

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH AND RESERCH**

**LOK SABHA
UNSTARRED QUESTION NO. 131
TO BE ANSWERED ON 2ND FEBRUARY, 2018**

VACANT POSTS IN ICMR

131. SHRI RAOSAHEB DANVE PATIL:

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) the major research projects undertaken by the Indian Council of Medical Research (ICMR) during the last three years and the current year;
- (b) whether functioning of ICMR and progress of various health research projects taken thereby have adversely affected due to shortage/vacant posts of scientists and experts therein;
- (c) if so, the details thereof; and
- (d) the corrective measures taken/ proposed to be taken by the Government to augment capacity strengthening of ICMR and streamline its functioning?

**ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND
FAMILY WELFARE
(SMT. ANUPRIYA PATEL)**

- (a): List of major research projects is annexed.
- (b) & (c): No, only 20 posts of Scientist/Expert, out of 74 sanctioned posts, are vacant currently, due to retirements, deputations and career progression.
- (d): To augment capacity strengthening and streamline functioning, the ICMR has entered into Inter-ministerial collaborations, Public-Private Partnerships and has also released ICMR Strategy Plan: Agenda 2030.

Major Projects/Activities & Achievements during last 3 years (2015-2018)

Affordable Health Technology

ICMR is working on various indigenously developed medical technologies/devices/kits which are cost effective and applicable in primary health care system. During the last 3 years following innovations took place:

- Ñ Six diagnostic technologies which include, ELISA based diagnostic tests for detection of diseases viz. Hepatitis E virus, Kyasanur Forest disease (KFD), Crimean-Congo haemorrhagic fever (CCHF), Chandipura virus (CHPV) and Japanese encephalitis, have been transferred to M/s Cadila Healthcare through execution of license agreement. Three of which have been launched in the market.
- Ñ Vaccine development initiatives against typhoid and shigellosis (MOU has been signed between ICMR-NICED and Hilleman for commercialization of the product).
- Ñ ICMR in collaboration with IIT, Kharagpur is associated with its Imprint programme to work in collaboration for designing health technologies and finding better technological solutions for human health.
- Ñ Four fertility assessment kits (InduLISA, CorpuLISA, LuteLISA and FolliLISA) developed and technology licensed to HLL Healthcare, Thiruvananthapuram
- Ñ Resazurin reduction test to assess sperm quality and functional ability has been filed. Kits have been prepared and the test is being commercialized by ICMR.
- Ñ A sensitive and specific PCR method developed to detect *Chlamydia trachomatis* (CT) infection in cervical samples is ready for commercialization.
- Ñ A sensitive and specific ELISA has been developed for the estimation of human intact Osteocalcin (OC) for assessment of bone health especially in conditions such as osteoporosis. Second party validation has been carried out.
- Ñ ICMR has signed an MoU with Federation of Indian Chambers of Commerce and Industry (FICCI) for commercialization of ICMR technologies under the program 'Health Technology Acceleration and Commercialization (HTAC).
- Ñ The Indian Council of Medical Research (ICMR) and the Department of Health and Family Welfare of the Ministry of Health and Family Welfare (MOHFW), GOI signed a Memorandum of Understanding (MOU) with the International Vaccine Institute (IVI), South Korea to collaborate on vaccine research and development.
- Ñ Two MoUs were signed between ICMR and Emami Healthcare Ltd, Kolkata on "Development of Standardized Phytopharmaceutical Formulation for Preventing or Delaying the Development of Type-2 Diabetes in Subjects with Pre-Diabetes" and on "Development of Standardized Herbal/Ayurvedic formulation for the Treatment of Sleep disorders".

Flagship Programmes

- **The India TB Research Consortium:** ICMR took a lead and initiated a new flagship Programme to establish India TB research and development Consortium that aims to bring together all major national players (with international collaborators) to address overarching scientific questions to tackle TB in a mission mode.
- **TB Diagnostic Initiative:** TruNAT Rif, an indigenous, cost effective, rapid molecular diagnostic kit for TB/MDR-TB has been developed in collaboration with ICMR, DBT and the industry. The feasibility study of TruNAT at 100 microscopy centres at 50 districts across

10 states has been completed and the report has been reviewed by ICMR expert committee and International Scientific Advisory Group. In view of the above recommendations, it has been recommended for roll out under RNTCP at Primary Health Centres (DMCs) in a phased manner. Also, active case finding pilot project has been initiated in five states for bridging gap in last mile delivery of services amongst tribal populations.

- **Malaria Elimination Programme:** A Tripartite Agreement has been signed involving ICMR, Sun Pharma's Foundation for Disease Elimination and Control of India (FDEC-India) and Govt. of MP to launch "Malaria Free India" demonstration project in Mandla district of Madhya Pradesh by using field tested and proven tools of integrated vector control and case management strategies.
- **Implementation of MIP Vaccine in leprosy contacts under Programme settings:** Mycobacterium Indicus Pranii (MIP), the world's 1st leprosy vaccine developed in India, is being piloted as preventive vaccine for contacts of patients in Gujarat and Bihar. This is a project which has been jointly proposed by ICMR along with the Central Leprosy Division. The Vaccine is being produced by Cadilla Pharmaceuticals and the company has agreed to provide the vaccine free of cost for this pilot study. Also, *Nikusht*, a Real-time monitoring software developed by ICMR has been introduced into the National Leprosy Elimination Programme (NLEP).

Enhancing Outreach/Establishing new Centres in deficit/un-served areas

À ICMR has established Samrat Ashok Tropical Disease Research Centre at RMRI, Patna which will focus on research on various tropical diseases. The other development in the area of infrastructure development is the expanding outreach of ICMR in far flung and difficult areas like Keylong in Lahaul & Spiti district of Himachal Pradesh, establishment of satellite centre of National Institute of Immunohaematology (NIIH), Mumbai at Chandrapur, Maharashtra for screening and management of sickle cell disease and field station of NIV Pune at Alappuzha (Alleppey) and RMRC, Port Blair in Car Nicobar & Nancowry islands aimed at providing necessary health facilities. Process has also started for establishment of new Regional Medical Research Centre (RMRC) at Gorakhpur, UP for human public health related problems of eastern part of UP as well as Biomedical Research Centre in Guwahati, Assam. National Animal Resource Facility for Biomedical Research is being set up at Hyderabad. This will be first of its kind Institute for basic and applied biomedical research and will provide support to academic and private R&D groups for preclinical testing. All these Centres will be further strengthened and made fully functional in the coming year.

E-Health/M-Health and Promoting Use of Space Technology Tools

- With the changing time, ICMR is focusing its efforts on using E-Health/M-Health and promote the use of Space Technology tools. ICMR has developed –a mobile based disease surveillance system for malaria (MosQuit) using mobile platform. This technology has been developed by RMRC, Dibrugarh in collaboration with CDAC, Pune, which has been deployed in Tengaghat PHC of Assam. ICMR has also developed various e-learning programmes in Health Research as well as prepared databases like TB-DRUGS, DDRTB, Food and Nutrition Database, etc.
- To address the impact of climate change on human health and promote use of space technology tools ICMR has developed an early warning system of JE for Upper Assam, initiated studies on mapping of malaria and mosquito-genic conditions, developed models for predicting filariasis. These efforts will be up-scaled for larger use in the coming year.
- PBIT an online webserver for identification of drug targets for infectious diseases has been developed.

- ICMR-NIMR (National Institute of Malaria Research), Delhi has signed MoU with ISRO-IIRS (Indian Institute of Remote Sensing), Dehradun for development of geospatial solution for disease surveillance particularly vector-borne diseases and work in the area of Health and GIS for disease modeling.

Regulatory Issues in Research/deal with strong ethical dimensions

- Regulatory issues are also important for protecting public and patients and ICMR has developed various Bills/Guidelines which help to take care of the patients enrolled for research. The important among these are The Biomedical and Health Research Regulation Bill(*Ethical Issues pertaining to Biomedical Research*), Assisted Reproductive Technology Bill, Guidelines for Stem Cell Research, revised Bioethics guidelines and Bioethics guideline for health research involving children.

Nutrition

- **Mobile App on 'Dietary Guidelines For Indians:** The App is based on the Recommended Dietary Allowances (RDAs) for Indians prescribed by NIN.
- **Fortified Food to Fight Malnutrition:** ICMR has come up with a micronutrient mix that is being considered by government for its flagship programmes.
- **Release of Indian Food Composition Tables:** The new “Indian Food Composition Tables- 2017”, comprising of data of 586 varieties of Indian foods and their nutritive values, was released.
- ICMR has taken up a project involving **Nutrition Interventions in adolescent girls.** 18 Navodaya Schools have been identified
- ICMR in collaboration with DBT and ICAR is working on, **“Establishment of nutri-smart villages and backyard nutrighardens”**. 3 nutrition deficient districts have been identified.

Disease Burden Estimation/Other Research Studies

- **India's State-Level Disease Burden report** released (Jointly by the Public Health Foundation of India (PHFI), ICMR & the Institute for Health Metrics and Evaluation (IHME) that contained State-Level Disease Burden and Risk Factors estimates to improve health programmes and planning in India.
- **Preparedness of ICMR to handle Zika virus outbreak:** NIV, Pune has capacity to test the samples received during the acute phase of the disease by RT-PCR. A training of DHR/ICMR VRDLs and concerned ICMR Institutes for Zika virus testing is shortly being organized. ICMR also issued an alert to several paediatricians as well as the Viral Research & Diagnostic Laboratories to refer suspected samples for Zika testing at NIV, Pune. The detection of Zika virus infection in India was accomplished through ICMR's surveillance network.
- **National Anti-Microbial Resistance Surveillance Network (AMRSN)** continued to enable compilation of National Data of AMR at different levels of Health Care. Pfizer one of the global leaders in anti-infectives and medical therapy is committed to combat AMR and has partnered with ICMR as part of its Corporate Social Responsibility (CSR) activity to achieve the unified goal of reducing AMR.
- **National Hospital Based Rotavirus Surveillance Network:** The study has been carried out at 4 Major referral labs, 7 ICMR's Regional labs and 23 hospital sites to observe the trend in burden of rotavirus diarrhoea as well as impact of Rotavirus vaccine under Universal Immunization Program (UIP).

- **ICMR-INDIAB**, an epidemiological study on diabetes: The study is a landmark study providing authentic epidemiological data on diabetes, prediabetes, hypertension, dyslipidemia and obesity from the various States of India. The ICMR-INDIAB study gains significance as it is collecting representative data from the various States and Union Territories in India. The study has been completed in 14 states and one UT and the data obtained has been shared with the State health departments. Data provide a snap shot of the existing burden of pre diabetes, diabetes, hypertension and obesity in the country.
- **National Cancer Registry Programme:** Since 1982 providing systematic, continuous data in cancer Incidence, burden, mortality, trends, clinical care and survival through 30 Population Based Cancer Registries (PBCR) and 27 Hospital Based Cancer Registries (HBCR).
- **Baseline serosurvey to assess the prevalence of antibodies for dengue, chikungunya and JE:** This serosurvey is ongoing in 15 States of the country.
- **Sentinel surveillance for Congenital Rubella Syndrome (CRS) in India:** The study has been initiated at 6 sites. Aim is to assess the impact of Measles Rubella vaccination in India.
- **Hospital based sentinel surveillance for Pneumonia and Invasive Bacterial Diseases (IBD):** The study has been initiated at 6 sites. Aim is to assess the impact of Pneumococcal Conjugate Vaccine (PCV).