As the coronavirus pandemic spread across the world in last 9 months, affecting smallest and biggest of the economies, it has become clear that not even one nation could have evaluated the impact and find way out from it. However, a strong response at the outset of the outbreak and well thought strategy to contain the virus has shown positive outcome. India responded swiftly, first by applying national lockdown and then effectively implementing 5T approach of “Test, Track, Trace, Treat, Technology” strategy across the nation. But it is important that, we continue to follow precaution to protect ourselves against the spread of the coronavirus, while waiting for breakthrough in vaccine development.

Despite, initial apprehension from many health agencies, India has rather done well. In a recent meeting with Chief Ministers of most high burdened states, Prime Minister Shri Narendra Modi emphasized the need to continue focus on “effective testing, tracing, treatment and surveillance” to bring the coronavirus under control. 70% of India’s total coronavirus cases are reported from only 60 districts of the seven States/UTs i.e. Maharashtra, Andhra Pradesh, Karnataka, Uttar Pradesh, Tamil Nadu, Delhi and Punjab. It is an indication that early detection and treatment strategy has helped in containing the spread.

Since the time of first coronavirus case which was reported on 31st January 2020 in India, ICMR has effectively responded through recalibrated testing strategy and has achieved significant milestones in last 9 months. It has conducted almost 2.31 crores tests in less than 21 days and record per day testing of almost 15 Lakhs was achieved on 24th September, 2020. Large scale testing and evolving clinical management protocol will go a long way and is critical for effective management of this pandemic. In addition to this, India has done some significant progress on vaccine development also.

“Covaxin” developed indigenously by Bharat Biotech International Ltd in collaboration with ICMR, is in second phase of human trials. Zydus Cadila “ZyCoV-D” is in the process to receive approvals for conducting third-phase clinical trials. The third vaccine “ChADOx1” jointly developed by the University of Oxford and Serum Institute of India [SII] has started third phase trials. ICMR is helping SII in clinical trials as second sponsor agency. The data from phase 3 clinical trial are very crucial as this will assure itself of its safety and efficacy.

**Our Achievements**

**ICMR conducts almost 2 crores covid-19 sample testing in only 20 days**

**ICMR launch dedicated Vaccine Portal and National Clinical Registry for COVID-19**
ICMR revises testing guidelines, permits ‘Testing on Demand’ for everyone

- All individuals staying in containment zones should be tested.
- States can adopt the testing advisory with modifications if required.
- No emergency medical procedure should be delayed for lack of testing facilities.

Indian Council of Medical Research [ICMR] released an advisory on COVID-19 testing guidelines based on recommendation of the national COVID-19 task force. The revised advisory released on 4th September, 2020 is based on changing ground situation and is generic in nature and can be modified as per discretion of the State/UTs government’s health authority.

The recommendation has been extended, elaborated and divided into four parts - routine surveillance in containment zones and screening at points of entry, routine surveillance in non-containment areas, hospital settings and testing on demand and choice of test (RT-PCR, TrueNat or CBNAAT and rapid antigen tests).

ICMR has permitted “Testing on Demand” for all individuals who wish to get themselves tested for COVID-19 and also for all individuals undertaking travel to countries/Indian states mandating a negative COVID-19 test at point of entry. ICMR has said that states governments can reduce and simplify the modalities for testing on demand so that more people who want to get tested for Corona virus can get tested.

Further, the advisory has recommended that all individuals living in containment zones should be tested by rapid antigen tests, especially in cities where there has been a widespread transmission of the infection. However, if an individual develops symptoms following a negative RAT (Rapid antigen tests), an RT-PCR test should be done.

ICMR has advised states to ensure that no emergency medical procedure, including child deliveries, should be delayed on account of a lack of testing facilities. Adequate testing of high-risk patients (both symptomatic and asymptomatic), including senior citizens and those with co-morbidities should be undertaken at the hospital.

The advisory has suggested that the first priority for testing should be rapid antigen tests followed by the RT-PCR test and other methods in the containment as well as non-containment areas. ICMR has reiterated that states are free to formulate their own testing procedures according to their capacity and infrastructure.
India achieved record testing through innovation in diagnostic capabilities

- India tested almost 2 crores COVID-19 sample in only 20 days.
- COVID-19 testing laboratories expanded to more than 1800.
- ICMR encourages innovative affordable diagnostic technology.

Indian Council of Medical Research (ICMR) has been breaking its own record in terms of testing capabilities. India crossed 6 crores testing mark on 16th September 2020. This milestone was achieved, as India has conducted average testing of more than 10 Lakhs per day during the month of September, with last 2 crores sample testing done in only 20 days.

These are not mere numbers but highlights how innovation, recalibrating testing strategy and focused, collaborative efforts of the Centre, State/UTs government can effectively implement strategy in combating corona virus pandemic. ICMR has been enhancing COVID-19 testing capability across the country by expanding and diversifying testing capacity by leveraging technology and facilitating innovation in affordable COVID-19 diagnostics kits.

Prof (Dr.) Balram Bhargava, Director General, ICMR said, “ICMR encourages innovative diagnostic approaches that could be cheaper and technologically less demanding than the existing ones to diagnose COVID-19. Such approach helps in effective containment of outbreak or epidemic situations. The Council is receiving applications on numerous diagnostic innovations from across the country. These innovations are validated through an established network of institutions.”

ICMR has expanded outreach through technological innovations by employing indigenous point of care tests like TrueNat for COVID-19 testing that required minimal training, skills, infrastructure and biosafety measures. Widespread availability of customized cartridges of TrueNat and CBNAAT serve as a big boost to take the COVID-19 testing to the level of the primary health care system. These tools have transformed testing rates across the country particularly in remote areas.

India crossed 6 crores testing mark on 16th September 2020. Last 2 crores sample testing done in only 20 days. Average testing of more than 10 Lakhs per day.

India has been continually working on the strategy of 5T i.e. Test, Track, Trace, Treat and Technology to expand and diversify its capacity and thus enabling efforts to effectively combat this pandemic.
ICMR publishes first National Sero Survey results conducted in May-June 2020

- Survey conducted in 700 villages and wards, selected from 70 districts in 21 states.
- Samples were tested using the COVID-19 Kavach ELISA kit developed by ICMR.
- Finding of research will help in planning and revising testing strategy.

Indian Council of Medical Research (ICMR) has published results of first national sero survey conducted from May 11 to June 4 to detect prevalence of the COVID-19 in India. Community-based survey was conducted in 700 villages and wards, which were selected from 70 districts in 21 states of the country. The survey had enrolled 400 adults per district from 10 clusters and an adult per household. Serum samples were tested for Immunoglobulin G (IgG), a type of a long-lasting antibody, using the COVID-19 Kavach ELISA detection kit developed by ICMR.

The finding of research report was published in *Indian Journal of Medical Research* on 10th September 2020. Based on the results, it is estimated the national prevalence of the novel coronavirus infections at the time was 0.73% of the population and an infection fatality rate (IFR) of 0.08%.

According to research report, of all tested positive, 43.3% were in the age group 18-45 years, 39.5% in age group of 46-60 years and only 17.2% were from age group of more than 60 years.

Based on the results ICMR researchers have highlighted the need to continue to implement the context-specific containment measures including the testing of all symptomatic, isolating positive cases and tracing high-risk contacts to slow transmission and to prevent the overburdening of the health system. It further mentioned that males living in urban slums and occupation with high risk of exposure to potentially infected persons were associated with sero positivity.

The study aimed to detect IgG antibodies against the viral infection that starts appearing by the end of the first week after the onset of the symptom and most cases are IgG positive by the end of the second week. The finding of research will help ICMR to plan and revise testing strategy and recommend the same to states so that they can focus on limiting covid-19 cases in specific areas of their region.
Blood Plasma therapy not beneficial against corona virus: ICMR

- Mortality rate among plasma therapy participants was 13.6% (34) Vs 14.6% (31) in BSC group.
- 464 participants from 39 hospitals across 14 state participated in the study.
- Researchers divided the participants into two groups: intervention and control.

The usage and effectiveness of convalescent plasma (CP) therapy as a treatment for COVID-19 patients has been debated because of lack of clinical evidence. ICMR in its recent study has found that plasma therapy is not associated with a reduction in mortality or progression to severe COVID-19. The research will be peer-reviewed and observations will be detailed later.

This study held during April-July 2020 period took into account 464 participants from about 39 hospitals across 14 states/UT of India. All participants were above the age of 18 and had moderate symptoms. Researchers divided the participants into two groups. The group 1 or intervention group received two doses of plasma at a 24-hour interval. The second group received “Best Standard of Care” (BSC), but without plasma therapy.

After analyzing the participants’ conditions on the basis of progression to the disease, the researchers found that the mortality rate among participants was 13.6% (34) in the group one that received plasma therapy and 14.6% (31) in the group that didn’t. Further, the disease progression from moderate to severe was noted amongst 7.2% individuals in the intervention group, while it accounted for 7.4% in the control group.

Based on outcome it was concluded that convalescent plasma played no significant role in preventing deaths or progression to severe COVID-19. A prior measurement of neutralizing antibody in donors and participants may further clarify the role of convalescent plasma in the management of COVID-19.

ICMR did study the effectiveness of plasma therapy for COVID-19 patients. Outcome concluded that convalescent plasma played no significant role in preventing deaths or progression to severe COVID-19.

In India and around the world, plasma therapy has been deemed as a potential weapon in the fight against the global pandemic. This study would be helpful in guiding the future policy of the treatment against COVID-19.
ICMR launch dedicated Vaccine Portal and National Clinical Registry for COVID-19

- Portal has the latest information on Indian efforts towards vaccine development.
- Vaccine portal will try to dispel misinformation on processes of vaccine development.
- NCR of COVID-19 will help in formulating appropriate patient management strategies.

The Indian Council of Medical Research (ICMR) has developed a dedicated vaccine portal, which will have data on research development and clinical trials on potential COVID-19 vaccine. Not only COVID-19 vaccine, it will also provide latest information on Indian efforts towards vaccine development against other diseases. Interested people can visit the website on https://vaccine.icmr.org.in to get updated information on vaccine development.

Another portal on National clinical registry for COVID-19 was also started. This registry will collect systematic data on clinical signs & symptoms, laboratory investigations, management protocols, clinical course of COVID-19 disease, disease spectrum and outcomes of patients. The data will serve as an invaluable tool for formulating appropriate patient management strategies, predicting disease severity. Dedicated COVID-19 hospitals and health centres will serve as primary sites for data collection. These sites have been trained, mentored and supervised by 15 medical institutes of repute across the country.

Dr. Harsh Vardhan, Union Minister of Health & Family Welfare launched both the web portal at special event organized at ICMR-HQ on 28th September, 2020.

ICMR has developed a dedicated vaccine portal, which will have data on research development and clinical trials on potential COVID-19 vaccine. Web portal for National clinical registry for COVID-19 was also launched.

Prof (Dr.) Balram Bhargava, Director General, ICMR said, “ICMR has always been in the forefront of health research in the country and is now leading the country in tackling the unprecedented pandemic through scientific rigour and innovation. To disseminate the vaccine related information the exclusive portal will be helpful in creating awareness among the masses. I hope all query of common people on vaccine development process would be addressed through this portal and I am confident it will become most visited portal in times to come.”
108 years history timeline unveiled at ICMR Headquarters in New Delhi

- The timeline highlights the milestone achievements since 1911.
- Featured stories and photos, captures key milestones during 108 years journey.
- The timeline poster has been placed at the reception area of ICMR HQ.

The history timeline depicting 108 year journey of Indian Council of Medical Research (ICMR) was unveiled by Dr. Harsh Vardhan, Union Minister of Health & Family Welfare on 28th September, 2020. The timeline poster, which will be on display at the ICMR Headquarters in New Delhi features stories and photos that capture key milestones during the century old journey.

The timeline mentions important achievements of ICMR since the day of its inception in 1911, when it used to be known as Indian Research Fund Association (IRFA). It highlights important success stories such as the discovery of the Bombay blood group; the delivery of India’s first scientifically evidenced test-tube baby; tackling the diseases like Kyasanur Forest Disease (KFD), Nipah & Zika. The policy and program interventions by ICMR and its institutes to control diseases like tuberculosis, malaria, polio and neglected tropical diseases (NTDs) that once affected the population at an epidemic level has also been highlighted.

After unveiling the timeline, Union Minister Dr Harsh Vardhan, said “It’s an honour for me to release 108-year history timeline of ICMR within its premises. The contribution of scientists associated with it is commemorated & serves as an inspiration to upcoming scientists. ICMR has contributed immensely towards the nation’s welfare; however, its contributions have not been adequately recognized by the public.”

He further suggested that a similar exercise be undertaken at all our great institution creating an exhibit depicting their journey & accomplishments.

On this occasion Prof (Dr.) Balram Bhargava, Director General, ICMR said, “From its initial days to provide fund to research in tropical diseases, ICMR has now metamorphosed into an organization that carries out pioneering work in areas of maternal and child health, nutrition, lifestyle diseases, communicable diseases and occupational health. By recognizing our exceptional past, we at the Council will be further motivated to strive harder to fight the current and future public health crises.”
ICMR initiates mobile stroke care unit for north-east region

- Mobile stroke unit for Tezpur and Dibrugarh districts of Assam.
- Studies indicate a huge burden of stroke in tea garden workers.
- Stroke is a major cause of mortality & morbidity in the country.

Indian Council of Medical Research (ICMR) has started stroke treatment through state of the art Mobile Stroke Unit (MSU) in Tezpur and Dibrugarh districts of Assam. The MSU was inaugurated by Union Minister of Health and Family Welfare Dr. Harsh Vardhan on 28th September, 2020 through video conferencing.

Mobile stroke unit is a “State of Art‘ facility with latest CT scanner, provision of telemetry and thrombolytic therapy. This unit will also provide services like imaging, mobile laboratories, telemedicine (connection with a hospital), and appropriate medication and assessment tools. This will serve the purpose of reducing the time from the symptom onset to treatment (OTT). A multi-disciplinary team of doctors has been formed to provide consultancy through Telemetry. Training manuals have been developed for doctors, paramedics, CT scan technicians and drivers.

Stroke is a major cause of mortality & morbidity in the country as per India: Health of the Nation’s State Report 2017. With an incidence rate of 119 to 152/100000, stroke has a case fatality rate of 19% to 42% in the country. The prevalence of hypertension, a major risk factor of stroke, in indigenous Assamese population and tea garden workers has been reported to be 33% to 60.8% respectively. Anecdotal reports and hospital based studies from this region indicate a huge burden of stroke in Assam.

Dr. Harsh Vardhan, Union Minister for Health and Family Welfare said, “It’s a great idea to provide immediate medical care in remote areas. I am hopeful that ICMR’s model for ‘Stroke Care Pathway’ utilizing mobile stroke unit will address the needs of the people.”

Prof (Dr.) Balram Bhargava, Director General, ICMR highlighted that recent studies have found that 50% of strokes in north east region are hemorrhagic strokes. Telestroke, which is increasingly being used across the world, has shown to decrease the door-to-needle time for acute ischaemic stroke patients. A combination of these services in addition to directing the identified patient to a hospital with acute stroke care facilities will provide improved outcomes.
ICMR-NIN releases revised nutrient requirements and report on India’s dietary patterns

- Nutrient requirements for Indians (RDA) - 2020 report released.
- “What India Eats” documents the Regional Dietary Pattern of Indian population.
- ICMR-NIN initiated a mobile based program for mapping of nutrition & health status.

ICMR-National Institute of Nutrition (ICMR-NIN), the 100 year old premier nutrition research institute has released the ‘Nutrient Requirements for Indians (RDA) - 2020’ report that documents energy, protein, fat and micronutrients requirements for the populace and ‘What India Eats’ report which details the Regional Dietary Pattern of Indian population. These reports were released by Dr. Harsh Vardhan, Union Minister for Health and Family Welfare on 28th September, 2020 at ICMR headquarters in New Delhi.

The Recommended Dietary Allowances (RDAs) are revisited and revised from time to time in view of the changing food habits, physical activity patterns and nutrition transition of various groups. Whereas “What India Eats” report gives details of ‘Regional Dietary Pattern of Indian Population’ and energy and protein sources from different food groups in graphical form.

ICMR-NIN has initiated a mobile based mapping of nutrition and health status – A national level participatory real-time data generation program. This programme aims to develop a mobile based device, which will be used by nutrition researchers at district level nationwide in the present pandemic situation. This innovative endeavour of ICMR-NIN is first of its kind and would be useful in the present scenario.

On this occasion, Dr. Harsh Vardhan, Hon’ble Minister for Health & Family Welfare, said “ICMR-NIN has glorious history of 100 years. Many relevant researches in the field of nutrition have been done at the institute. In future, the strategy should be to make public aware of these studies, so that diseases due to bad nutrition and bad food habits can be eliminated. He opined that health and nutrition are big focus areas of our hon’ble PM. Various programs such as Fit India Movement, Poshan Abhiyan are all aimed at realizing his vision of a fit & healthy new India.”

Prof (Dr.) Balram Bhargava, Director General, ICMR, said, “While rooted in the time-tested practices, ICMR-NIN has always been nurturing creativity and innovation to address the contemporary health and nutrition challenges of the country. These releases and the launch of innovative data collection programme are reflective of NIN and ICMR’s commitment to the cause of nutrition and wellbeing of our people.”
ICMR-RMRC, Gorakhpur organized a Seminar on Health Crisis Management and Preparedness to Celebrate its 2nd Foundation Day

- Dr. Sanjay Mehendale, Director Research, P. D. Hinduja Hospital, Mumbai & Former Addl DG, ICMR, New Delhi delivered the keynote address.
- Director, ICMR-RMRC, G’pur highlighted major achievements of last one year.
- Regional institute needs to be upscaled with adequate handholding: DG, ICMR.

ICMR-Regional Medical Research Centre (RMRC), Gorakhpur organized an important seminar on ‘Health crisis management and preparedness’ to mark the 2nd foundation Day of the Institute on 9th September, 2020. On the occasion, Dr Sanjay Mehendale, Director Research, P. D. Hinduja Hospital and Medical Research Centre, Mumbai and Former Addl DG, ICMR, New Delhi delivered the keynote address on Research & Development Action Plan for Epidemic Preparedness and Management. He described in detail about zoonotic infections, global travel, climate change and emerging and re-emerging infections with possible solutions for its management.

Dr Rajni Kant, Director, ICMR-RMRC, G’pur highlighted Centre’s major achievements of last one year which includes the partnership with BRD Medical College, AIIMS, Gorakhpur and MOU with Gorakhpur University for working in partnerships. He also highlighted the work done by RMRC in COVID-19 diagnosis and mentioned that a new BSL 2 plus lab was made functional to scale up testing which was inaugurated by Hon’ble Chief Minister of UP, Shri Yogi Adityanath. He further informed about the TB prevalence survey and other initiatives of the Institutes undertaken during the year. It was also informed that the construction work of new building of the RMRC is in full swing and expected to be completed by the end of the year. Prof (Dr.) Balram Bhargava, Director General, ICMR appreciated the work done by the RMRC and felt that Regional Institutes needs to be upscaled with adequate handholding.

On the occasion, Commissioner Gorakhpur Shri Jayant Narlikar, Joint SAC Chairman and Former Director, NVBDCP, Dr P.L. Joshi and Principal BRD Medical College Dr Ganesh Kumar also delivered the talk and appreciated the work done by RMRC and felt that the Centre will attain new heights in years to come.

ICMR- RMRC, Gorakhpur is one of the 26 Institutes of the Indian Council of Medical Research (ICMR), under Department of Health Research (DHR), Ministry of Health & Family Welfare of Government of India. The foundation stone of the centre was laid on 2nd September 2018, after Government of India upgraded the Field Unit of NIV at Gorakhpur to full-fledge independent Regional Medical Research Centre.

Since, its foundation the RMRC has initiated to establish a model human health research facility in this region to tackle local and regional health problems keeping focus on the marginalized, the vulnerable and the disadvantaged sections of society. Some of the major public health important diseases in this region are JE/AES, vector borne diseases like dengue, chikungunya & malaria, Human immunodeficiency virus (HIV), Tuberculosis, multidrug resistance strains, cervical and oral cancer, filariasis, diabetes, hepatitis to name a few beside nutritional deficiency disorders.
ICMR launches free online prescription practices course for Indian Medical Graduates

Indian Council of Medical Research (ICMR) has started a free online course on prescribing skills for Indian Medical Graduates. The course is meant for improving prescription practices and will be run by National Institute of Epidemiology (ICMR-NIE), Chennai.

The course constitutes 40 video lectures of 20 minutes to be taken over 3 months at learners’ pace. It involves a pre test to evaluate participants prior knowledge, MCQs to be answered after seeing the modules, evaluate a prescription for appropriateness, all this to assess if the course has improved the participants knowledge. A certificate of participation will be given on successful completion of the course.

Prof (Dr.) Balram Bhargava, Director General, ICMR said “ICMR is committed to ensuring that the country’s medical graduates are at par with their international counterparts. The Council, through its institute ICMR-NIE is successfully running a basic course in biomedical research. The course has now been made compulsory for postgraduates by the Medical Council of India. Building on the success, we will ensure that this digital course on prescribing skills for Indian medical graduates is effective”.

The enrolment for the course started from 17th September, 2020. The course details will be available at https://main.icmr.nic.in/content/icmr-online-prescribing-skills-course-indian-medical-graduates-

Second National Sero Survey Completed: ICMR

The Indian Council of Medical Research (ICMR) has completed second national sero survey, which was started in last week of August 2020. The preliminary results were briefed by DG, ICMR during PIB press briefing. The initial results suggested that 6.6% population has been exposed to SARS-CoV-2. Population of urban slum had more exposure (15.6%) than urban non-slum (8.2%) and rural areas (4.4%). Second sero survey shows considerable population remains vulnerable to coronavirus infections. Lower infection to case ratio in August compared to May reflects a substantial increase in testing & detection across India.

The purpose of second survey is to understand the growth in the real exposure size as compared to first survey done in the month of May-June 2020. The sero survey also seeks to determine the infection fatality rate (IFR) among the population.

Second survey was done almost three months after the first survey in the same districts as the first survey. However, this time the study involved testing almost 29,052 samples from the population more than 10 years of age. A total of 400 samples was collected from every 70 district surveyed. ICMR researchers are analysing the final phase of the samples collected and outcome will be announced soon.
Dr Harsh Vardhan, Union Minister of Health & Family visited ICMR-HQ @ New Delhi on 28th September 2020
Dr Harsh Vardhan, Union Minister of Health & Family visited ICMR-HQ @ New Delhi on 28th September 2020
ICMR is available on Facebook, Twitter and Instagram. For latest update about COVID-19 and other medical research breakthrough, you can follow ICMR’s Official handles.
Patron
Prof. (Dr.) Balram Bhargava
Secretary DHR and Director-General, ICMR

Communication Team
Dr. Rajni Kant
Director, ICMR-RMRC, Gorakhpur and Scientist G & Head, Research Management, Policy, Planning and Communications

Dr. Lokesh Sharma
Scientist E, Social Media & Media Coordinator, Communications Unit
Informatics, Systems & Research Management (ISRM) Cell

Dr. Enna Dogra Gupta
Scientist C, Content Coordinator, Communications Unit

Supported by:
Aakhya India (Media Consultant to ICMR)

Contact Us
Indian Council of Medical Research
V. Ramalingaswami Bhawan, P.O. Box No. 4911
Ansari Nagar, New Delhi - 110029, India
Ph: 91-11-26588895 / 91-11-26588980, 91-11-26589794 / 91-11-26589336,
91-11-26588707
Fax: 91-11-26588662