Kant, Director, ICMR-RMRC, Gorakhpur & Scientist G& Head, RMPPC, ICMR Hqrs, N. Delhi
11.00AM - 11.15 AM	Tea Break	
<b>Session IV</b>		
11.15 AM- 12.30PM	Mission SHAKTTI :Quiz Competition	Dr Enna Dogra Gupta, Scientist C, ICMR Hqrs, New Delhi  Dr.Abhik Sinha, Scientist C, NICED, Kolkata
12:30 PM – 12: 45 PM	Valedictory	Award Distribution: Quiz Winners

## Patron

**Prof. (Dr.) Balram Bhargava**, Secretary, DHR & Director General, ICMR

## Event Coordinators:

- **Dr. Rajni Kant**, Scientist G & Director, ICMR-Regional Medical Research Centre, Gorakhpur & Head, Research Management, Policy, Planning & Coordination (RMPPC), ICMR
- **Dr. Neeraj Tandon**, Scientist G & Head, Publications & Information and Medicinal Plant Division, ICMR
- **Prof. (Dr.) Punit Mishra**, Centre for Community Medicine, AIIMS, New Delhi
- **Prof. (Dr.) Uma Kumar**, Head, Department of Rheumatology, AIIMS, New Delhi
- **Dr. Ranjan Kumar Nandy**, Scientist F, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata
- **Dr. Sujoy Das Gupta**, Professor, Microbiology, Bose Institute, Kolkata
- **Dr. Abhik Kumar Sinha**, Scientist C, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata
- **Dr. Smita Mehrotra**, Consultant, Vigyan Prasar

## Volunteers

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- *Bose Institute*  
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- **Dr. Enna Dogra Gupta**, Scientist C, Research Management, Policy, Planning & Coordination (RMPPC), ICMR