सत्यमेव जयते

ANNUAL REPORT
2024-25

DEPARTMENT OF HEALTH RESEARCH
Ministry of Health & Family Welfare
Government of India
New Delhi
www.dhr.gov.in

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Chapter 1 Introduction

1.1 Department of Health Research (DHR) was created as a separate Department within the Ministry of Health & Family Welfare by an amendment to the Government of India (Allocation of Business) Rules, 1961 on 17.09.2007. The Department became functional from November 2008 with the appointment of first Secretary of the Department. The aim of the DHR is to bring modern health technologies to the people through research and innovations related to diagnosis, treatment methods and vaccines for preventions; to translate them into products and processes and, in synergy with concerned organizations, introduce these innovations into public health system.

1.2 Mandate of DHR is:

(i) Promotion and co-ordination of basic, applied and clinical research including clinical trials and operational research in areas related to medical, health, biomedical and medical profession and education through development of infrastructure, manpower and skills in cutting edge areas and management of related information thereto.

(ii) Promote and provide guidance on research governance issues, including ethical issues in medical and health research.

(iii) Inter-sectoral coordination and promotion of public - private – partnership in medical, biomedical and health research related areas.

(iv) Advanced training in research areas concerning medicine and health, including grant of fellowships for such training in India and abroad.

(v) International co-operation in medical and health research, including work related to international conferences in related areas in India and abroad.

(vi) Technical support for dealing with epidemics and natural calamities.

(vii) Investigation of outbreaks due to new and exotic agents and development of tools for prevention.

(viii) Matters relating to scientific societies and associations, charitable and religious endowments in medicine and health research areas.

(ix) Coordination between organizations and institutes under the Central and State Government in areas related to the subjects entrusted to the Department and for the promotion of special studies in medicine and health.

(x) Administering and monitoring of Indian Council of Medical Research (ICMR).

(xi) Matters related to Health Technology Assessment.

1.3 With a view to fulfilling its mandate, DHR has rolled out the following Schemes:

(i) Setting-up of Nation-Wide Network of Laboratories for Managing Epidemics and National Calamities.

(ii) **Development of Infrastructure for Promotion of Health Research**

(a) Establishment of Multi-Disciplinary Research Units (MRUs) in Govt. Medical Colleges/ Research Institutes.

(b) Establishment of Model Rural Health Research Units (MRHRUs) in States.

(iii) **Human Resource and Capacity Development**

(a) Human Resource Development (HRD) for Health Research.

(b) Grants in Aid scheme (GIA) for inter-sectoral convergence & Co-ordination for Promotion and Guidance on Health Research.

(c) Health Technology Assessment in India (HTAIn).

(d) International Cooperation

(iv) Development of Tools/support to prevent outbreaks & epidemics.

(v) **Prime Minister's Ayusman Bharat Health Infrastructure Mission (PM-ABHIM) – Bio Security Preparedness and strengthening Pandemic Research and Multi Sector and National Institutions and Platform for One Health**

(a) PM-ABHIM – Bio Security Preparedness and strengthening Pandemic Research and Multi Sector

(b) Programme for strengthening Research & Development towards integrated disease control and pandemic preparedness for the National One Health Mission.

1.4 During the year under review, the Department has made significant progress in implementation of aforesaid schemes. 163 Viral Research & Diagnostic Laboratories (VRDLs), 117 Multi-Disciplinary Research Units (MRUs) and 36 MRHRUs were sanctioned up to 2024-25 (up to 31st December, 2024).

1.5 VRDL, MRU and MRHRU schemes are helping in building up a strong and effective ecosystem for carrying out health research in the country and for introduction of new technologies, new methods of treatment and products/ processes into the Public Health System.

1.6 Centre for Evidence based Guidelines is established in the DHR for coordinating the formulation of Evidence Based Guidelines.

1.7 A total number of 4291 fellowships have been supported under HRD Scheme during the year 2024-25 including 4199 new fellowships for the year 2024-25 (till 31.12.2024).

1.8 A total number of 548 research projects were approved and funded under the GIA Scheme since its launch in 2013-14 up to 2023-24. During the year **2024-25** a total number of **161** ongoing research projects and 5 new intersectoral joint projects in the different research areas under Grant in Aid scheme was funded till 31st December, 2024.

1.9 In 2024-25 (till 31.12.2024), MRUs undertook 375 and MRHRUs 65 research projects.

The Assisted Reproductive Technology (Regulation) Act, 2021 and the Surrogacy (Regulation) Act, 2021:

1.10 The field of Assisted Reproductive Technology (ART) has witnessed tremendous growth in recent

years, with an increasing number of couples seeking these services to fulfill their biological parenthood aspirations. However, lack of comprehensive regulatory framework led to concerns about unethical practices, exploitation of poor vulnerable woman, potential health risks and parentage issues. A need was, therefore, felt to bring forth legislation in the sector to curb the commercialization and commodification of these technologies and promote safe and ethical practices of ART & Surrogacy in the country.

1.11 The Assisted Reproductive Technology (Regulation) Act, 2021, and The Surrogacy (Regulation) Act, 2021, were enacted by the Parliament which have come into force with effect from 25.01.2022. The Rules and Regulations for the both the Acts have been notified. The National ART & Surrogacy Board which is the central Supervisory Board has been constituted and the National Registry is also operational. All States have constituted their respective State ART & Surrogacy Board (except 1 state) and Appropriate Authority has also been constituted by all the States (except 1 state). The UT Board and UT Appropriate Authority have been constituted in all UTs by the Central Government.

1.12 Both these Acts aim to establish a regulatory framework ensuring ethical practices and safeguarding the rights of all stakeholders involved. The Surrogacy (Regulation) Act, 2021, is a unique amalgamation of social, ethical, moral, legal and scientific issues. It seeks to regulate surrogacy procedure is such a way as to stop exploitation of poor vulnerable women: to ensure protection of rights of the child born out of surrogacy and to facilitate only needy infertile couple and widowed and divorced women to have child to complete their family. The Act prohibits commercial surrogacy and allows only altruistic surrogacy.

Swachhata Action Plan Activities & Special Campaign for disposing pending matters

1.13 Swachhata Action Plan, an inter-ministerial approach coordinated by Department of Drinking Water and Sanitation, M/o Jal Shakti was formulated and complied with, to mainstream Swachhata within the existing programmes and schemes of the Department.

1.14 A Special Campaign for disposing pending matters, coordinated by Department of Administrative Reforms and Public Grievances from 2nd October to 31st October, 2024 was carried out in DHR, which is being continued for the present. During this campaign an overall effort was made by the Department to dispose of pending matters like VIP References, Parliamentary Assurances, Inter-Ministerial Consultations, Public Grievances and Appeals, State Government References etc. in time bound manner. This was further converted into a weekly phenomenon. Also, the SCDPM Portal of DARPG was regularly updated in this regard.

Health Technology Assessment in India (HTAIn)

1.15 Health Technology Assessment in India (HTAIn) is a sub-scheme under the umbrella scheme Human Resource and Capacity Building in the 15th Financial Commission approved for year 2021-22 to 2025-26 under the Department of Health Research (DHR), Ministry of Health & Family Welfare (MoHFW), Government of India to facilitate the process of transparent and evidence-informed decision making in the field of healthcare. It is now approved as an attached office of DHR. HTAIn is entrusted with the responsibility to analyze health technologies viz. medicines, devices and health programmes for its cost-effectiveness, clinical-effectiveness and equity issues by means of Health

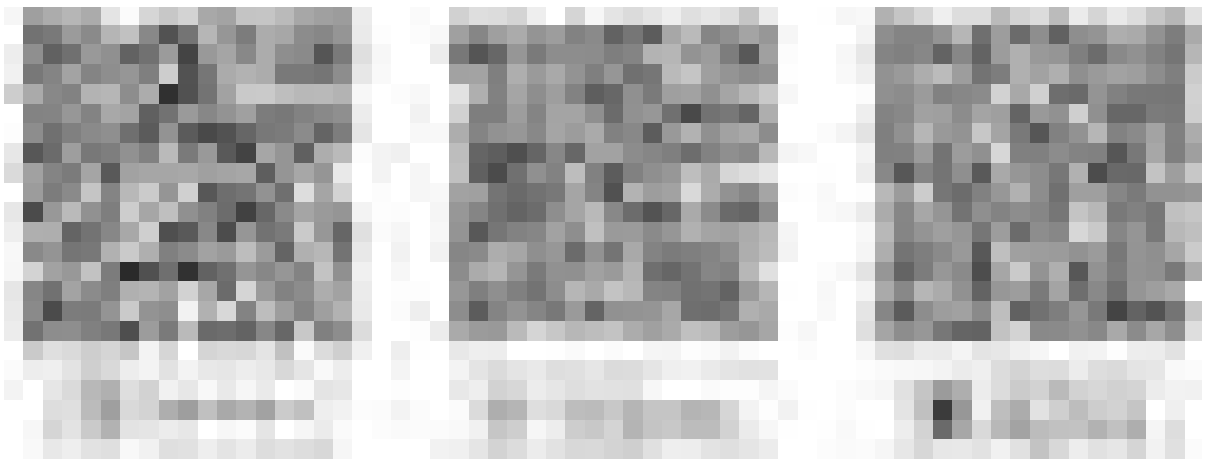
Technology Assessment (HTA), and in turn help in decision making for an efficient use of the limited health budget and provide people access to the quality health care reducing their out-of-pocket expenditures (OOPs) on health. Established in 2017, HTAIn has extended support to various verticals (e.g. Maternal Health, Child Health, TB division, State Health Departments, Ayushmann Bharat Program, National Program for Blindness and NCD division etc.) of the health ministry at the center and also at state level, in evidence-based decision making. Health Technology Assessment Board has been proposed to institutionalize the structure and function of Health Technology Assessment body in India.

National Ethics Committee Registry for Biomedical and Health Research (NECRBHR)

1.16 DHR is the designated authority to register Ethics committees for Biomedical and Health Research under the ambit of the New Drugs and Clinical Trials Rules 2019, Drugs and Cosmetic Act 1940. Until date, around 2004 EC registration applications have been received and more than 1625 provisional certificates and around 576 final certificates have been issued to Ethics committees. Continuous efforts have been made to improve the portal to ensure users' friendliness of the portal. In addition, ICMR-DHR outreach attempts to reach various ethics committees are going on which also includes training sections and communications with various stakeholders.

Preparation of Standard Treatment Workflows (STWs):

1.17 Indian Council of Medical Research (ICMR), Department of Health Research (DHR) initiated a mission project of developing Standard Treatment Workflow (STWs). ICMR is continuously expanding Standard Treatment Workflows in collaboration with the NHA and the WHO countryoffice. The ICMR, and DHR receive the topics for developing STW from NHA and experts all over the country. In the year 2018, volume-1 of STWs for 53 conditions in 9 specialties was developed, in year 2022 STW volume-2 special edition for the Tuberculosis in 3 clinical specialties comprising 18 conditions and volume-3 in 11 clinical specialties comprising 51 conditions and Volume-4 for 5 conditions in 32 specialities was developed. So far, STW for 157 conditions covering 28 disciplines have been published. These workflows comprise symptoms, signs, diagnostics, treatment, etc. for concerned diseases. These are available on the ICMR website (https://icmr.gov.in), mobile apps on Android at Google Play store and iOS platform at Apple store, hardbound copies, posters and scannable QR Codes as given below:



For its wider dissemination and implementation, collaborative efforts have been initiated by the National Health Authority to convene the regular meetings with state health authorities and tertiary care hospitals, wherein the session on STW are conducted regularly. Besides this, NHA is also usingthe STW as the clinical guidance document to prepare their reimbursement package under the Ayushman Bharat Scheme. We have approached the NHSRC to reach physicians in both public and private systems, and the NMC to engage with medical colleges, faculty, and postgraduate students. Additionally, we will work with national associations such as IMA, IAPSM, IPHA, and other specialty associations to ensure comprehensive outreach and collaboration. We have published articles in reputed journals. We are conducting regular monthly training of medical officers across various states in collaboration with NHA in English and Hindi for better understanding.We have conducted webinars in the area of CTVS (Cardiothoracic Vascular Surgery), Interventional Radiology and Orthopaedics.Further, the STWs Volume 4 has been released in 5 clinical specialties comprising 32 conditions along with a revamped mobile application.

Name of Speciality (No. of STWs)	Name of conditions
Extra Pulmonary Adult TB (10)	1. Adult Abdominal Tuberculosis 2. Adult Lymph Node Tuberculosis 3. Adult Musculoskeletal Tuberculosis 4. Adult Pericardial Tuberculosis 5. Adult Pleural Tuberculosis 6. Adult Tubercular Meningitis 7. Cutaneous Tuberculosis 8. Female Genital Tuberculosis 9. Genitourinary Tuberculosis 10. Intraocular Tuberculosis
Paediatric Pulmonary TB (5)	1. Paediatric Abdominal Tuberculosis 2. Paediatric Intrathoracic Tuberculosis 3. Paediatric Lymph node Tuberculosis 4. Paediatric Osteoarticular Tuberculosis 5. Paediatric Tubercular Meningitis
Invx. & Rx TB (3)	1. Microbiological Workup for Adult Extrapulmonary TB 2. ATT Drug Dosages 3. ATT Hepatitis

Contd...

Name of Speciality (No. of STWs)	Name of conditions
Dermatology (14)	1. Acne Roseacea 2. Alopecia 3. Bacterial skin infections 4. Cutaneous adverse drug reactions Part A 5. Cutaneous adverse drug reactions Part B 6. Dermatophytosis 7. Eczema/Dermatitis 8. Immunobullous dermatoses 9. Psoriasis 10. Rationale use of Topical Steroids 11. Scabies 12. Urticaria 13. Varicella and Herpes 14. Vitiligo
Endocrinology (6)	1. Diabetes Type I 2. Diabetes Type II 3. Diabetic Ketoacidosis 4. Fragility Fractures 5. Hyponatremia 6. Hypothyroidism
Gastroenterology (4)	1. Gastrointestinal Bleed Part A 2. Gastrointestinal Bleed Part B 3. Jaundice 4. Liver Failure
Neurosurgery (3)	1. Suspected Brain Tumor 2. Head Injury 3. Spinal Injury
Orthopaedics (11)	1. Ankle Fractures 2. Distal Femur Fractures 3. Fracture Distal End Radius 4. Fracture Neck of Femur 5. Hip Osteoarthritis 6. Intertrochanteric Femoral Fractures 7. Lower Back Pain 8. Neck Pain 9. Open Fractures 10. Osteoarthritis of Knee Joint 11. Tibial Plateau Fractures

Name of Speciality (No. of STWs)	Name of conditions
Pediatric Cardiology (6)	1. Acute Rheumatic Fever 2. Critical Heart Disease in the Newborn 3. Pediatric Heart Failure 4. Kawasaki Disease 5. Left to Right Shunt Lesions 6. Tachyarrhythmias
CTVS (5)	1. Acute Aortic Syndrome 2. Acute Limb Ischemia 3. Chest Trauma 4. Chronic Lower Limb Ischemia (CLLI) 5. Surgical Management of Coronary Artery Disease
Intervention Radiology (6)	1. Image Guided Drainage of Intra Abdominal AbscessImage Guided Management of Haemoptysis 2. Image Guided Therapies for Primary Liver Tumors 3. Image Guided Management of Obstructive Jaundice 4. Image Guided Management of Stroke 5. Image Guided Management of Vaginal Bleeding 6. Image Guided Management of Varicose Veins (Chronic Venous Insufficiency)

1. We have published articles in reputed journals.
2. We are conducting regular monthly training of medical officers across various states in collaboration with NHA in English and Hindi for better understanding.

Webinars done

S.No.	Webinar-2025	Date
1	CTVS	10.01.2025
2	Interventional Radiology	21.01.2025
3	Orthopaedics	28.01.2025

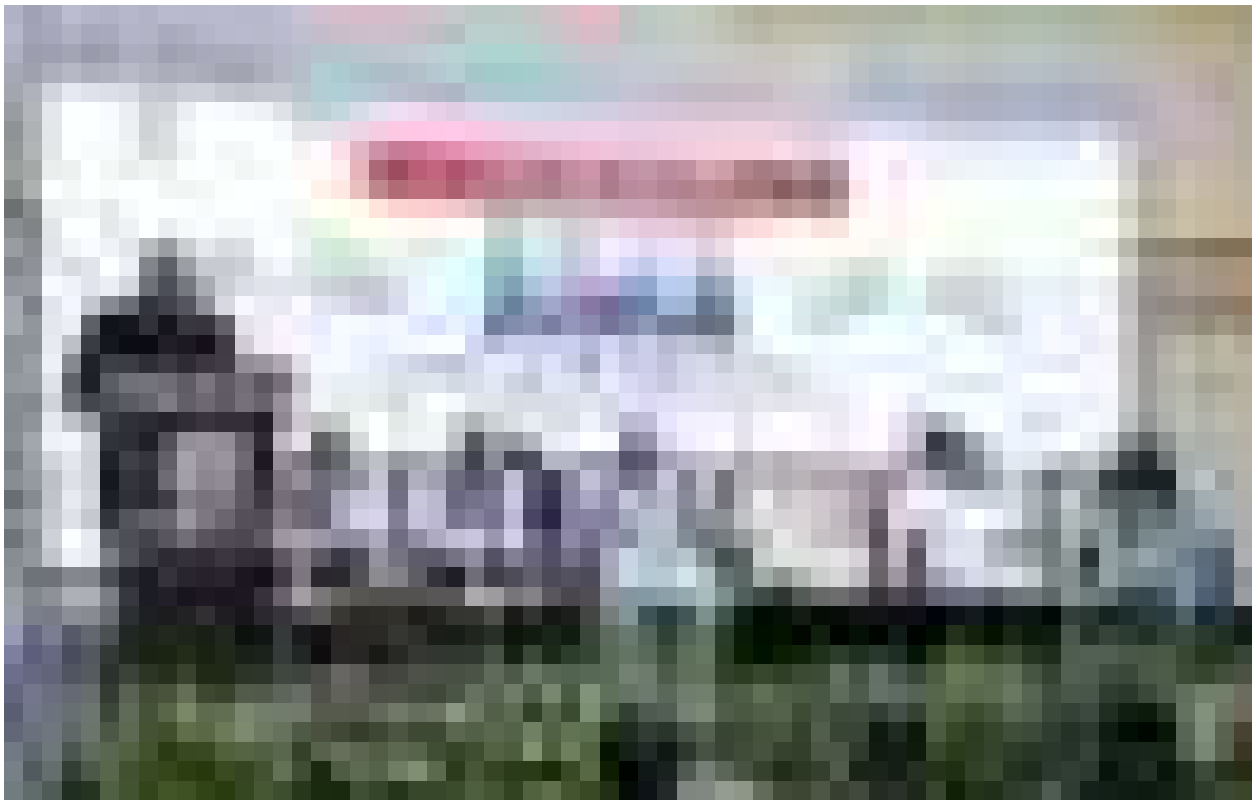
New topics have been proposed by experts in various specialties which will be prepared in due course.

New Topics proposed	
Orthopaedics	
1	Rickets
2	Club foot
3	Fracture related infection / Implant related infection
4	Nerve Injuries
5	Fracture distal humerus and proximal humerus
6	Avascular Necrosis of bone
7	Developmental dysplasia of the hip
8	Acute Osteomyelitis
9	Rheumatoid Arthritis
10	Wholesome approach in fragility fractures

Obstetrics and Gynaecology	
1	Caesarean Delivery
2	Cancer of Cervix

Hemoglobinopathies	
1	Thalassemia

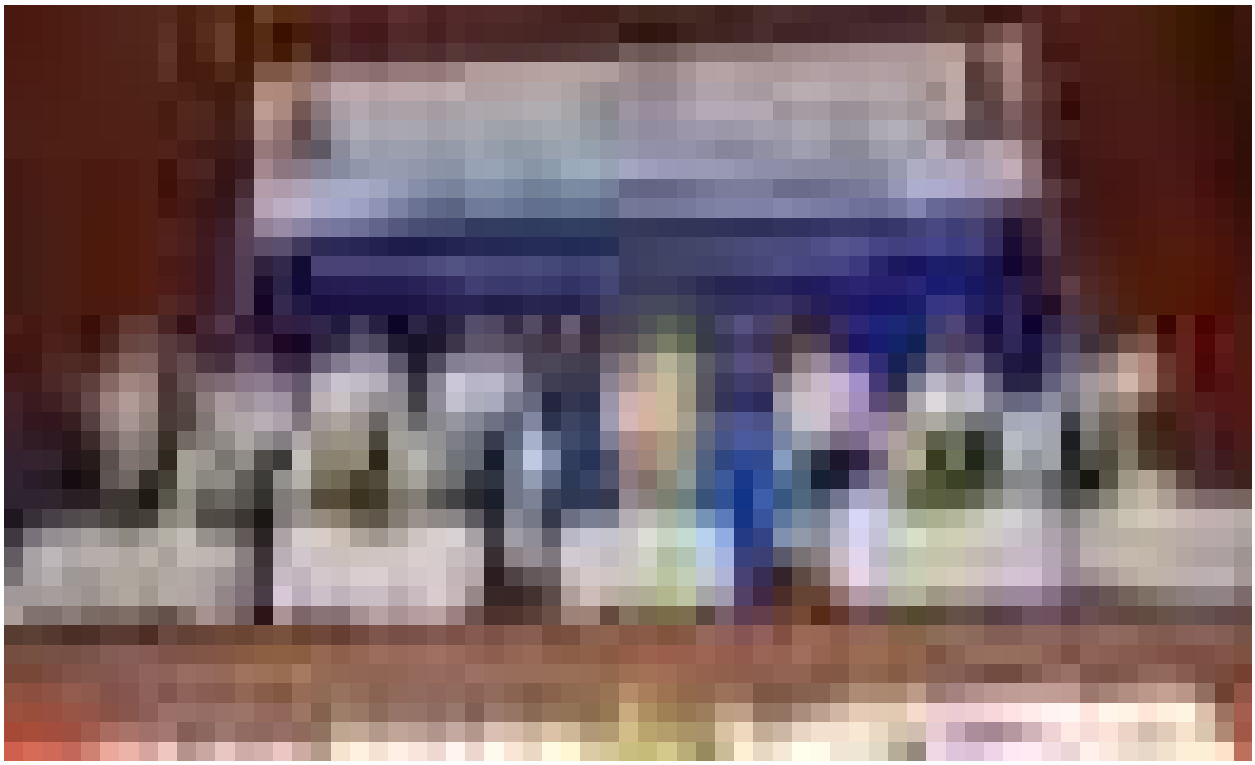
Interventional Radiology	
1.	Pulmonary Embolism
2.	Image guided therapy for primary liver malignancies
3.	Image guided therapies for portal hypertension
4.	Image guided vascular access
5.	Image guided therapies for Portal hypertension
6.	Image guided therapy for Pain management
7.	Image guided therapy for Deep vein thrombosis
8.	Image guided therapy for Aortic aneurysm /dissection
9.	Image guided therapies for management of Hemoptysis
10.	Image guided management of Hemoptysis
11.	Image guided therapies for critical limb ischemia



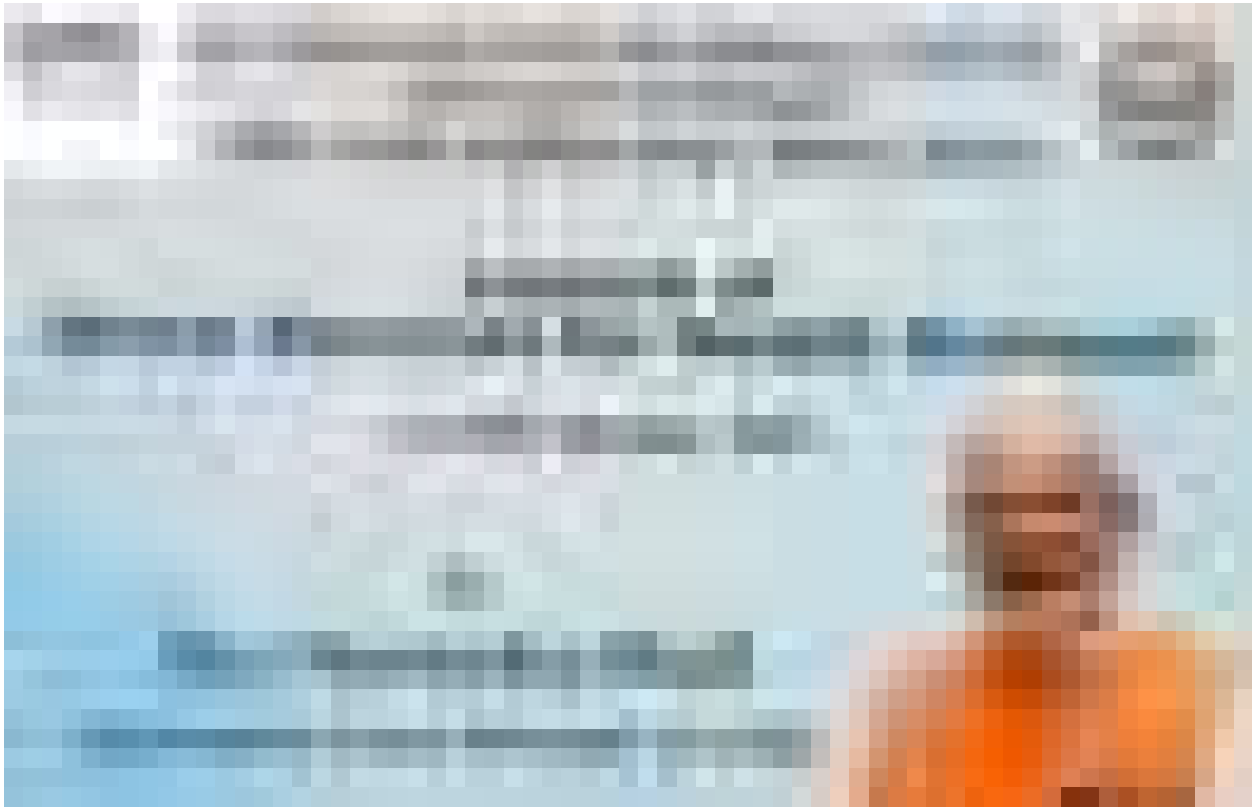
Foundation Day celebration of ICMR-NITM, Belagavi in the august presence of Hon'ble Vice President of India and Hon'ble Governor of Karnataka

Visit of Hon'ble MoS Health, Sh. Prataprao Ganpatrao Jadhav for reviewing the ICMR activities

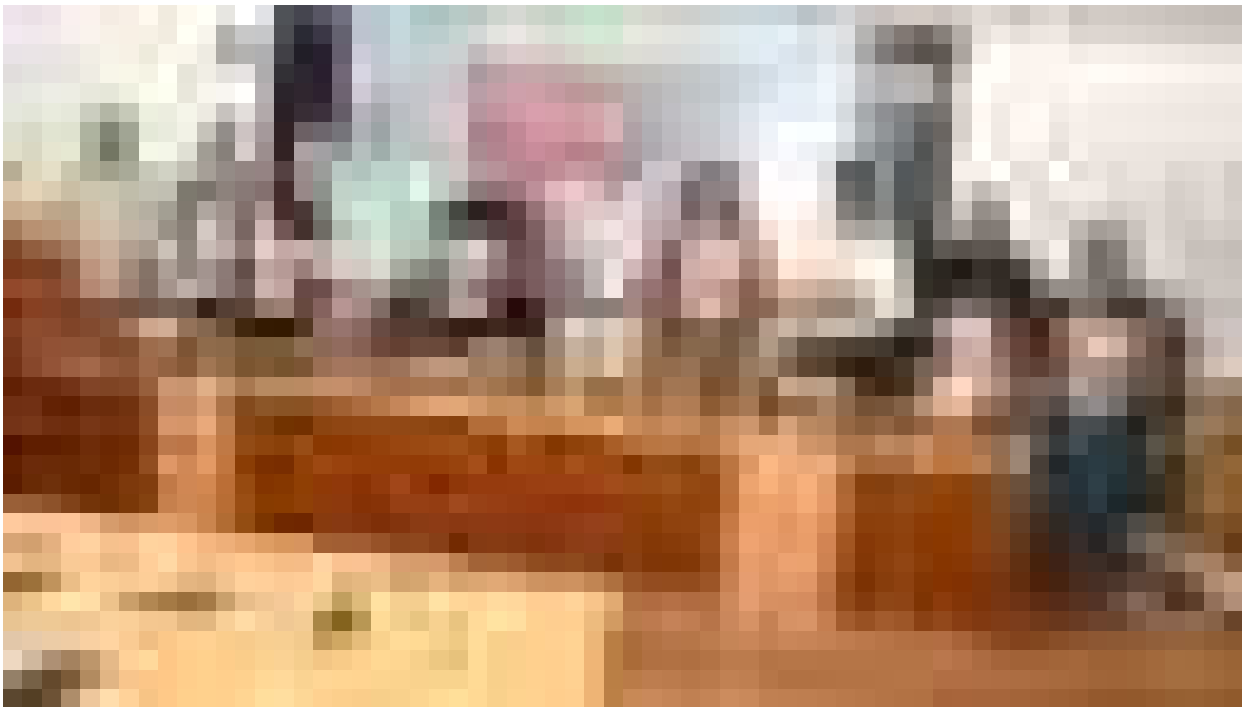
Release of ICMR Technology Development Collaboration Guidelines, CSR Policy & IPR Policy by Hon'ble MoS, Health, Smt. Anupriya Patel



Launch of State Level launch of STAR NCD by Hon'ble CM of Tripura, Prof (Dr) Manik Saha



Launch of Drone Services For Health Outreach at AIIMS Bibinagar by Hon'ble PM



Release of Standard Treatment Workflows Volume 4 featuring 5 specialties & 32 diseases

Vishanu Yuddh Abhyas - A groundbreaking pandemic preparedness drill under the National One Health Mission

ICMR, with ICAR, DAHD, & NCDC launched study on zoonotic spillover detection

Chapter 2 Administration and Finance

2.1 The Department of Health Research is operating many schemes to fulfil its mandate besides administering Indian Council of Medical Research (ICMR), an autonomous organisation of the Department. Presently, DHR has a total of 62 sanctioned posts in different grades with incumbency position as under:

(incumbency position as on 1st January 2025)

S.No.	Name of the post	Total sanctioned strength	Incumbency position	Vacancy position
1.	Secretary DHR	1	1	0
2.	Joint Secretary	2	2	0
3.	Director/Deputy Secretary	4	4	0
4.	Sr. Principal Private Secretary	0	1*	0
5.	Scientist F	2	0	2
6.	Scientist E	4	0	4
7.	Scientist D	7	0	7
8.	Scientist C	7	2	5
9.	Under Secretary	5**	3	2
10.	Principal Private Secretary	0	2*	0
11.	Assistant Director	1	0	1
12.	Section Officer	7**	4	3
13.	Scientist B	2	0	2
14.	Private Secretary	2	0	2
15.	Assistant Section Officer	14**	8	6
16.	Junior Translation Officer	1	1	0
17.	Personal Assistant	2	0	2
18.	Typist (Hindi)	1	0	1
		62	**28 (3*)**	**37**

**** 03 incumbents of the Central Secretariat Stenographer service have been posted beyond the sanctioned strength for these posts.***

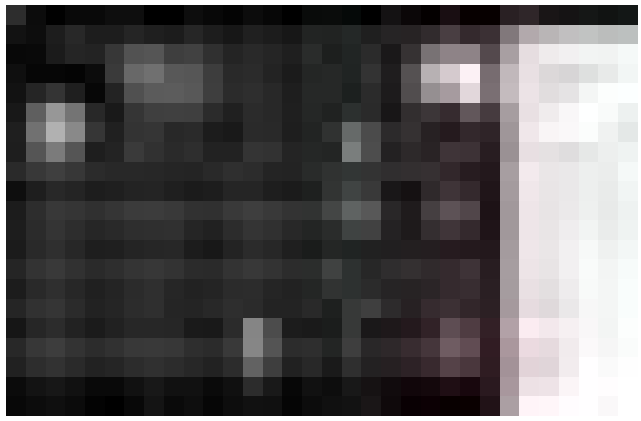
***** 01 post of Under Secretary, 01 post of Section Officer and 03 posts of Asst Section Officer have been sanctioned by Ministry of Finance and are under process of encadrement in the Central Secretariat Service (CSS).***

2.2 **Creation of HTAIn attached office in the Department of Health Research:** The Health Technology Assessment division under the Department of Health Research has been constituted as an attached office in the Department of Health Research. This will create a health technology assessment system that evaluates clinical effectiveness, cost effectiveness, safety, equity and appropriateness of the existing and new health technologies, to support evidence-based decision making in health care. 15 Regular posts have been created under the HTAIn attached office.

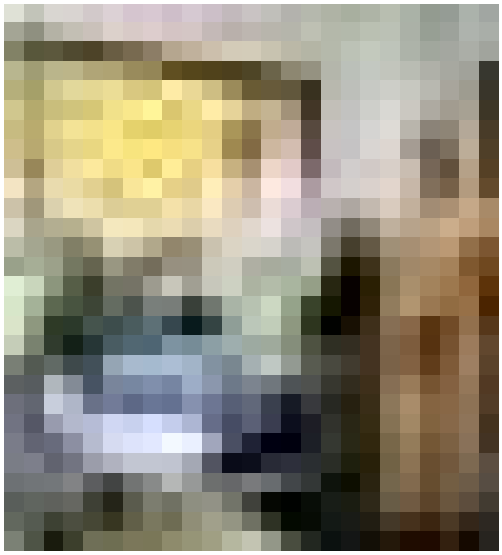
2.3 **Improving the efficiency in decision making through Delegation of Financial Powers:** With a view to increase efficiency and reduce channels of clearance, order of delegation of financial power of HoD and other Division Heads have been streamlined. Further, orders for delegation of financial powers in respect of Director/ DS (Admn) and Head of Office were issued.

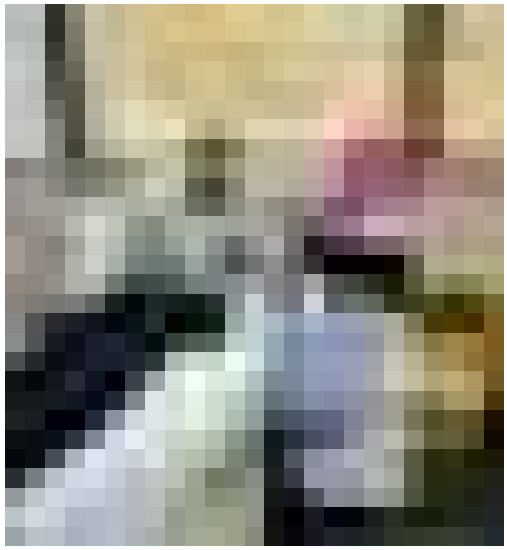
2.4 **Organisation of Hindi Pakhwada 2024:** In order to encourage the use of Hindi in official works and among the officers/employees of the Department, Hindi fortnight (Hindi Pakhwada) was organized successfully in the Department during September 14- 29, 2024. During the Hindi fortnight, competitions namely, a Quiz competition regarding the awareness of Official Language Policy among employees of the Department, Essay competition, Hindi Kavyapath competition and Hindi Dictation Competition for MTS were organized. The winners of these competitions were awarded cash prizes including certificates.

2.5 **Capacity Building Initiatives and observance of National Learning Week 2024:** The "Mission Karmayogi" has been launched by the Government to promote role based capacity building with the goal of offering a wide range of learning resources on the iGOT Karmayogi platform. The officials/employees of the Department of Health Research have been registered on the portal and are encouraged to use the portal for capacity building and also to complete various mandatory online courses on the iGOT platform. The Department of Health Research also observed the National Learning Week inaugurated on 19th October 2024. During the week, all officials of the Department were encouraged to attend various learning sessions on the iGoT portal. Webinars on topics such as emerging technologies in health sector, etc were also organised in the Department to encourage the spirit of learning.



2.6 **Celebration of World Blood Donor Day:** The officials/ staff of Department of Health Research were encouraged to donate blood in the donation camp organised by the Department in association with Indian Red Cross Society on the World Blood Donor Day on 14th June 2024.





2.7 Awareness on Cyber Security: With a view to create awareness on Cyber Security a seminar was organised for all officials of the Department on the 15 October 2024 by cyber security experts from NIC.

2.8 On boarding of DHR on the PM Gati Shakti NMP portal: PM GatiShakti National Master Plan portal is a web-based, customized GIS platform to bring various Central Ministries and States/ UTs together for integrated planning and coordination of Government projects. Initially, the portal involved only the infrastructure Ministries of GOI and subsequently, the Social Sector Ministries, including DHR have also been onboarded onto the PM GatiShakti NMP platform. Since the onboarding of DHR on the portal, data layers of the Lands and buildings of ICMR and its institutes, Multi disciplinary research units, Model rural health research units, Viral Research diagnostic labs and HTAIn Resource Centres/ DIAMOnds Centres have been uploaded on the portal.

2.9 Complaints Committee for prevention of Sexual harassment of Women at work place: Department has setup a Complaint Redressal Mechanism to look into the matters/ cases of sexual harassment of female employees of the Department as per the extant instructions of Government of India.

2.10 Grievance Redressal Mechanism: The Department has a robust Grievance Redressal Mechanism in place. The grievances received on the CPGRAMS portal were resolved in a satisfactory and timely manner.

2.11 E-Governance Initiatives: The Department has taken the following E Governance measures:

- eHRMS 2.0 (Electronic Human Resource Management System) has been implemented in the Department which has made the HR management processes more efficient.
- As per the General Financial Rules, The Department of Health Research uses the GeM portal for procurement of Goods and Services in a transparent, efficient and cost effective manner.
- VPN facility has been provided to the officers to facilitate faster disposal of work.

FINANCE:

2.12 Allocations and Expenditure from 2015-16 to 2019-20, 2020-21 (14th Finance Commission period) and from 2021-22 beginning with the 15th Finance Commission period, are as follows:

Year	BE	RE	Actual Expenditure
Total (14th Finance Commission period)	7,362.97	7,793.43	7,709.95
2020-21	2,100.00	4,062.30	3,124.59
2021-22	2,663.00	3,080.00	2,690.60
2022-23	3,200.65	2,775.00	2,432.11
2023-24	2,980.00	2,892.83	2,857.47
2024-25	3,001.73	3,391.64	2525.90 (31.12.2024)
2025-26	3,900.69	-	-

A statement indicating the scheme-wise BE/RE/actual expenditure for 2023-24 and BE/RE/ expenditure (provisional) for 2024-25 and BE 2025-26 in respect of Demand No.47-Department of Health Research is given at **Annexure-I**.

Audit Observations:

2.13 There was no PAC Para pertaining to the Department of Health Research (DHR) during the year 2024-25.

2.14 There were 11 CAG Paras pertaining to the Department of Health Research (DHR) during the year 2024-25.

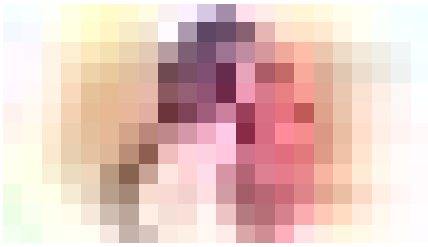
Chapter 3

The Assisted Reproductive Technology (Regulation) Act, 2021 and The Surrogacy (Regulation) Act, 2021

3.1 The Assisted Reproductive Technology (Regulation) Act, 2021 and The Surrogacy (Regulation) Act, 2021 came into force w.e.f. 25th January 2022.

3.2 Objectives of The Assisted Reproductive Technology (Regulation) Act, 2021 and The Surrogacy (Regulation) Act, 2021

(i) The ART Act, 2021 aims to regulate and supervise the assisted reproductive technology clinics and the assisted reproductive technology banks, prevention of misuse, safe and ethical practice of assisted reproductive technology services to commissioning couple/single women for addressing the issues of reproductive health where assisted reproductive technology is required for becoming a parent or for freezing gametes, embryos, embryonic tissues for further use due to infertility, disease or social or medical concerns and for regulation and supervision of research and development and for matters connected therewith.



(ii) The Surrogacy Act, 2021 is an Act to constitute National Assisted Reproductive Technology and Surrogacy Board, State Assisted Reproductive Technology and Surrogacy Boards and appointment of appropriate authorities for regulation of the practice and process of surrogacy and for matters connected therewith or incidental thereto. The Act aims to provide safe and ethical practice of Surrogacy services for providing bliss of child to needy intending couple/intending women (divorcee or widow) and at the same time ensuring safety of donor & surrogate mother and also future rights of the child born through surrogacy.

3.3 The National Registry for the purposes of both the Acts has been constituted and made operational with effect from 22.04.2022 under DHR. An application form has been devised on the National Registry portal and all clinics / banks can access the portal and use the application form for applying for registration under the Acts to the concerned State/UT Authorities. The downloaded filled in PDF form, duly signed along with registration fee, is required to be submitted to the State/UT Health Deptt. for the purpose of registration. The access of the National Registry Portal for viewing has also been given to all the States/UTs. The National Registry Portal has been upgraded to give access to

State/UT Appropriate Authorities for uploading of the registration certificates/rejection order directly on the National Registry Portal.

3.4 The National Assisted Reproductive Technology and Surrogacy Board (National Board) was constituted on 4th May 2022. The Chairperson of the National Board is Hon'ble Minister of Health and Family Welfare. The Board discharges various important functions namely:-

(a) to advise the Central Government on policy matters relating to surrogacy.

(b) to review and monitor the implementation of the Act, and the rules and regulations made there under and recommend to the Central Government, changes therein.

(c) to lay down the code of conduct to be observed by persons working at surrogacy clinics.

(d) to set the minimum standards of physical infrastructure, laboratory and diagnostic equipment and expert manpower to be employed by the surrogacy clinics.

(e) to oversee the performance of various bodies constituted under the Act and take appropriate steps to ensure their effective performance.

(f) to supervise the functioning of State Assisted Reproductive Technology and Surrogacy Boards; and

(g) such other functions as may be prescribed.

3.5 The UTs Appropriate Authority and Board with or without legislature have been constituted by the Central Government on 4th May, 2022. All the States have constituted their respective State Boards (except 2 States) and State Appropriate Authorities (except 1 State). The appropriate authority

discharges the following functions, namely:-

(a) to grant, suspend or cancel registration of a surrogacy clinic.

(b) to enforce the standards to be fulfilled by the surrogacy clinics.

(c) to investigate complaints of breach of the provisions of this Act, rules and regulations made there under and take legal action as per provision of this Act.

(d) to take appropriate legal action against the use of surrogacy by any person at any place other than prescribed, suomoto or brought to its notice, and also to initiate independent investigations in such matter.

(e) to supervise the implementation of the provisions of this Act and rules and regulations made there under.

(f) to recommend to the Board and State Boards about the modifications required in the rules and regulations in accordance with changes in technology or social conditions.

(g) to take action after investigation of complaints received by it against the surrogacy clinics.

(h) to consider and grant or reject any application under clause (vi) of section 3 and sub-clauses (a) to (c) of clause (iii) of section 4 within a period of ninety days as per the Act.

3.6 The Assisted Reproductive Technology (Regulation) Rules, 2022 and Surrogacy (Regulation) Rules, 2022 have been notified on 7th June 2022 and 21st June 2022 respectively.

3.7 The National Assisted Reproductive Technology and Surrogacy Board (Appointment of Expert Members by Nominating) Rules, 2022 were notified on 16th June, 2022.

3.8 The State Assisted Reproductive Technology and Surrogacy Board (Appointment of Expert Members) Rules, 2022 were notified on 17th June, 2022.

3.9 The Assisted Reproductive Technology Regulations, 2023 and the Surrogacy Regulations, 2023 have been notified on 5th April, 2023.

3.10 Use of Donor of Gametes for availing Surrogacy in India- Notification dated 14.3.23 regarding prohibition of use of donor gamete was substituted vide Notification dated 21.2.2024, Surrogacy (Regulation) Amendment Rules, 2024 thereby permitting the use of donor gametes for availing Surrogacy in India when the intending couple suffers from medical indication subject to the condition that the child to be born through surrogacy must have at least one gamete from the intending couple.

3.11 Since inception i.e 26.08.2022, a total of 887 No objection certificates have been issued by DHR seeking permission of the National Board for transfer of own gametes and embryos for personal use within or outside India u/s 29 of ART (Regulation) Act, 2021 and 07 certificate of recommendations have been issued by DHR to Couple of Indian Origin (OCI Cardholders) for the purpose of availing surrogacy in India u/s 4(ii) (a) of Surrogacy (Regulation) Act, 2021. Out of this, 399 certificates have been issued in the period from 01.04.2024 to 31.12.2024.

3.12 A total of 8871 forms have been downloaded till 31.12.2024 from the National Registry's portal and used by clinics/banks for applying for registration to the State/UT Appropriate Authority (ART Clinics- 6184, ART Banks- 1599 & Surrogacy Clinics- 1008). Out of this 1098 forms (ART Clinic:- 806, ART Bank:- 183, Surrogacy Clinic:- 109) have been downloaded in the period from 01.04.2024 to 31.12.2024.

3.13 FAQs on ART (Regulation) Act, 2021 have been published on the National Registry Portal and circulated to all States/UTs.

Chapter 4 Swachh Bharat Abhiyan in Department of Health Research

4.1 On the line of the proverb 'Cleanliness is next to godliness', DHR always gives first preference to cleanliness in the campus of the Department which is followed by regular monitoring and supervision by the senior officers. During the Swachhata Hi Seva Campaign-2024, DHR organized multiple Swachhata Activites and laid special focus to spread awareness on Swachhata to all the field units.

Swacchta Action Plan (SAP) (2024-25)

4.2 SAP is an inter-ministerial approach coordinated by Department of Drinking Water and Sanitation, M/o Jal Shakti to mainstream Swachhata within the existing programmes and schemes of Ministries and the Departments. The various important components included in SAP for DHR are as under:-

i. Swachhata Pledge
ii. E-Waste Management
iii. Clean Office premises/Shramdaan
iv. Office Digitization
v. Toilet Renovation
vi. Monthly Festival for promoting Swachhata
vii. Plantation drives
viii. Mass Swachhata Pledge
ix. Maintenance of Swachhata Assets
x. Menstrual Hygiene Management/Vending Machine/Incinerator
xi. Swachhata Awards and incentives

Swacchta Pakhwada (1st to 15th April, 2024)

4.3 Department of Health Research also observed Swacchta Pakhwada from 1st to 15th April, 2024 with following Action Plan:-

1. Taking Swachhata Pledge by every official in DHR to be administered by JS (Admn.)
2. Cleaning of Work Space (Desk) by Offices and Subordinate Staffs.
3. Removing and weeding out of old files/ records.
4. Digitization of Remaining physical files and records of DHR.
5. Upgrading and updating of Swachhata Wall in DHR.
6. Disposal of e-waste in DHR

7. Replacement of old dustbins with new ones.
8. Deep Cleaning of cable path in DHR and pest control of all the sections.
9. Swachhata Drive in DHR to be followed by inspection by JS level Officer.
10. Preparation of Action Taken Report.

Special Campaign 4.0

4.4 Special campaign for Disposal of Pending matters' (SCDPM 4.0) under the aegis of Department of Administrative Reforms & Public Grievances (DARPG) was implemented in DHR from 2nd to 31st October, 2024. This Campaign was preceded by preparatory phase from 17th to 30th September, 2024. The Department sensitized the officers, mobilized the ground functionaries, identified pendency in various categories (such as MP references, Parliament Assurances, Public Grievances, PMO references etc) in the Department of Health Research, ICMR Hqrs. and its institutes across the nation. The identified pendencies were disposed of accordingly.

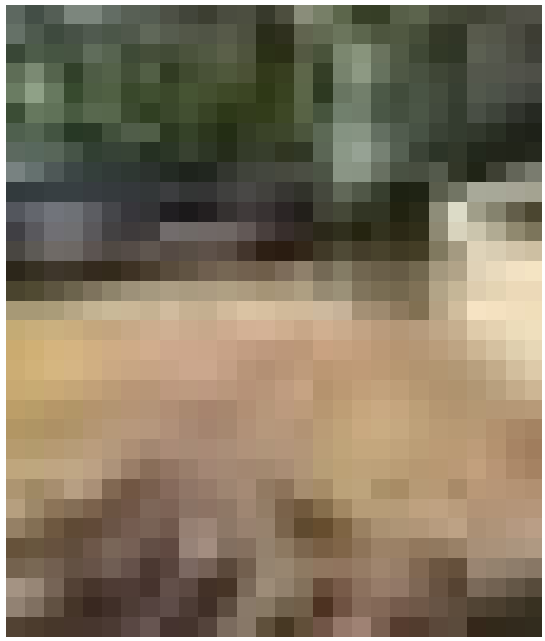
4.5 Swachhata hi Seva' campaign-2024 was organised in the department from 17th September to 2nd October 2024. Under the campaign, following activities were undertaken in the department

➲ **Plantation Drive:** A mass plantation drive in the campus of DHR was organized under the theme "Ek Ped Maa ke Naam".

➲ **Shramdaan Activity:** Mass cleanliness drive under the campaign was held in the campus of India Red Cross Society in which all the officers/staff of the DHR took part in cleaning the campus and Cleanliness Target Unit (CTU) identified in the campus.

Before

After



➲ **Preventive Health Checkup of Sanitation Workers:** Preventive Health Checkup of Sanitation Workers was organized in the Red Cross Society campus for. In this activity, general physical examination such as blood pressure, blood sugar, dental health, physiotherapy checkups were done by physicians. Gynaecological checkup was done separately for women by lady doctors.

➲ **Celebration of Swachh Bharat Diwas and Felicitation of Sanitation worker:** Campaign was concluded with the celebration of Swachh Bharat Diwas and all the Sanitation Workers/Safaimitras were felicitated.

Activities executed during this campaign were photographed and uploaded on the 'Swachhata hi Seva' portal administered by Department of Drinking Water & Sanitation along with MoHUA.

4.6 The Indian Council of Medical Research (ICMR) and its network of 27 Institutes, Centres, and Field Stations actively participated in a series of impactful initiatives under the recent cleanliness campaign. Key highlights included awareness programs conducted in schools, colleges, and model colony clinics, where participants were educated on hygiene and cleanliness practices. Cleaning materials were distributed to school and college officials to support their efforts in maintaining a clean environment. Under the banner of Swachchta ki Bhagidari, ICMR and its institutes actively engaged in activities such as Shramdan. Mass plantation drives, under “Ek Ped Maa Ke Naam,” were launched at all ICMR institutes. Dark spots in public spaces around ICMR institutes were identified and cleanliness drives were organized to clear the area. Sanitary napkins, dustbins, and sanitizers were distributed to encourage healthy practices. SafaiMitra Suraksha Shivirs were organized to ensure their well-being and safety. Educational lectures in schools, colleges, and institutes emphasized proper handwashing techniques and the broader significance of maintaining hygiene. Photographs of several swachhata activities in DHR and ICMR are in the following pages.

1. Department of Health Research, MoHFW, New Delhi

2. Indian Council of Medical Research Headquarters, New Delhi

Cleaning of Dark Spots

Swashthya Surakasha Shivir of SafaiMitras

Walkathon for Promoting Swachha

Swachhata Chaupal

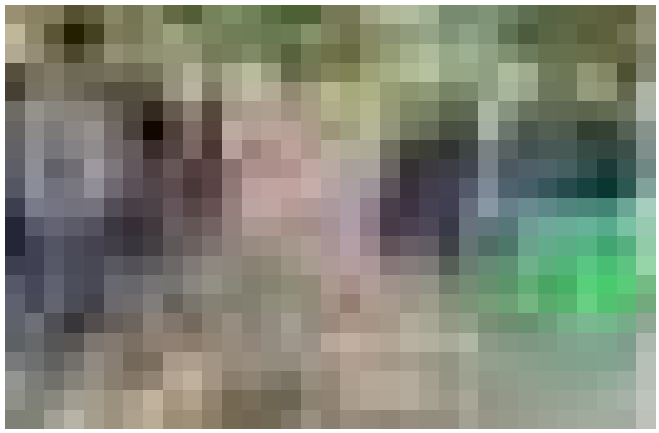
Mass Plantation by ICMR in Ridge Area, New Delhi

Swachh Bharat Campaign Organized at MRUs and MRHRUs

MRU- Gulbarga Institute of Medical Sciences, Kalaburagi

MRU- Govt. Mohan Kumaramangalam Medical College, Salem, Tamil Nadu

MRU- KIMS, Hubali, Karnataka



MRU-Kalpana Chawala Govt. Medical College Karnal, Haryana

MRHRU Sirwar, Karnataka

Staff of MRHRU, Jheet and CHC, Jheet taking pledge for cleanliness

Cleanliness Drive

Shramdan by the MRHRU Jheet Staff

MRHRU Team with children and Staff of Lilas Public School, Motipur participating in the drive

Chapter 5 Establishment of Network of Viral Research and Diagnostic Laboratories for Managing Epidemics and Natural Calamities

5.1 In recent years, India has experienced multiple outbreaks of emerging and re-emerging viral infections. Annual epidemics of diseases such as dengue, chikungunya, influenza, rotavirus, measles-rubella, and Japanese encephalitis have been reported across the nation. Additionally, over the past two decades, India has faced acute outbreaks or the risk of new or exotic viruses, including the Nipah virus (in 2001, 2007, 2018, 2019, 2021, and 2023), SARS-CoV (2003), Avian Influenza H5N1 (2006), the ECSA strain of chikungunya (2006), pandemic influenza (2009), and the Zika virus (2016, 2018, and 2021). Other significant threats include Ebola, Yellow Fever, and MERS-CoV (Middle East Respiratory Syndrome coronavirus), which continue to pose serious challenges to public health. Theses sequential events paved the way for strengthening the molecular diagnostic facilities for viruses in India through the establishment of Virus Research & Diagnostic Laboratory (VRDL) Network of DHR in the year 2013.

5.2. The Viral Research and Diagnostic Laboratories (VRDL) were established to improve the understanding, diagnosis, and management of viral infections. Since its initiation in 2013, the VRDL network has steadily expanded across India, with 163 labs established by 2024. The VRDL system consists of 11 Regional-Level labs, 27 State-Level labs, and 125 Medical College-Level labs, all equipped with state-of-the-art infrastructure. The primary goal of VRDL scheme is to deliver high-quality diagnostic services, conduct innovative research, and provide technical training to public health professionals. VRDLs support the health system by providing timely diagnosis, identifying viruses, generating data on viral diseases to aid resource deployment, and facilitating research projects to inform public health policies.

5.3 VRDLs have established high-quality diagnostic standards, strengthened event-based surveillance for rapid outbreak detection, and streamlined coordination with the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC). All regional labs have Biosafety Level-3 (BSL-3) facilities, capable of handling high-risk pathogens like Nipah, CCHF, Yellow Fever, and KFD viruses. The state-level and medical college labs are equipped with Biosafety Level-2 (BSL-2) facilities, sufficient for diagnosing moderate-risk pathogens like Dengue, Chikungunya, Influenza, SARS, Zika, Hepatitis, and Measles. With advanced equipment, VRDLs have successfully reduced diagnostic turnaround times from 7 days to 24-48 hours. Their capacity to diagnose 25-30 viruses of public health importance has made VRDLs a crucial pillar in India's public health system, particularly in outbreak management and disease surveillance.

5.4 **Significant achievements of VRDL network during the year:**

- DHR-ICMR Health Research Summit 2024: The VRDLs were evaluated under two broad categories and a total of six awards were distributed under the below given categories.
  i. VRDL's Excellence in Public Health Measures;
  - JIPMER Puducherry
  - KGMC Lucknow
  - SVIMS Tirupati

  ii. VRDL's Excellence in Scientific Research.
  - JIPMER Puducherry
  - KGMC Lucknow
  - SMS Jaipur
- 12 Virus Research & Diagnostic Laboratories (VRDLs) have been strengthened and equipped for study aimed to characterize the infectious causes of Acute Encephalitis Syndrome among patients in the most heavily affected regions of India.
- 13 VRDLs and Resource Centre (ICMR-NIV Pune) have been strengthened for development of Proficiency Panel (PT) panels for common analytes employed for the diagnosis of important infectious diseases in India in the DHR-ICMR VRDL network. This network will further serve as a starting point for the development and implementation of a nationwide External Quality Assurance (EQA) program, which has the potential to uplift the quality of laboratory testing in India to be at par with international standards.
- Few VRDLs have been geared up for the various research activities aimed to detect zoonotic spill over in increased animal-human interaction setting using a one health approach.
- 43 VRDLs have been identified for strengthening as invitro diagnostics validation centres. These labs will serve as the recognized validation centers as Medical Device and Diagnostic Testing Labs (MDDTL).
- 8 VRDLs have been selected for the establishment of Infectious Diseases Diagnostic and Research laboratory (IRDLs) in the pilot phase through rigorous internal and external review, including on-site assessment. The IRDLs shall serve as Regional Referral level labs for diagnosis and research on infectious diseases.
- Soon after the declaration of Monkeypox a Public Health Emergency of International Concern (PHEIC) on 14th August 2024 by the World Health Organisation (WHO) due to the emergence of the new strain (Clade Ib) of the virus. 36 VRDL laboratories across the country covering 21 states 3 UTs were sensitized and geared quickly to overcome the emergent situation. This robust diagnostic network, with extensive geographic reach, supports the detection of suspect samples

and early diagnosis, in coordination with the Integrated Disease Surveillance Programme (IDSP) of the Government of India.

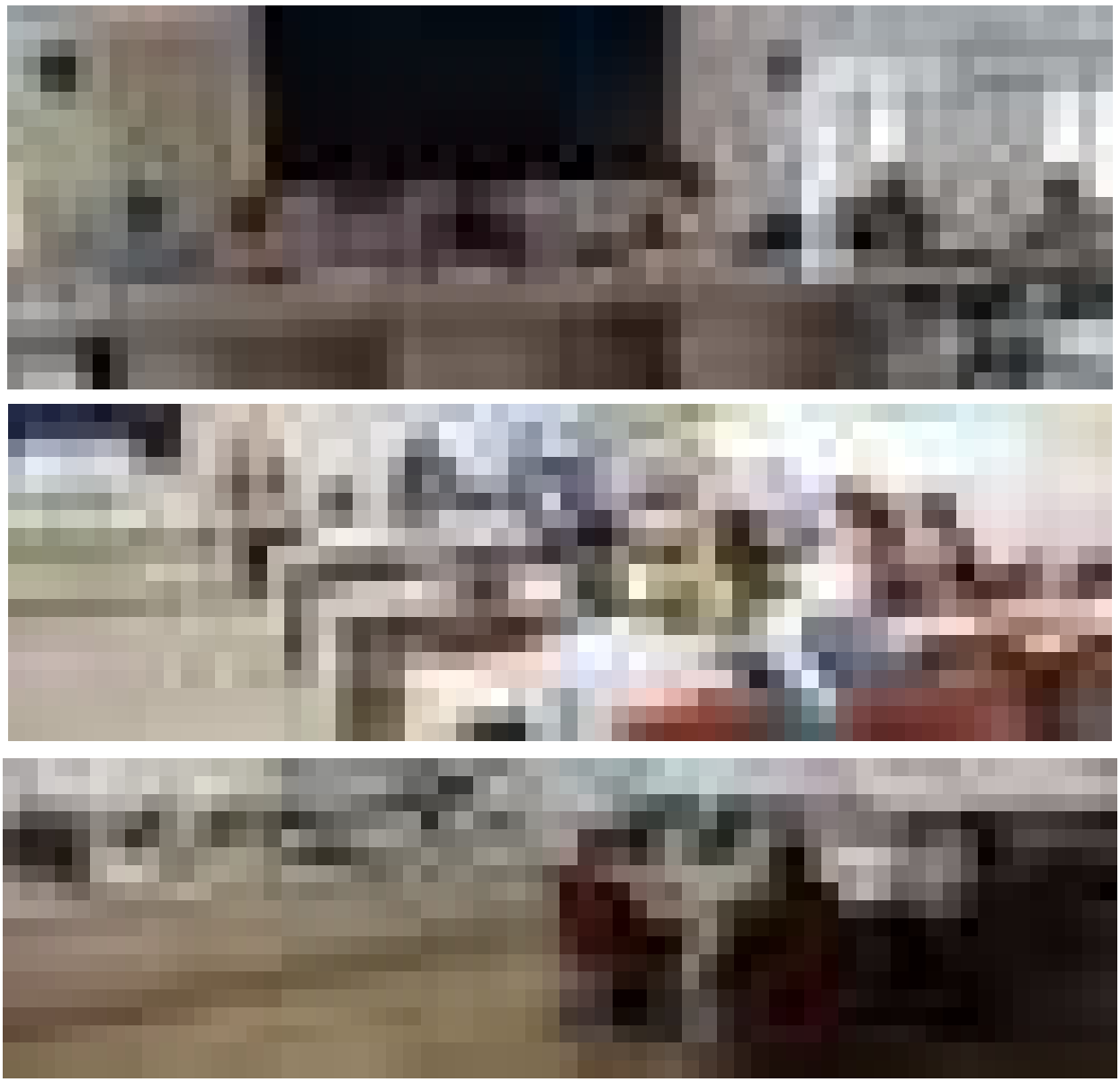
- Medical College Level VRDL functioning at Government Medical College, Malapurram, Kerala played a significant role in containment of the Nipah virus outbreak in July 2024. This was the seventh outbreak in India since 2001 when the first outbreak was reported in Siliguri town, West Bengal. Subsequently, six outbreaks have been reported- Nadia district, West Bengal, Kozhikode and Malappuram, Kerala in 2018, Ernakulum, Kerala in 2019 and Kozhikode, Kerala in 2021 and 2023.
- More than 50 VRDLs have been equipped with Next Generation Sequencing facilities and trained for genomic surveillance of SARS-CoV-2, Influenza, as well as other viral pathogens.
- Regional level VRDL at ICMR-National Institute for Infectious Diseases (ICMR-NIRBI), Kolkata played a significant role in detection of low pathogenic avian influenza (LPAI) H9N2 case in April, 2024.
- Sentinel surveillance for Zika viruses (ZIKV) initiated with 35 VRDLs in 2018 is now expanded in the entire VRDL network. Necessary handholding and trainings have been provided to the whole network for diagnosis of Zika virus infection.
- A pan India Epidemiological, Virological and Genomic Surveillance network on Influenza like Illness (ILI) / Severe Acute Respiratory Illness (SARI) with 73 VRDLs covering 21 States and 5 Union Territories (UTs) has been established for Human Influenza and SARS-CoV-2 viruses.
- 15 sites of respiratory surveillance network are strengthened for pediatric Severe Acute Respiratory Infection (SARI) surveillance with a specific emphasis of RSV infection in children under 5 year age group.
- 17 VRDLs of Kerala and west Bengal states are strengthened for an extended testing of Nipah virus among Severe Acute Respiratory Illness (SARI) category.
- The influenza virus types and subtypes data is also fed into WHO FluNet portal through ICMR-NIV Pune. The surveillance network is monitoring the disease trends of respiratory viruses with special focus to SARS-CoV-2 and Influenza infections, co-infections, and genetic evolution over time within the same catchment area.
- 17 VRDLs have been involved in WHO Global Measles Rubella Laboratory Network (GMRLN) to conduct casebased surveillance for Measles and Rubella. Active surveillance along with strong laboratory network is underway. All the VRDLs are successfully accredited by WHO for quality testing of measles and rubella both serologically and molecular testing.
- Dengue Serotyping has been initiated to know the status of circulating serotype in the country in different geographic locations. A total of 46 VRDLs were mapped and were involved in the molecular serotyping of Dengue. Data related to circulating Serotype in different region of the

country are being monitored.

- A sizeable number of VRDLs have been able to establish robust linkages with State IDSP, NVBDCP and State public health departments, thus increasing outreach of public health programs. Turnaround time reduced from 7 days to 24-48 hours.

5.5 Workshops/Meetings:

- One-day Orientation Workshop on "VRDL Network laboratories" was conducted on date 28th June 2024 at Conference Hall, DHR, New Delhi.
- One-day review meeting of VRDLs established after 2020 was conducted in December, 2024 to expedite the delayed action points.



Orientation meeting of VRDLs inducted during 2021-2024 in June 2024

5.6 Resource Center-National Institute of Epidemiology

➲ The VRDL network are engaged in diagnosis of wide variety of viral pathogen and played a significant role in outbreak detection. The VRDLs are capable to diagnose up to 30-35 different viruses, 20-25 types in State level, and up to 20 at Medical college level VRDL. Besides that, VRDLs were actively involved in testing of new variants of SARS-CoV-2 and other infectious pathogens during the upsurge of respiratory illnesses. The VRDL network is currently diagnosing 15-35 viral etiology under their routine diagnostic spectrum. Testing data are being fed into the Data Mining Centre at ICMR-National Institute of Epidemiology (NIE). Details of tests conducted and outbreaks investigated by VRDL Network and reported to the NIE portal during the year 2024 is given below:

Table 1: Tests conducted and reported to Data Mining Centre by VRDL Network

Parameters	Apr 2014 – March 2024	April 2024- December 2024
Total no. of patients investigated by VRDLs	39,12,120	5,67,431
Total no. of tests run	73,64,396	10,87,885
Total no. of tests positive	8,30,342	96,800
Total cases positives (%)	7,46,866 (35.9)	88,234 (121.09)
Disease Clusters investigated by VRDLs	1,174	94

Table 2: Outbreaks investigated and reported to Data Mining Centre by VRDL Network during January 2024 – March 2024

Pathogen investigated (January 2024 - December 2024)	Number of suspected outbreaks investigated
Varicella Zoaster Virus (VZV)	22
Dengue	4
Mumps virus	45
Influenza A H3N2	1
SARS	1
Influenza A Pandemic H1N1	2
Hepatitis A Virus (HAV)	11
Entero virus	5
Mumps/Entro	1
Hepatitis E virus (HEV)/A/Leptospira	1
Leptospira	1
Respiratory Adeno Virus	1
RSV	1
Chikungunya	2
Chikungunya/Dengue	2
Rota Virus	1
Nipah	1
Salmonella Typhi	1
Total	**103**

5.7 Training / Workshops:

Data Mining Centre (ICMR-National Institute of Epidemiology, Chennai):

- No. of trainings conducted for data entry on NIE portal since April 2014: 20
- No. of persons trained since April 2014: 1425
- No. of trainings conducted in the year 2023 (Jan 2023 to March 2024): 1 (KFD)+4
- No. of persons trained in the 2023-2024 (Jan 2023 to Mar 2024): 660
- No. of VRDLs reporting to Data Mining Centre at National Institute of Epidemiology (NIE) (Jan 2023 to Mar 2024): 145
- No. of new VRDLs have started reporting to Data Mining Centre at National Institute of Epidemiology (NIE) during 2024: 24

Other key achievement by the NIE Data Centre

- New revised portal and full integration with IHIP is completed.

5.8 Resource Centre for VRDL network: ICMR-NIV, Pune

❖ **Training / Workshops:**

A summary of the basic training programs and the specialized training programs conducted by RC-VRDL since 2014 is provided in Table 3 below.

Table 3: Training programs imparted by RC VDL for the VRDL Network during January 2024- December 2024

Parameters	Apr 2014 – December 2024		January 2024 - December 2024	
	Basic Trainings	Specialized Trainings	Basic Training	Specialized Trainings
No. of training conducted	28	56	2	22
No. VRDLs trained	166	205 (including VRDLs trained in more than one specialized training)	20	69
Total No. of Person trained	488	1150 (Including online training)	35	187

5.9 No. of labs supported for kits/reagents, pathogen-wise details during Jan, 2024 to December 2024

Diagnostics test kits/assays	No. of labs supported for kits/reagents
IgM capture ELISA kits for diagnosis of Dengue, Japanese Encephalitis and Chikungunya infections	414 kits provided to 113 VRDLs
Zika Diagnostic PCR Kit	21 VRDLs
Zika Positive Control	33 VRDLs
Chandipura Positive Control	16 VRDLs
Dengue Positive Control	63 VRDLs
Dengue Serotyping kits	46 VRDLs

5.10 External Quality Assurance Programme (EQAP):

Serological Diagnosis (ELISA) of Viruses EQA program:

The External Quality Assessment (EQA) program for ELISA based diagnosis of Dengue, Chikungunya and Japanese Encephalitis was delayed in 2024, due to non-availability of funds until December 2024. The EQA panel preparation and distribution to VRDLs is currently ongoing and results of the EQA program will be available shortly.

RC-VRDL has conducted External Quality Assessment (EQA) program for ELISA based diagnosis for Dengue NS1, Dengue IgM and Dengue IgG detection for the Dengiall Vaccine Clinical Trial laboratories, as a part of the capacity building efforts of DHR. These three EQA panels were shared with 19 Dengiall Clinical Trial laboratories (including 12 VRDLs) The results of this EQA program are summarized below.

Year	Number of VRDLs provided with EQA Panels for (Name of Pathogen)	Number of VRDLs reporting results for at least one parameter	Average concordance
2024	120 (Dengue, Chikungunya and Japanese Encephalitis)	Ongoing program. Results awaited.	Ongoing program. Results awaited.

Molecular EQA:

A molecular EQA program for Dengue serotyping was conducted for the 46 VRDLs participating the Dengue serotype specific surveillance project. 42 VRDLs completed the EQA program and achieved 100% concordance.

RC-VRDL has conducted External Quality Assessment (EQA) program for Realtime RTPCR based detection and serotyping of Dengue viruses, for the Vaccine Clinical Trial laboratories, as a part of the capacity building efforts of DHR. These two EQA panels were shared with 19 Clinical Trial laboratories (including 12 VRDLs) The results of this EQA program are summarized below.

Year	Number of VRDLs provided with EQA Panels for (Name of Pathogen)	Number of VRDLs reporting results for at least one parameter	Average concordance
2024	64 (including VRDLs for Dengue serotype specific surveillance and Dengue vaccine trial) (Dengue serotyping by Realtime RTPCR)	60	1
2024	19 (Dengue RNA detection by Realtime RT-PCR)	19	1

5.11 Testing of Quality control (QC) samples has been a continued activity in the current year:

Samples from 119 VRDLs were received for quality control testing from January 2024 to December 2024. RC-VRDL is also actively reaching out to all VRDLs to improve participation.

Number of VRDLs	List of Parameters	Total Number of samples received	Number of Samples tested
January 2024-December 2024: 119 VRDLs	Dengue IgM	10782	8696
	Japanese Encephalitis IgM		
	Chikungunya IgM		
	Hepatitis A IgM		
	Hepatitis E IgM		
	Hepatitis B surface antigen (HBsAg)		
	HCV IgG		
	Dengue IgG		
	Measles IgM		
	Mumps IgM		
	Rubella IgM		
	CMV IgM		
	VZV IgM		
	West Nile IgM		
	Parvovirus B19 IgM		
	HCV Total antibody		
	Dengue NS1		
	Rubella IgG		
	Rotavirus Antigen		

Other key achievement by the NIV Resource Centre

RC-VRDL, ICMR-NIV Pune, has been actively supporting the VRDL network on various issues related to outbreak investigations, scientific, technical and logistic support; and resolution of network activity related issues. A summary of the support activities, for the period January 2024 to December 2024 is summarized in Table 5 below:

Type of Support	Number of VRDLs supported
Support for laboratory layout, design, workflows and equipment specifications	47
Support for referral sample testing at ICMR-NIV	32
Resolution of Queries regarding diagnostic reagents, SOPs and network specific testing algorithms (excluding routinely supplied reagents through RC-VRDL)	187
Trouble-shooting and root cause analysis support	57

Details of training conducted by Maximum Containment Facility, ICMR-NIV, Pune from January-December 2024

Sr. No	Details of training	Venue/Mode	No. of participants trained	Trained personnel brief details
1	Orientation and Hands-On Training on Point of Care Testing (POCT) for Kyasanur Forest Disease Diagnosis“ for staff of VDL Shivamogga, Karnataka from March 18-20, 2024	VDL Shimoga	10	• VDL Shimoga Microbiologist and Technologist
2	Field validation of KFD PoC assay for VDL, Shimoga and North Goa District laboratory on March 28, 2024	Virtual	15	• VRDL Goa lab microbiologist and technologist. • VDL Shimoga Microbiologist and Technologist
3	Biosafety, Donning doffing and working in MBSL-3 for the scientists and technologists of GMC Manjeri during Nipah virus outbreak July 2024	GMC Manjeri	12	• VRDL GMC Manjeri Scientist, Microbiologist and technologist

Representative Photographs:

Outbreak investigation

Serological diagnosis for viral infections

Outbreak investigation

Molecular diagnostics for viral infections

Troubleshooting in molecular diagnostics

Brainstorming activities on implementing quality management systems in virology laboratories

5.12 Physical Target

12th Plan Period (2012-2017)

Year	Target			Actual Achievement		
	Regional VRDL	State VRDL	Medical College VRDL	Regional VRDL	State VRDL	Medical College VRDL
2013-2014	2	5	10	2	4	6
2014-2015	3	10	40	3	3	13
2015-2016	5	15	40	0	4	10
2016-2017	0	0	30	0	4	16
Total	**10**	**30**	**120**	**5**	**15**	**45**

14th Finance Commission Period (2017-2018 to 2020-2021)

Year	Target			Actual Achievement		
	Regional VRDL	State VRDL	Medical College VRDL	Regional VRDL	State VRDL	Medical College VRDL
2017-2018	5	10	15	2	1	11
2018-2019	0	0	30	2	4	10
2019-2020	0	0	0	1	2	9
2020-2021	0	0	0	0	3	14
Total	**5**	**10**	**45**	**5**	**10**	**44**

15th Finance Commission Period (2021-2022 to 2025-2026)

Year	Target			Actual Achievement till 31st March 2024		
	Regional VRDL	State VRDL	Medical College VRDL	Regional VRDL	State VRDL	Medical College VRDL
2021-22	0	2	12	0	2	12
2022-23	1	-	14	1	-	14
2023-24	0	1	8	0	-	9
2024-25	0	0	10	-	-	2

5.13 The financial achievements from inception of the Scheme are given in the table below:

(Rs. in Crore)

Year	BE	RE	Actual Expenditure
2013-2014	45.00	34.00	34.00
2014-2015	35.00	30.00	30.00
2015-2016	46.00	45.25	45.25
2016-2017	39.25	44.25	44.25
2017-2018	56.00	66.00	66.00
2018-2019	70.00	55.00	52.14
2019-2020	80.00	73.00	69.37
2020-2021	83.00	83.00	81.89
2021-2022	82.00	79.20	75.79
2022-2023	82.00	70.00	69.98
2023-2024	60.00	60.00	60.00
2024-2025	60.00	60.00	45.57
			(as on 31.12.2024)

5.14 Components of the Scheme and Funding Norms:

(I) **Regional Labs:** The non-recurring cost of a Regional Level Lab is Rs.14.575 crore for development of infrastructure, which include civil works/ furnishing & furniture (Rs.9.425 crore) and equipment (Rs.5.15crore). There recurring cost of Regional Lab per annum is Rs0.968 crore, towards staffing (Rs.61.8lakh), consumables, contingencies and training (Rs.35lakh).

(ii) **State Level Labs:** The non-recurring cost of a State Level Lab is Rs.2.971 crore for development of infrastructure which include civil works mainly for renovation/modification of the building (Rs.62.50 lakh) and for equipment (Rs.2.346 crore). The recurring cost of a State Level Lab per annum isRs.68.00 lakh which will be extended for a period of five years for engaging trained technical manpower on contractual basis (Rs.43.00 lakh per annum) and for consumables, contingencies and training (Rs.25.00 lakh).

(iii) **Medical College Labs:** Then on-recurring cost of a Medical College Level Lab is Rs.1.507 crore comprising of Rs.88.20 lakh for equipment and Rs.62.50 Lakh for civil works/renovation of building. The recurring cost of a Medical College Level Lab per annum is Rs.46.40 lakh, towards staffing (Rs.31.4 lakh) and consumables, contingencies and training (Rs.15 lakh).

5.15 Role of VRDL Network in COVID-19

A decade ago, when India witnessed one of the worst flu pandemic, swine flu in 2009, the public health system was paralyzed due to severe dearth of infrastructure for molecular diagnosis of viral infections and the public health professionals helplessly watched the pandemic quickly escalating to all parts of the country. Though the country was equipped to carry out serology- based ELISA or rapid blood tests, but the virus was challenging and could not be detected in blood. Similar challenge is posed by several other respiratory viruses, MERS-CoV, SARS-CoV and SARS- CoV-2 causing COVID19 which pose a threat to us time and again. A total of 162 COVID-19 rapid antigen test kits and 17 COVID-19 home/self-test kits have been validated so far.

- As on December 2024, all 163 VRDLs have been established and all are functional and involved in COVID-19 testing. Results are being reported to COVID-19 testing Portal.
- More than 75 million samples have been tested for COVID-19 till the month of December 2024.

5.16 List of Regional Labs:-

(i) The Post graduate Institute of Medical Education and Research, Chandigarh
(ii) ICMR-Regional Medical Research Centre, Dibrugarh
(iii) ICMR- National Institute of Cholera and Enteric Diseases (NIRBI), Kolkata
(iv) All India Institute of Medical Sciences, New Delhi
(v) Government Medical College, Kozhikode
(vi) All India Institute of Medical Sciences, Bhopal
(vii) ICMR-Regional Medical Research Centre, Bhubaneswar
(viii) Jawaharlal Institute of Post graduate Medical Education and Research, Puducherry
(ix) All India Institute of Medical Sciences, Jodhpur
(x) All India Institute of Medical Sciences(AIIMS),Patna
(xi) All India Institute of Medical Sciences(AIIMS), Bilaspur

5.17 State wise list of VRDLs

State	Level ofVRDL	S.No	NameofVRDL	Funded in
Andaman & Nicobar Island	State Level	1	Regional Medical Research Centre (RMRC), Port blair	2018-2019
	Medical College Level	2	Andaman and Nicobar Islands Institute of Medical Sciences, Port Blair	2020-2021
Andhra Pradesh	State Level	3	Guntur Medical College, Guntur	2018-2019
	State Level	4	Sri Venkateswara Institute of Medical Sciences, Tirupati, Andhra Pradesh	2014-2015
	Medical College Level	5	Andhra Medical College, Visakhapatnam	2019-2020
	Medical College Level	6	Government Medical College (GMC), Anantpur	2015-2016
	Medical College Level	7	Rajiv Gandhi Institute of Medical Science (RIMS), Kadappa	2015-2016
	Medical College Level	8	Rangaraya Medical College, Kakinada, Andhra Pradesh	2017-2018
	Medical College Level	9	Siddhartha Medical College, Gunadala, Vijayawada, Andhra Pradesh	2014-2015
	Medical College Level	10	All India Institute of Medical and Sciences, Mangalagiri, Andhra Pradesh	2021-2022
	Medical College Level	11	Kurnool Medical College, Kurnool	2022-2023
Arunchal Pradesh	Medical College Level	12	Tomo Riba Institute Health and Medical Sciences (TRIHMS), Naharlagun	2022-2023
Assam	Regional Level	13	Regional Medical Research Centre, Dibrugarh	2013-2014
	State Level	14	Gauhati Medical College, Gauhati, Assam	2014-2015
	Medical College Level	15	Fakhruddin Ali Ahmed Medical College, Barpeta, Assam	2017-2018
	Medical College Level	16	Jorhat Medical college, Jorhat	2015-2016
	Medical College Level	17	Silchar Medical College, Silchar, Assam	2017-2018
	Medical College Level	18	Tezpur Medical College, Tezpur	2015-2016
	Medical College Level	19	Diphu Medical College & Hospital, Diphu, Assam	2022-2023
	Medical College Level	20	All India Institute of Medical Sciences (AIIMS), Guwahati, Assam	2022-2023
	Medical College Level	21	Lakhimpur Medical College & Hospital, Assam	2023-2024
Bihar	Regional Level	22	All India Institute of Medical Sciences (AIIMS), Patna	2019-2020
	Medical College Level	23	Darbhanga Medical College, Darbhanga	2017-2018
	Medical College Level	24	Patna Medical College, Patna	2013-2014

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State	Level ofVRDL	S.No	NameofVRDL	Funded in
Bihar	Medical College Level	25	Rajendra Memorial Research Institute of Medical Sciences (RMRIMS), Patna	2019-2020
	Medical College Level	26	S.K. Medical College, Muzaffarpur	2017-2018
	Medical College Level	27	Jawahar Lal Nehru Medical College & Hospital, Bhagalpur	2020-2021
Chandigarh	Regional Level	28	Post Graduate Institute of Medical Education & Research, Chandigarh	2013-2014
	Medical College Level	29	Government Medical College & Hospital, Chandigarh	2017-2018
Chhattisgarh	State Level	30	All India Institute of Medical Sciences (AIIMS), Raipur	2017-2018
	Medical College Level	31	Late Baliram Kashyap (LSBK) Memorial Govt. Medical College, Jagdalpur, Chattisgarh	2014-2015
	Medical College Level	32	Pt. JNM Medical College, Raipur, Chhattisgarh	2022-2023
	Medical College Level	33	Chhattisgarh Institute of Medical Sciences, Bilaspur, Chhattisgarh	2022-2023
	Medical College Level	34	Government Medical College, Kanker, Chhattisgarh	2022-2023
	Medical College Level	35	Chandulal Chandrakar Memorial Government Medical College, Durg, Chhattisgarh	2023-2024
Delhi	Regional Level	36	All India Institute of Medical Sciences (AIIMS), Delhi	2018-2019
	Medical College Level	37	Lady hardinge Medical College, Delhi	2018-2019
	State Level	38	Maulana Azad Medical college Delhi-	2020-2021
	Medical College Level	39	Guru Teg Bahadur Hospital, Delhi	2020-2021
	Medical College Level	40	Dr. Ram Manohar Lohia Hospital and Atal Bihari Vajpayee Institute of Medical Sciences	2020-2021
	Medical College Level	41	Army Hospital Research and Referral Dhaula Kuan, New Delhi	2022-2023
	Medical College Level	42	Vallabhbhai Patel Chest Institute (VPCI), University of Delhi	2023-2024
Goa	Medical College Level	43	Goa Medical College, Goa	2020-2021
Gujarat	State Level	44	B.J. Medical College, Ahmedabad	2013-2014
	Medical College Level	45	Government Medical College, Surat	2018-2019
	Medical College Level	46	Government Medical College, Vadodara	2018-2019
	Medical College Level	47	Government Medical College, Bhavnagar, Gujarat	2019-2020
	Medical College Level	48	Shri M.P. Shah Govt. Medical College, Jamnagar	2013-2014
Gujarat	Medical College Level	49	Pandit Dindayal Upadhyay Government Medical College, Rajkot, Gujarat	2019-2020
	Medical College Level	50	All India Institute of Medical Sciences (AIIMS), Rajkot, Gujarat	2022-2023

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State	Level ofVRDL	S.No	NameofVRDL	Funded in
Haryana	Medical College Level	51	Bhagat Phool Singh (BPS) Medical college for Women, Sonipat	2015-2016
	Medical College Level	52	Pt. BD Sharma Post Graduate Institute of Medical Education & Research, Rohtak	2013-2014
	Medical College Level	53	Kalpana Chawla Government Medical College, Karnal, Haryana	2022-2023
Himachal Pradesh	State Level	54	Indira Gandhi Medical College, Shimla	2013-2014
	Medical College Level	55	Dr. Rajendra Prasad Government Medical College, Tanda, Himachal Pradesh	2014-2015
	Medical College Level	56	Lal Bahadur Shastri Medical College, Mandi	2020-2021
	Medical College Level	57	Pt. Jawaharlal Nehru Govt. medical College, Chamba, Himachal Pradesh	2021-2022
	Regional Level	58	All India Institute of Medical Sciences, Bilaspur	2022-2023
Jammu & Kashmir	State Level	59	Sher-e-Kashmir Institute of Medical Sciences, Srinagar	2013-2014
	Medical College Level	60	Govt Medical College, Srinagar, Jammu & Kashmir	2016-2017
	Medical College Level	61	Govt. Medical College, Jammu	2013-2014
	Medical College Level	62	Government Medical College, Baramulla	2021-2022
	Medical College Level	63	Government Medical College, Anantnag	2022-2023
Jharkhand	Medical College Level	64	MGM Medical College, Jamshedpur	2016-2017
	Medical College Level	65	Rajendra Institute of Medical Sciences (RIMS), Ranchi	2016-2017
	State Level	66	All India Institute of Medical Sciences, Deogarh, Jharkhand	2021-2022
Karnataka	State Level	67	Bangalore Medical College & Research Institute, Bangalore, Karnataka	2014-2015
	Medical College Level	68	Government Medical College, Mysore, Karnataka	2014-2015
	Medical College Level	69	Gulbarga Institute of Medical Sciences, Gulbarga, Karnataka	2016-2017
	Medical College Level	70	Hassan Institute Of Medical Sciences (HIMS), Hassan	2015-2016
	Medical College Level	71	Karnataka Institute of Medical Science Hubballi	2020-2021
	Medical College Level	72	Shimoga Institute of Medical Sciences, Shimoga, Karnataka	2016-2017
	Medical College Level	73	Vijayanagar Institute of Medical Sciences (VIMS), Bellary	2016-2017
Karnataka	Medical College Level	74	National Institute of Traditional Medicine Belagavi, Karnataka	2023-2024
	Medical College Level	75	National Institute of Mental Health & Neurosciences (NIMHANS), Bangalore	2023-2024
	Medical College Level	76	Kodagu Institute of Medical Sciences, Madikeri, Karnataka	2023-2024

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State	Level ofVRDL	S.No	NameofVRDL	Funded in
Kerala	Regional Level	77	Government Medical College (GMC), Kozhikode	2018-2019
	State Level	78	National Institute of Virology (NIV) Field Unit, Kerala	2018-2019
	Medical College Level	79	Government Medical College, Thrissur	2016-2017
	Medical College Level	80	Government Medical College, Trivandrum, Kerala	2014-2015
	Medical College Level	81	Government Medical College, Kannur, Pariyaram	2021-2022
	Medical College Level	82	Government Medical College Manjeri, Malapuram, Kerala	2023-2024
	Medical College Level	83	Government Medical College, Ernakulam, Kerala	2023-2024
Madhya Pradesh	Regional Level	84	All India Institute of Medical Sciences, Bhopal, Madhya Pradesh	2014-2015
	State Level	85	National Institute of Research In Tribal Health (NIRTH), Jabalpur	2018-2019
	Medical College Level	86	Bundelkhand Medical College, Sagar, Madhya Pradesh	2018-2019
	Medical College Level	87	Gajra Raja Medical College, Gwalior, Madhya Pradesh	2016-2017
	Medical College Level	88	MGM Medical College, Indore, Madhya Pradesh	2016-2017
	Medical College Level	89	Shyam Shah Medical College, Rewa, Madhya Pradesh	2017-2018
Maharashtra	State Level	90	Govt Medical College (GMC), Nagpur	2019-2020
	Medical College Level	91	Dr Vaishampayan Memorial (VM) Government Medical College, Solapur, Maharashtra	2019-2020
	Medical College Level	92	G.S Seth Medical college and KEM Hospital, Mumbai	2018-2019
	Medical College Level	93	Government Medical College (GMC), Aurangabad	2019-2020
	Medical College Level	94	Government Medical College, Akola	2019-2020
	Medical College Level	95	Government Medical College, Miraj, Sangli	2017-2018
Maharashtra	Medical College Level	96	Indira Gandhi Medical College, Nagpur, Maharashtra	2014-2015
	Medical College Level	97	Kasturba Hospital for Infectious Disease, Mumbai, Maharashtra	2018-2019
	Medical College Level	98	Shri Bhausaheb Hire Government Medical College & Hospital, Dhule	2019-2020
	Medical College Level	99	AIIMS, Nagpur	2020-2021
	State Level	100	Armed Forces Medical College (AFMC), Pune	2021-2022
Manipur	State Level	101	Regional Institute of Medical Sciences (RIMS), Imphal	2016-2017
	Medical College Level	102	Jawaharlal Nehru Institute of Medical Sciences (JNIMS), Imphal, Manipur	2014-2015

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State	Level ofVRDL	S.No	NameofVRDL	Funded in
Meghalaya	State Level	103	North-Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong	2013-2014
Mizoram	Medical College Level	104	Zoram Medical College, Mizoram	2020-2021
Odisha	Regional Level	105	Regional Medical Research Center (RMRC), Bhubaneswar	2017-2018
	State Level	106	Srirama Chandra Bhanja (SCB) Medical College, Cuttack	2015-2016
	State Level	107	AIIMS, Bhubaneswar	2020-2021
	Medical College Level	108	Saheed Laxman Nayak Medical College & Hospital, Koraput, Odisha (SLNMCH)	2020-2021
	Medical College Level	109	Veer Surendra Sai Institute of Medical Sciences and Research, Burla, Sambalpur, Odisha	2020-2021
	Medical College Level	110	Maharaja Krishna Chandra Gajapati Medical College and Hospital, Brahmapur.	2021-2022
Puducherry	Regional Level	111	Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry	2014-2015
	Medical College Level	112	Indira Gandhi Medical College & Research Institute, Puducherry	2016-2017
Punjab	Medical College Level	113	Govt. Medical College, Amritsar	2013-2014
	Medical College Level	114	Govt. Medical College, Patiala, Punjab	2014-2015
	Medical College Level	115	Guru Gobind Singh Medical College, Faridkot	2020-2021
	Medical College Level	116	AIIMS, Bathinda	2022-2023
Rajasthan	Regional Level	117	All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan	2017-2018
	State Level	118	Sawai Man Singh (SMS) Medical College, Jaipur	2015-2016
	Medical College Level	119	Jhalawar medical college, Jhalawar	2016-2017
	Medical College Level	120	Ravindra Nath Tagore (RNT) Medical College, Udaipur	2016-2017
	Medical College Level	121	S N Medical College, Jodhpur Rajasthan	2014-2015
	Medical College Level	122	Sardar Patel Medical College (SPMC) Bikaner	2016-2017
	Medical College Level	123	Govt. Medical College Kota	2021-2022
	Medical College Level	124	Military Hospital Jodhpur, Rajasthan	2022-2023

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State	Level ofVRDL	S.No	NameofVRDL	Funded in
Tamil Nadu	State Level	125	Coimbatore Medical College, Coimbatore	2016-2017
	State Level	126	The King Institute of Preventive Medicine and Research (KIPM&R), Chennai	2016-2017
	Medical College Level	127	Government Medical College, Theni, Tamil Nadu	2014-2015
	Medical College Level	128	Government Medical College, Thiruvarur, Tamil Nadu	2018-2019
	Medical College Level	129	Government Medical College, Villupuram, Tamil Nadu	2018-2019
	Medical College Level	130	Government Mohan Kumaramangalam Medical College, Salem	2016-2017
	Medical College Level	131	Madras Medical College, Chennai	2016-2017
	Medical College Level	132	Madurai Medical College, Madurai, Tamil Nadu	2014-2015
	Medical College Level	133	Tirunelveli Medical College, Tirunelveli	2016-2017
	Medical College Level	134	ICMR-National Institute for Research in Tuberculosis, Chennai	2021-2022
Telangana	State Level	135	Gandhi Medical College, Telangana	2015-2016
	Medical College Level	136	Kakatiya Medical College, Warangal, Telangana	2017-2018
	Medical College Level	137	Osmania Medical College, Hyderabad	2013-2014
	Medical College Level	138	All India Institute of Medical Sciences (AIIMS), Bibinagar	2021-2022
Tripura	Medical College Level	139	Government Medical College, Agartala	2014-2015
Uttar Pradesh	State Level	140	Banaras Hindu University (BHU), Varanasi	2016-2017
	State Level	141	King George's Medical University (KGMU), Lucknow	2015-2016
	Medical College Level	142	Jawaharlal Nehru Medical College (JNMC), Aligarh	2015-2016
	Medical College Level	143	Uttar Pradesh Rural Institute of Medical Sciences & Research, Saifai, Etawah, UP	2015-2016
	State Level	144	ICMR-Regional Medical Research Centre, Gorakhpur	2020-2021
	Medical College Level	145	All India Institute of Medical Science Raebareli, Uttar Pradesh	2021-2022
	Medical College Level	146	Government Institute of Medical Sciences, Greater Noida, Uttar Pradesh	2021-2022
	Medical College Level	147	LLRM Medical College, Meerut, Uttar Pradesh	2022-2023
	Medical College Level	148	Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Uttar Pradesh	2023-2024
Uttarakhand	State Level	149	All India Institute of Medical Sciences (AIIMS) Rishikesh	2019-2020
	Medical College Level	150	Doon Medical College, Dehradoon	2019-2020
	Medical College Level	151	Govt. Medical College, Haldwani, Uttarakhand	2015-2016

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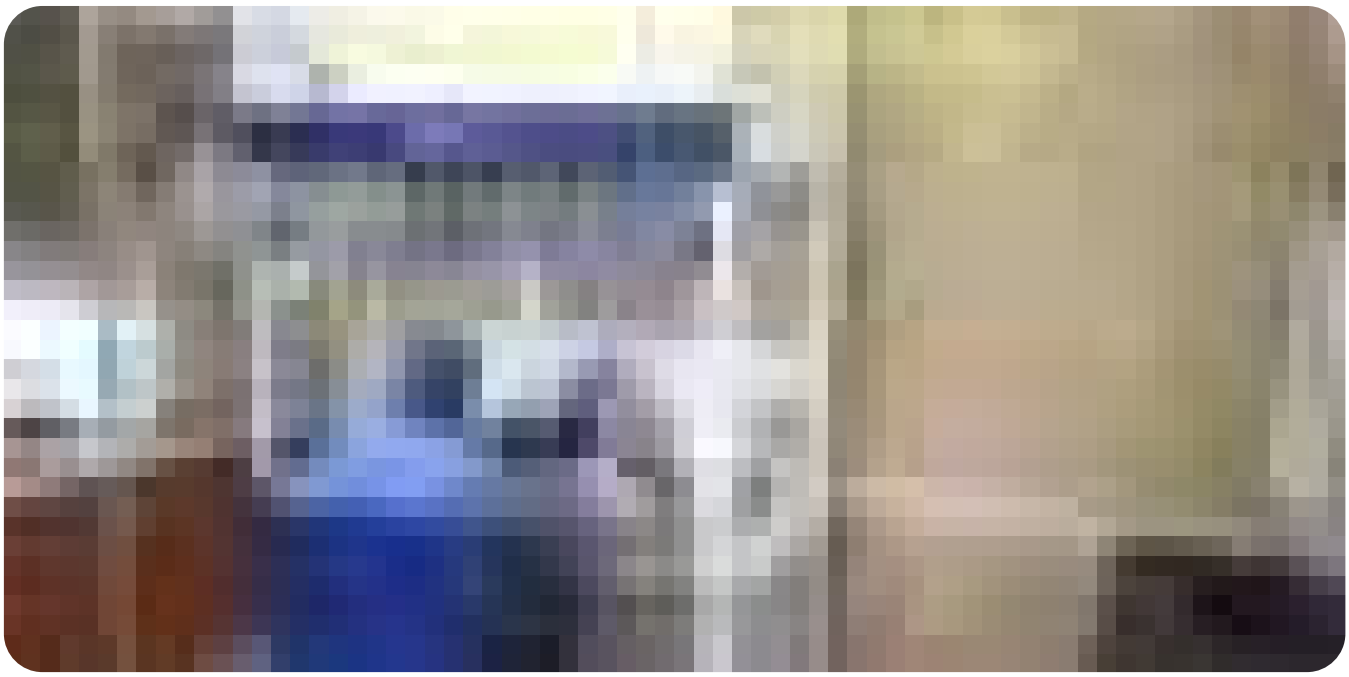
State	Level ofVRDL	S.No	NameofVRDL	Funded in
West Bengal	Regional Level	152	ICMR Virus Unit, National Institute of Cholera & Enteric Diseases, Kolkata	2014-2015
	Medical College Level	153	Burdwan Medical College, Burdwan	2020-2021
	Medical College Level	154	Institute of Post Graduate Medical Education & Research (IPGMER), Kolkata	2015-2016
	Medical College Level	155	Malda Medical College, Malda	2018-2019
	Medical College Level	156	Midnapore Medical College, Midnapore, West Bengal	2016-2017
	Medical College Level	157	Murshidabad Medical College, Murshidabad	2016-2017
	Medical College Level	158	North Bengal Medical College, Darjeeling	2016-2017
	Medical College Level	159	RG Kar Medical College, Kolkata	2018-2019
	Medical College Level	160	Diamond Harbour Govt. Medical College & Hospital, Diamond Harbour, West Bengal	2021-2022
	Medical College Level	161	All India Institute of Medical Sciences (AIIMS), Kalyani, West Bengal	2021-2022
	Medical College Level	162	Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST), Thiruvananthapuram, Kerala	2024-25
	Medical College Level	163	Nagaon Medical College & Hospital, Nagaon, Assam	2024-2025

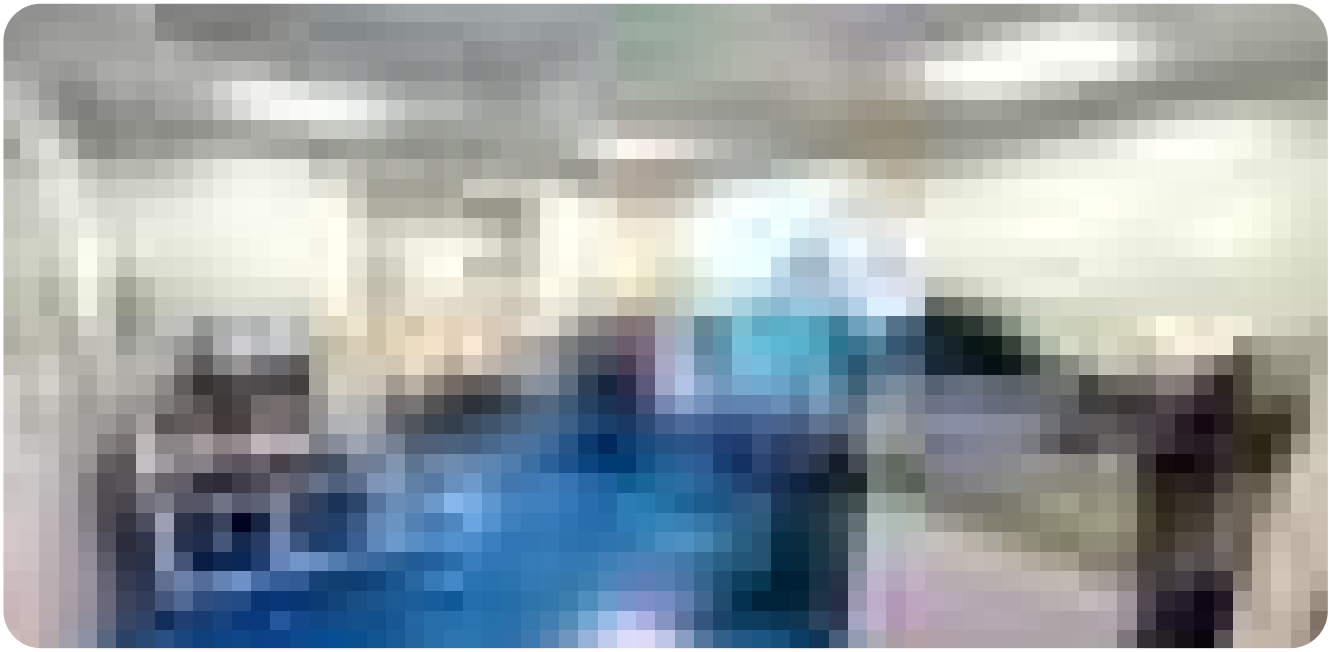
5.18 Geographical spread of VRDL Network

5.19 Glimpses of few VRDLs

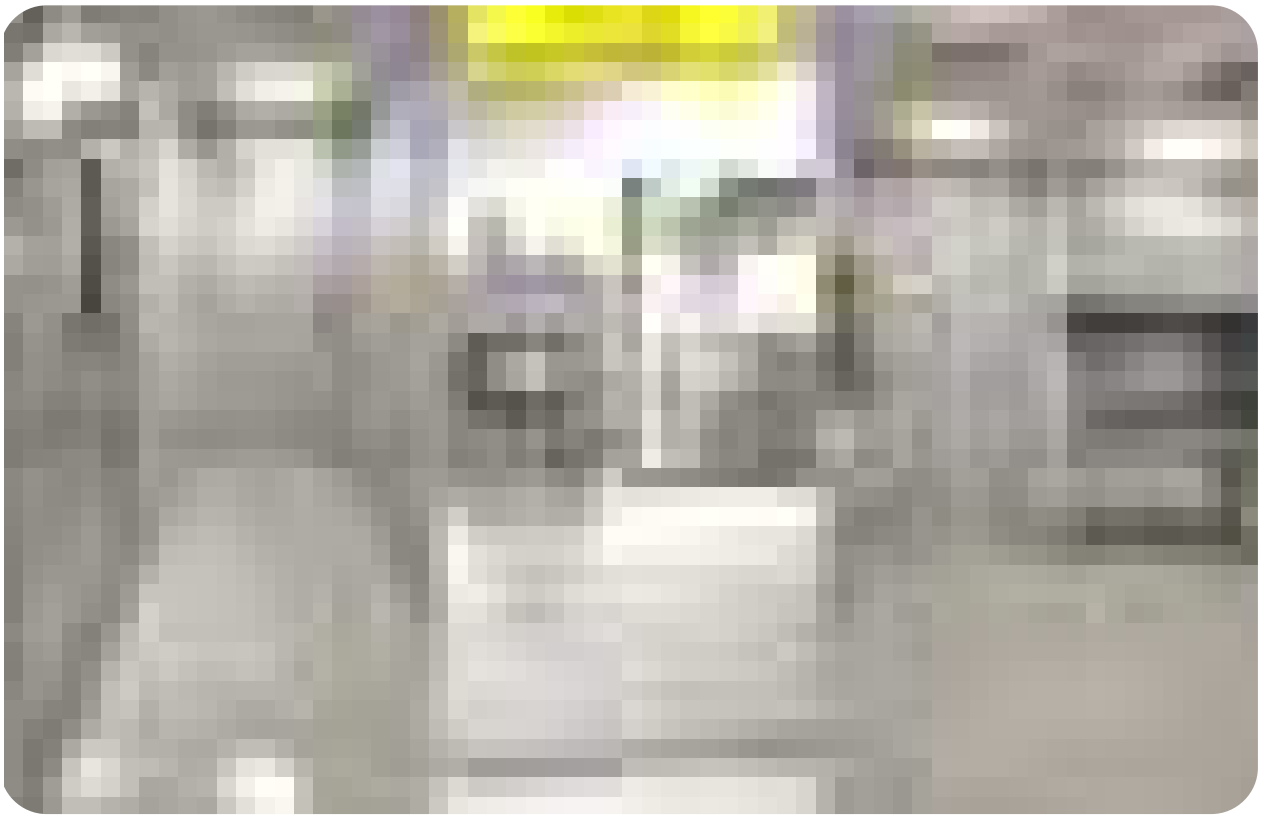


Glimpses of few VRDLs

Glimpses of few VRDLs



Glimpses of few VRDLs



Chapter 6

Establishment of Multi Disciplinary Research Units (MRUs) in Government Medical Colleges/ Research Institutes

6.1 Health research is predominantly carried out in the hospitals and research institutes. Medical colleges are the backbone of both medical education and providing health care services to patients. They are also expected to set the trends in the thinking process and innovations to improve the understanding of the diseases and their management. However, over the years it has been noticed that the majority of medical colleges cum hospitals have confined themselves to patient care and teaching based on conventional methods. Presently, quality medical research is largely confined to a small number of institutes and medical colleges in the country which may be attributable to lack of appropriate infrastructural facilities, motivation for conducting research and ever increasing patient care load.

6.2 Therefore, with a view to promote and encourage medical research in the country and provide assistance for appropriate research facilities, Government introduced a central sector umbrella scheme for Development of Infrastructure for promotion of Health Research in the year 2013-14 i.e. during the 12th Five Year Plan (2012-13 to 2016-17). The umbrella scheme has 02 sub-schemes namely **(i) establishing Multi Disciplinary Research Units (MRUs) in Government Medical Colleges and Research Institutes;** and (ii) establishing Model Rural Health Research Units (MRHRUs) in rural areas under the mentorship of ICMR institutes.

6.3 The scheme was extended from 2017-18 to 2019-20 to be co-terminus with the 14th Finance Commission Period. Subsequently, Department of Expenditure vide its Notification No.42(02)/PF-II/2014 dated 10.01.2020 approved an interim extension to all ongoing scheme still 31.03.2021 or till the date of recommendations of 15th Finance Commission came into effect, whichever was earlier.

6.4 The Standing Finance Committee chaired by Secretary (DHR) in its meeting on 15.03.2021 appraised the scheme and subsequently, the competent authority approved it for continuation during the period of 15th Finance Commission (2021-22 to 2025-26) with the financial outlay of Rs. 288.11 crore for MRUs.

Objectives of the Scheme

6.5 The scheme provides infrastructural support, in terms of civil works, equipment and recurring expenditure, to carry out bio-medical research in consonance with national health research priorities outlined in National Health Policy of the country. The main objectives of the scheme are:

- Encouraging and strengthening research environment in medical colleges and research institutes.

- Bridging infrastructural gap inhibiting health research in the medical colleges and research institutes.
- Capacity building and human resource development in the field of health research.
- Undertaking clinical trials.
- Undertaking multicentric and multidisciplinary research projects.
- Ensuring geographical spread of health research infrastructure in medical colleges and research institutes across the country.
- Improving overall health status of the population by creating evidence-based application of diagnostic procedures/drugs/devices.

6.6 Approval Mechanism

- Proposals for setting up MRUs are submitted by the Heads of government medical colleges/ research institutes to the Department of Health Research as per the format prescribed in the scheme guidelines.
- These are considered by the Technical Evaluation Committee (TEC) of Experts and its recommendations are forwarded to the Approval Committee.

Composition of TEC:

I. Prof. Sushma Bhatnagar,
Chief, Institute Rotary Cancer Hospital & Head
National Cancer Institute (NCI), Jhajjar, Haryana

II. Prof. Sandeep Bansal,
Consultant Professor & Ex-Head, Department of Cardiology
Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi

III. Prof. Achal Kumar Srivastava,
Professor (Clinical Neurophysiology), Department of Neurology
All India Institute of Medical Sciences, New Delhi

IV. Prof. Piyush Gupta (Retd.),
Ex. Principal (Pediatrician)
University College of Medical Sciences, New Delhi

V. Prof. Rajesh Sagar,
Professor, Department of Psychiatry
All India Institute of Medical Sciences, New Delhi

VI. Prof. Mongjam Meghachandra Singh,
Director-Professor & Head, Deptt. of Community Medicine
Maulana Azad Medical College, New Delhi

Composition of Approval Committee

1. Secretary, Department of Health Research……...…… Chairman
2. AS & FA (Health) or his nominee…….....….Member

3. Joint Secretary, Department of Health Research…….....……Member

4. Head, HRD, Indian Council of Medical Research…….....……..Member

Funding Norms

6.7 The approved MRUs are eligible for one-time **non-recurring grant-in-aid** for (i) civil construction, and (ii) purchase of equipments, and **recurring grant** for (i) salaries, (ii) contingencies/ consumables /training etc. as per the following norms:

(Rs in crore)

Non-Recurring		Recurring (per annum)	
Civil Construction	0.25	Salaries	0.28
Equipment	*2.00 (to be released in two installments of Rs.1 crore each)	Contingencies/ Consumables/ Training, etc.	0.20

* *Proposals for grants in excess of Rs.2.00 crore for purchase of equipment recommended by the medical college/LRAC may be considered by the Department with the approval of the Secretary (DHR) on case to case basis taking into account the merits of the proposal.*

Operational Mechanism

6.8 The concerned States and medical colleges devise suitable internal mechanism for speedy execution of the civil works, procurement & installation of equipment, selection & posting of requisite core staff with the active involvement of the State Health/ Medical Education Department. This involves:

- Signing of tripartite Memorandum of Agreement between the Department of Health Research, State Health /Medical Education Department and the Medical College/Research Institute.
- Finalisation of layouts/ maps for establishing the MRU.
- Tendering and hiring the agencies for construction/ renovation of space provided for the setting up of MRU.
- Tendering and procuring equipment and ensuring their maintenance.
- Engaging contractual staff for MRU.

6.9 Staff Structure

(i) PMIU in DHR

A Programme Management & Implementation Unit (PMIU) consisting of regular government/contractual staff in Department of Health Research looks after the MRU related activities like policy formulation, monitoring, budgetary control etc.

Composition of PMIU in DHR is as under:

S.No.	Designation	No. of posts
1	Project Manager	01
2	Finance Manager/Consultant Finance & Accounts	01
3	Scientist C	02
4	Data Entry Operator	02
5	Multi Tasking Staff	01

Note: PMIU is common for both MRU and MRHRU schemes.

(ii) Staff in MRUs

S. No.	Designation	No. of Posts
1	Research Scientist-II (Scientist 'C')	01
2	Research Scientist- I (Scientist 'B')	01
3	Lab Technician	02
4	Lab Assistant/ DEO (Grade 'A')	01

Monitoring Mechanism

6.10 Progress of research work of MRUs is closely and regularly monitored by holding review meetings, visits by DHR officials and performance conclave.

6.11 During 2024-25, a total of 18 Review meetings and 32 Monitoring visits were held to review the performance of MRUs in terms of research projects undertaken, research projects completed, research papers published, patents filed, new technologies developed/transferred etc. Suggestions for improving performance were also shared with the units whose performance was not found satisfactory in terms of the above parameters.

6.12 The National Institution for Transforming India (NITI) Aayog and the Prime Minister's office have also developed Output Outcome Monitoring Framework (OOMF) and Dashboard for Analytical Review of Projects Across Nation (DARPAN) portals respectively for uploading data of Govt. schemes on quarterly and annual basis. The requisite data in respect of MRU scheme is regularly fed on these portals. The major Output & Outcome performance indicators of OOMF portals are:

	Output	Outcome
1	Number of Research Projects approved by Local Research Advisory Committee in MRUs	Number of Research Studies completed at MRUs
2	Number of Research Projects that obtained required funding.	Number of Research Publications from MRUs
3	Number of Research Projects initiated	Number of new Technologies/ Guidelines/ Process/ Patents developed as a result of Research by MRUs

6.13 The performance indicators of the DARPAN portal are as under:

1	Number of Publication
2	Number of MRUs approved
3	Number of Research Projects
4	Funds Released

Research Awards

6.14 After performance evaluation of all MRUs, following 03 MRUs were awarded as Best MRUs by Smt. Anupriya Patel, Hon'ble Minister of State for Health & Family Welfare and Chemicals and Fertilizers, Government of India during DHR-ICMR Health Research Excellence Summit 2024:

- ❖ Assam Medical College and Hospital, Dibrugarh.
- ❖ King George Medical University, Lucknow, Uttar Pradesh.
- ❖ Dr. A.L.M. Post Graduate Institute of Basic Medical Sciences, Taramani, Tamil Nadu.

Assam Medical College and Hospital, Dibrugarh

King George Medical University, Lucknow, Uttar Pradesh

Dr.A.L.M. Post Graduate Institute of Basic Medical Sciences, Taramani

Local Research Advisory Committee (LRAC)

6.15 For operating the MRU in medical colleges/research institutes, a Local Research Advisory Committee (LRAC) is constituted which considers and approves research proposals received from different departments of the colleges/research institutes. LRAC also monitors progress of research proposals in the college. The head of the medical college/ research institute designates one of the members of the faculty, preferably of the level of professor as Nodal Officer for overseeing the functioning of MRU. LRAC works as recommendatory body for all proposals of the medical college to be pursued through its MRU.

Composition of LRAC is as under

1	Chairperson	External Expert, preferably Professor level from reputed Research Institution/University
2	Co-Chairperson	
3	Three Clinicians/ Academicians	One External and Two Internal with expertise in Non- Communicable Diseases – one Expert specializing in the disease identified in Research Project.
4	One nominee of State Health/ Medical Education Deptt	
5	One nominee from ICMR HQ or nearest ICMR Institute.	
6	Member Secretary	Nodal Officer, MRU

Executive Committee (EC)

6.16 In 2024-25, DHR notified all MRUs to constitute an Executive Committee (EC) for establishing mechanism of receiving proposals from faculty of Medical College and to encourage wide participation of different departments in proposals submission to MRUs. Executive Committee reviews proposals for presentation to LRAC for finalization/ selection or otherwise and also oversees the distribution of contingency funds for activities of MRU and supports LRAC approved projects.

Composition of EC is as under:

1	Chairperson	Director/Principal/ Dean (Research) of the Medical College/ Institute
2	Three Faculty Members	Three- one each from preclinical, para-clinical & one from clinical departments (preferably one either from medical or surgical departments)
3	Nodal Officer of MRU	Faculty nominated by head of Medical College/ Research Institution

INDIA
117 Approved MRUs

Physical Achievements

6.17 Since the inception of the scheme in 2013-14, following 117 MRUs have been sanctioned till 31.12.2024.

S. No	State	Names of Medical Colleges approved for establishment of MRUs
1.	Andhra Pradesh (4)	Siddhartha Medical College, Vijaywada
2.		Rangaraya Medical College, Kakinda
3.		Andhra Medical College, Visakhapatnam
4.		S.V. Medical College, Tirupati
5.	Arunachal Pradesh (1)	Tomo Riba Institute of Health & Medical Sciences
6.	Assam (7)	Silchar Medical College and Hospital, Silchar
7.		Jorhat Medical College, Jorhat
8.		Fakhruddin Ali Ahmed Medical College, Barpeta
9.		Assam Medical College and Hospital, Dibrugarh
10.		Gauhati Medical College, & Hospital, Guwahati
11.		Diphu Medical College & Hospital, Diphu
12.		Tezpur Medical College & Hospital
13.	Bihar (1)	Indira Gandhi Institute of Medical Sciences, Patna
14.	Chandigarh (1)	Government Medical College, Chandigarh
15.	Chhattisgarh (1)	Pt. JNM Medical College, Raipur
16.	Delhi (NCT) (4)	University College of Medical Sciences
17.		Vallabh Bhai Patel Chest Institute
18.		Maulana Azad Medical College
19.		Vardhman Mahavir Medical College & Safdarjung Hospital
20.	Goa (1)	Goa Medical College, Panji
21.	Gujarat (2)	M.P.Shah Medical College, Jamnagar
22.		Surat Municipal Institute of Medical Education and Research, Surat
23.	Haryana (3)	Pt. BD Sharma Post Graduate Institute of Medical Sciences, Rohtak
24.		Kalpana Chawla Govt. Medical College, Karnal
25.		ESIC Medical College & Hospital, Faridabad
26.	Himachal Pradesh (3)	Indira Gandhi Medical College& Hospital, Shimla
27.		Dr. R.P. Govt. Medical College, Kangra at Tanda
28.		Dr. Radha Krishnan Govt. Medical College, Hamirpur
29.	Jammu & Kashmir (3)	Govt. Medical College, Jammu
30.		Govt. Medical College, Srinagar
31.		Sher-i-Kashmir Institute of Medical Sciences, Srinagar

Contd...

S. No	State	Names of Medical Colleges approved for establishment of MRUs
32.	Jharkhand (3)	MGM Medical College & Hospital, Jamshedpur
33.		Rajendra Institute of Medical Sciences, Ranchi
34.		All India Institute of Medical Sciences, Deogarh
35.	Karnataka (8)	Dharwad Institute of Medical Sciences, Dharwad
36.		Mandya Institute of Medical Sciences, Mandya
37.		Karnataka Institute of Medical Sciences, Hubli
38.		Shimoga Institute of Medical Sciences, Shivamogga
39.		Gulbarga Institute of Medical Sciences, Kalaburagi
40.		Raichur Institute of Medical Sciences, Raichur
41.		Mysore Medical College & Research Institute, Mysore
42.		Hassan Institute of Medical Sciences, Hassan
43.	Kerala (4)	Govt. Medical College, Thiruvananthapuram
44.		Calicut Medical College, Kozhikode
45.		Govt. Medical College, Kottayam
46.		Govt. Medical College. Thrissur
47.	Madhya Pradesh (7)	S.S. Medical College, Rewa
48.		Netaji Subhash Chandra Bose Medical College, Jabalpur
49.		M.G.M. Medical College, Indore
50.		Gandhi Medical College, Bhopal
51.		G.R. Medical College, Gwalior
52.		Bundhelkhand Govt. Medical College, Sagar
53.		All India Institute of Medical Sciences, Bhopal
54.	Maharashtra (4)	Seth G.S Medical College & KEM Hospital Mumbai
55.		Dr. Vaishampayan Memorial Government Medical College, Sholapur
56.		Armed Forces Medical College, Pune
57.		B.J. Medical College, Pune
58.	Manipur (2)	Regional Institute of Medical Sciences, Imphal
59.		Jawaharlal Nehru Institute of Medical Sciences, Imphal, Manipur
60.	Mizoram (1)	Zoram Medical College, Falkwan
61.	Nagaland (1)	Naga Hospital Authority, Kohima
62.	Odisha (5)	S.C.B. Medical College& Hospital, Cuttack
63.		V.S.S. Institute of Medical Sciences & Research, Burla
64.		M.K.C.G. Medical College, Berhampur
65.		Bhima Bhoi Medical College & Hospital, Balangir
66.		Pandit Raghunath Murmu Medical College & Hospital, Baripada

Contd...

S. No	State	Names of Medical Colleges approved for establishment of MRUs
67.	Punjab (3)	Govt. Medical College, Amritsar
68.		Govt. Medical College, Patiala
69.		Guru Gobind Singh Medical College& Hospital, Faridkot
70.	Rajasthan (12)	Dr. Sampurnanand Medical College, Jodhpur
71.		Government Medical College, Kota
72.		Sardar Patel Medical College and Associated Group of PBM Hospitals, Bikaner
73.		JLN Medical College, Ajmer
74.		SMS Medical College, Jaipur
75.		R.N.T. Medical College, Udaipur
76.		Rajasthan University of Health Sciences, Jaipur
77.		Govt. Medical College, Dungarpur
78.		Government Medical College, Pali
79.		Government Medical College, Jhalawar
80.		Shree Jagannath Pahadia Govt. Medical College, Bharatpur
81.		Pt. Deendayal Upadhyay Govt. Medical College, Churu
82.	Tamil Nadu (9)	Madras Medical College, Chennai
83.		Tirunelveli Medical College, Tirunelveli
84.		Coimbatore Medical College, Coimbatore
85.		Dr.A.L.M. Post Graduate Institute of Basic Medical Sciences, Taramani
86.		Tanjavur Medical College, Tanjavur
87.		Govt. Mohan Kumarmangalam Medical College, Salem
88.		Govt. Theni Medical College, Theni
89.		Chengalpattu Medical College, Chengalpattu
90.		Madurai Medical College, Madurai
91.	Telangana (7)	Osmania Medical College, Hyderabad
92.		Gandhi Medical College, Secunderabad
93.		Nizam Institute of Medical Sciences, Hyderabad
94.		Govt. Medical College, Mahbubnagar
95.		All India Institute of Medical Sciences, Bibinagar, Telangana
96.		Government Medical College, Siddipet
97.		Kakatiya Medical College, Hanumakonda
98.	Tripura (1)	Agartala Govt. Medical College, Agartala

Contd...

S. No	State	Names of Medical Colleges approved for establishment of MRUs
99.	Uttar Pradesh (11)	G.S.V.M Medical College, Kanpur
100.		King George Medical University, Lucknow
101.		Institute of Medical Sciences, Banaras Hindu University, Varanasi
102.		Uttar Pradesh University of Medical Sciences, Saifai, Etawah
103.		Government Institute of Medical Sciences, Greater NOIDA
104.		All India Institute of Medical Sciences, Raebareli
105.		Baba Raghav Das Medical College, Gorakhpur
106.		All India Institute of Medical Sciences, Gorakhpur
107.		S.N. Medical College, Agra
108.		Government Medical College, Kannuaj
109.		Moti Lal Nehru Medical College, Prayagraj
110.	Uttarakhand (3)	Govt. Medical College, Haldwani (Nainital)
111.		Veer Chandra Singh Garhwali Govt. Institute of Medical Science & Research Institute, Srinagar, Pauri Garhwal.
112.		All India Institute of Medical Sciences, Rishikesh
113.	West Bengal (5)	R.G. Kar Medical College& Hospital, Kolkata
114.		Medical College & Hospital, Kolkata
115.		Institute of Post Graduate Medical College Education & Research, Kolkata
116.		Nil Ratan Sircar Medical College& Hospital, Kolkata
117.		All India Institute of Medical Sciences, Kalyani, West Bengal

Note: Of the 117 MRUs sanctioned, 13 are in the north-eastern region.

6.18 Physical Targets for establishing new MRUs during 2021-22 to 2025-26

Year	No. of MRUs to be Established
2021-22	*06
2022-23	**06
2023-24	6
2024-25	6
2025-26	6

** Against the target of setting up 06 MRUs, 12 MRUs were approved.*

*** Against the target of setting up 06 MRUs, 18 MRUs were approved*

Note: The proposals for establishing new MRUs are considered and approved on first come first serve basis subject to their fulfilling prescribed guidelines, rules and procedures. The geographical spread of these units is also kept in view

6.19 Financial Achievements

(Rs. crore)

Year	Budget Estimates (BE)	Revised Estimates (RE)	Actual Expenditure
2013-14	45.00	37.10	36.25
2014-15	80.00	31.00	31.00
2015-16	45.50	28.00	25.20
2016-17	24.25	24.25	24.25
2017-18	36.00	45.00	45.00
2018-19	50.00	37.00	36.00
2019-20	58.00	55.00	55.00
2020-21	60.00	58.00	52.80
2021-22	60.00	51.00	39.61
2022-23	60.00	48.00	44.86
2023-24	60.00	50.00	50.00
2024-2025 (expenditure upto 31.12.2024)	60.00	61.99	43.65

6.20 Research Performance

As per the reports received from medical colleges and research institutes for the year 2024- 25 (from April, 2024 to December, 2024), 375 research studies/ projects are underway in MRUs on different aspects of diseases and 110 Research Papers have been published. A total of 14 workshops on research methodology were conducted by MRUs in all zones covering the fundamentals of research, ethics, protocol, proposal development and research grants in collaboration with ICMR-Collaborating Centres of Excellence (CCoE).

6.21 Use of State-of-the-Art Equipment at MRUs

Multi Disciplinary Research Units infrastructure has resulted into the development of laboratories in Govt. Medical Colleges equipped with advanced instruments for high through-put testing of large number of samples. The research undertaken at these MRUs will help to develop affordable, accessible and usable new medical diagnostic technologies, drugs, devices, drug monitoring

mechanism, vaccine designing etc. Following is the list of some the State-of-the-Art instruments used at MRUs:

S. No.	Name of MRU	State-of-the-Art facilities
1	Govt. Medical College, Srinagar, J&K	CFX-96 Real Time-PCR (RT-PCR), Neon Cell Transfection System, Countess FL (Cell counter), EVOS FL Auto microscope
2	Madurai Medical College, Madurai, TN	RT-PCR, Gas Chromatography Mass Spectrometry (GCMS), High Performance liquid Chromatography (HPLC), ChemiLumeniscence Immunology Analyzer (CLIA)
3	Institute of Medical Sciences, Banaras Hindu University, Varanasi	Microarray, Next Generation sequencing system-Nanopore Atomic Absorption spectrophotometer, Real time PCR system
4	Tirunelveli Medical College, Tirunelveli, TN	Real Time PCR, Inverted phase4 contrast microscope, HPLC, GCMS, Cytogenetic Work Station, Zebra fish Lab
5	Government Medical College, Calicut, Kerala	FISH, Molecular diagnostic lab including genetic testing, Sanger sequencer
6	Institute of Post Graduate Medical Education & Research , Kolkata	Electron Microscope with Ultramicrotome.
7	Silcher Medical College, Silcher, Assam	Next Generation Sequencer (High throughput Genetic analyzer)
8	Ravindra Nath Tagore Medical College, Udaipur, Rajasthan	Fluorescent in situ Hybridization (FISH), Flow cytometer
9	Shyam Shah Medical Rewa, Rewa, MP	Real time PCR, HPLC beta variant, Fluorescent Microscope
10	Coimbatore Medical College, Coimbatore, Tamil Nadu	Fluorescent in situ Hybridization (FISH), GEL-DOC Imaging Equipment for CHEMILUMINESCENCE
11	All India Institute of Medical Sciences, Rishikesh, Uttarakhand	Nanopore Sequencer, Q-PCR
12	MP Shah Govt. Medical College, Jamnagar, Gujarat	High Performance liquid Chromatography (HPLC)
13	S.V. Medical College, Tirupati, Andhra Pradesh	High Performance liquid Chromatography (HPLC), Auto Analyzer, Ultra Centrifuge, Fluorescent Microscope
14	Madras Medical College, Madras, Tamil Nadu	Real time – PCR, Fluorescence in situ hybridization (FISH), Auto Analyzer
15	Gandhi Medical College, Secunderabad, Telangana	Seq Studio Genetic Analyzer, HPLC & GCMS, Flow-cytometry, RTPCR, Tissue Processor,

Contd...

S. No.	Name of MRU	State-of-the-Art facilities
16	Dr. ALM Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani Campus, Chennai	Applied Biosystem 3500 8 Capillary Genetic Analyzer, Automated Cytogenetic Analysis Workstation, Floor Model High Speed Refrigerated Centrifuge, Real Time PCR System
17	S.P. Medical College, Bikaner, Rajasthan	Bio Chemistry Analyzer
18	SMS Medical College, Jaipur, Rajasthan	High Performance liquid Chromatography (HPLC), Fluorescent Microscope, Real time – PCR
19	Armed Forces Medical College, Pune, Maharashtra	Real time PCR system, Inverted fluorescence microscope, Multimode Microplate Reader and Washer
20	All India Institute of Medical Sciences, Rishikesh, Uttarakhand	Real time PCR system
21	King George Medical College, Lucknow, UP	Multimodal plate reader, Real time PCR system, Chemi Doc MP Imaging system
22	Maulana Azad Medical College, Delhi	Genetic Analyzer, Gas Chromatography Mass Spectrometry, Flow Cytometer, Multi-Mode Reader, DNA Extraction System, Real time PCR system
23	Sher-I-Kashmir Institute of Medical Sciences Srinagar, J&K	Multimode Elisa Reader, High Performance liquid Chromatography (HPLC), Real time PCR system
24	University College of Medical Sciences,	Upright Trinocular Fluorescent Microscope, Inverted Fluorescent Microscope
25	Assam Medical College & Hospital, Dibrugarh, Assam	Ultra-centrifuge, Microscope LED illumination,
26	Medical College and Hospital, Kolkata	Florescence Microscope with karyotyping software
27	Healtcare Laboratory & Research Centre, Naga Hospital, Kohima, Nagaland	Gas Chromatography Mass Spectrometer with Accessories, Auto Analyzer, Real time PCR system,
28	Thanjavur Medical College, Thanjavur, Tamil Nadu	LED Fluorescent Microscope, Chemi-luminescence Immune Assay Analyser, 5 - part Fully Automated Hematology Analyser, GCMS, Real Time - PCR, Inverted Phase contrast microscope, ELISA Reader
29	Government Medical College Thiruvananthapuram, Kerala	Zebra Fish Standalone System, Karyotyping & FISH Workstation, 5 - part Fully Automated Hematology Analyser, Fully Automatic Electrophoresis System, Real Time - PCR, Inverted Phase Contrast Microscope, ELISA Reader
30	Govt. Mohan Kumarmangalam Medical College (GMKMC), Salem, Tamil Nadu	Fully Automated Random Access Immune Analyzer, Fluorescent Microscope with camera, Electrolyte Analyzer Diarek Unilyte, Tissue Lyser-II, Real Time - PCR System, Fully Automated Biochemistry Analyzer, 5 - part Fully Automated Hematology Analyser

6.22 **Prominent features of the Scheme**

➲ **Multi-Centric Studies by MRUs**

The MRU scheme approved for 2021-22 to 2025-26 has provision for undertaking of multi-centric studies by MRUs. Operational guidelines for multi-centric studies were notified in December 2023. During 2024-25, following 05 multi-centric projects were approved by the Project Screening Committee (PSC) and Grants-in-aid amounting to Rs 8.34 crore was released:

a) Effect of additional targeted and tailor-made intervention package on malaria control in the very high malaria endemic areas of Dhalai District, Tripura - A quasi-experimental study.

b) Study of molecular representativeness of circulating tumor DNA from saliva and blood- A prospective multicentric observational study.

c) miRNA expression profiling in patients of breast cancer to identify the drivers of metastasis.

d) Vector bionomics and vectorial capacity for Aedes and Anopheles mosquitoes and knowledge and behavioral practices for transmission and prevention of dengue and malaria among the population of KarbiAnglong District of Assam and Sepahijala district of Tripura: A multicentric mixed method study.

e) Implementation of "Zero separation" policy and DHATRI (Dedicated Hospital Associate for teaching and re-inforcing) KMC and Lactation into routine newborn care and its impact on neonatal morbidities and duration of Kangaroo mother care (KMC) in small stable babies weighing 1500-2000 grams in MNCU – A Hospital-based Multi-centric Implementation study.

➲ **Funding and administration of MRUs by Central Government**

As per the revised scheme for the 15th Finance Commission Period (2021-22 to 2025-26), Central Government is to administer and bear all the recurring and non-recurring liabilities of the MRUs. In the earlier scheme, the recurring liabilities were to be taken over by the State Government after 5 years of running the MRU.

➲ **Grant for purchase of equipment**

In line with the economy measures of the government, grants-in-aid for purchase of equipment has been fixed at Rs.2.00 crore. Proposals for grants in excess of Rs.2.00 crore for purchase of equipment recommended by the medical college/ LRAC will be considered by the Department with the approval of the Secretary (DHR) on case-to-case basis taking into account the merits of the proposal.

➲ **Development of Dashboard of the Scheme**

DHR Electronic Project Management System (DHR e-PMS) Dashboard has been developed to provide user-friendly system for online submission of information related to research activities and

related documents of the unit (MRU). The dashboard has been developed with the help of ICMR IT Team for real time monitoring of the MRUs. It provides complete information in respect of MRUs, including but not limited to funds sanctioned/utilized, LRAC members/meeting details, number of LRAC approved – initiated, ongoing and completed projects, number of publications, total patents, extramural grants received, projects that contributed to policy or clinical policy change etc. Dashboard became functional in November, 2024. Zone wise hands-on workshops for MRU staff were organized by DHR on 18.11.2024, 20.11.2024, 21.11.2024 and 25.11.2024.

➲ **Integrated Primary Health Care Models for Palliative Care, Elderly Care and Mental Health (I-PEM)**

- ❖ The National Institute for Transforming India (NITI) Aayog desired, the Department of Health Research to develop an Integrated Primary Health Care Model for Palliative Care, Elderly Care and Mental Health (I-PEM) involving collaboration between Multi Disciplinary Research Units (MRUs)/ Model Rural Health Research Units (MRHRUs) of the Department of Health Research (DHR) and Health & Wellness Centres (HWCs) of the Department of Health & Family Welfare (DoH&FW). Grants-in-Aid @ 15.45 Lakh to 06 identified MRUs/MRHRUs have been released for necessary data collection based on which the Health Care Models would be piloted in the selected regions. In Addition to this GIA of Rs 1.00 Lakh to 12 participating units in this project has been released to provide incentives for ASHA workers for necessary data collection. The study is planned in two phases. In Phase-I, the data collection is achieved and data cleaning and further analysis is in process. Based on which the Health Care Models would be piloted in the selected region in Phase-II.

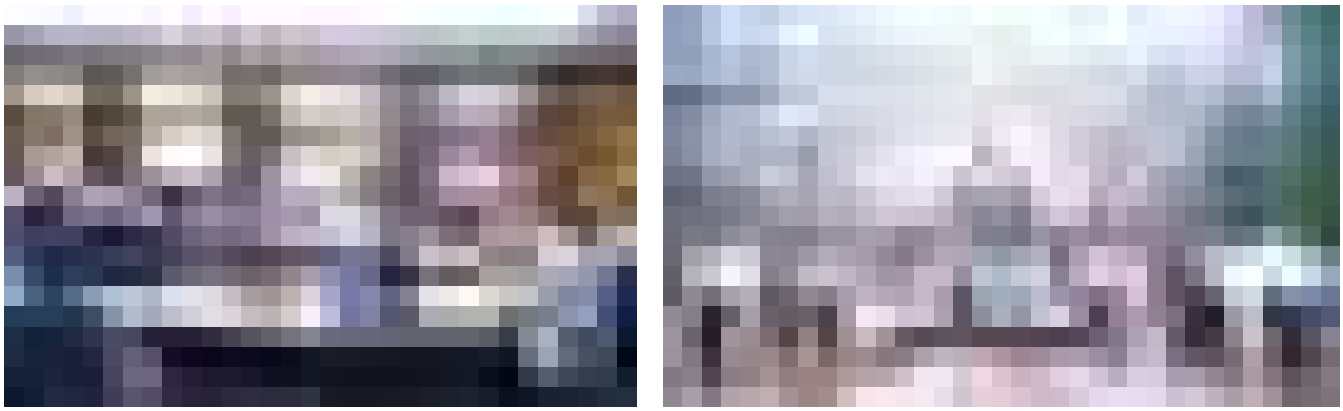
➲ **Clinical trial by MRUs**

Existing network/ infrastructure of MRUs to be utilised for undertaking clinical trials.

Research Day Celebration (2024) at Madras Medical College, Chennai, Tamil Nadu

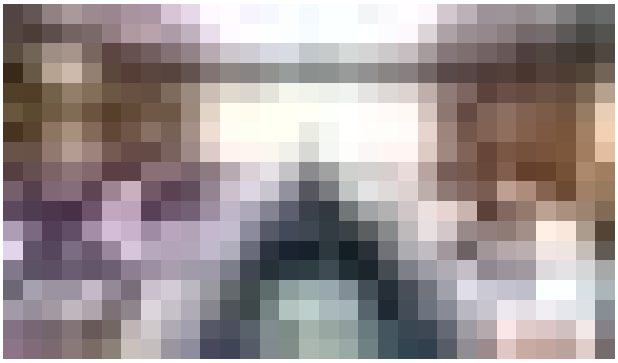
Dr. Rajiv Bahl, Director General of Indian Council of Medical Research (ICMR) and Secretary Department of Health Research (DHR), invited as Chief Guest during Celebration of Research Day, 2024 at Madras Medical College, Chennai, Tamil Nadu.

Regional Workshops conducted by Department of Health Research on Dashboard and OOMF & DARPAN Data



South Zone

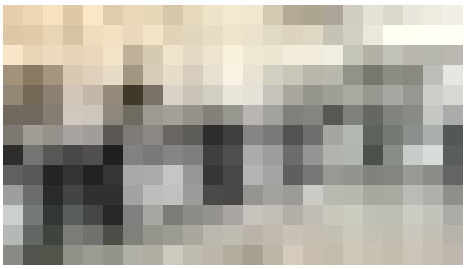
North- East & East Zone



North Zone

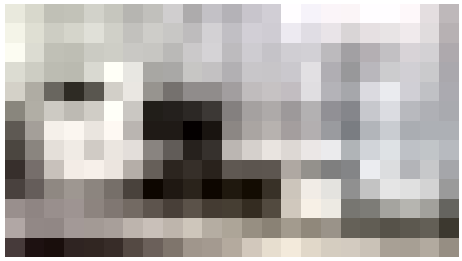
West & Central Zone

Laboratory Set Up at Multidisciplinary Research Units

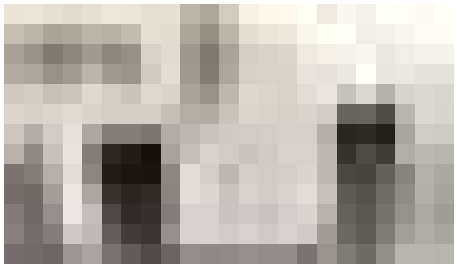


Madras Medical College
Chennai, Tamil Nadu

Dr. ALM PGIMS, Taramani,
Tamil Nadu



Coimbatore Medical College
Tamil Nadu



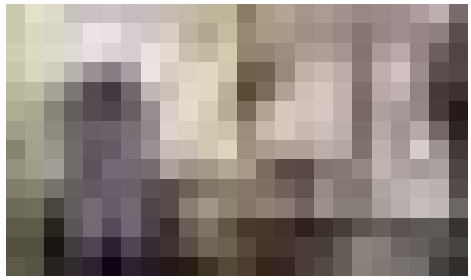
Thanjavur Medical College
Tamil Nadu

Govt. Medical College
Calicut, Kerela

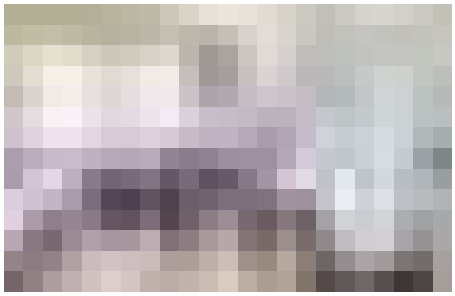
Govt. Medical College
Thiruvananthapuram Kerela

HLRC, Kohima, Nagaland

SMIMER, Gujarat



JLNMC, AJMER, Rajasthan



RTMC, Udaipur, Rajasthan

SCB Medical College
Cuttack, Odisha

Dr. RP GMC, Tanda
Himachal Pradesh

Maulana Azad Medical College
Delhi

AFMC, Pune, Maharashtra

GMKMC, Salem, Tamil Nadu

Orientation workshops on Research Methodology at Multidisciplinary Research Units

MRU Madras Medical College, Tamil Nadu

MRU- Coimbatore Medical College, Tamil Nadu

MRU- Armed Forces Medical College (AFMC), Pune

MRU- Maulana Azad Medical College (MAMC), New Delhi

Orientation workshops on Research Methodology at Multidisciplinary Research Units

MRU- GMC, Secunderabad Telangana

MRU-KGMU Lucknow, U.P.

MRU-UCMS

MRU-MP SAHA, Jamnagar, Gujrat

MRU- GMC, Srinagar

Hands on Trainings/ Demonstrations conducted by Multidisciplinary Research Units

Fully Automated Biochemistry Analyzer MRU - MP SAHA, Jamnagar, Gujarat

Molecular Techniques at MRU - SMS Jaipur, Rajasthan

Biochemical Test at MRU - GIMS, Kalaburagi

Biochemical Test at MRU - SVMC Tirupati, Andhra Pradesh

Biochemical Analysis at MRU - Madurai Medical College, Tamil Nadu

Molecular Techniques at MRU - HIMS Hassan, Karnataka

Hands on Trainings/ Demonstrations conducted by Multidisciplinary Research Units

Cytogenetics Technique at MRU-
SMS Medical College Hospitals, Jaipur, Rajasthan

Molecular Techniques
at MRU- KIMS, Hubali, Karnataka

Application of Molecular Biology Techniques in forensic diagnostic at MRU-
Maulana Azad Medical College and Associated Hospitals, New Delhi

Clinical Diagnostics at MRU- Dr. ALM PGIB
Taramani, Tamil Nadu

Microbial and Immunological Techniques
at MRU-GGSMC Faridkot, Punjab

Department of Health Research Official's Visit to Multidisciplinary Research Units

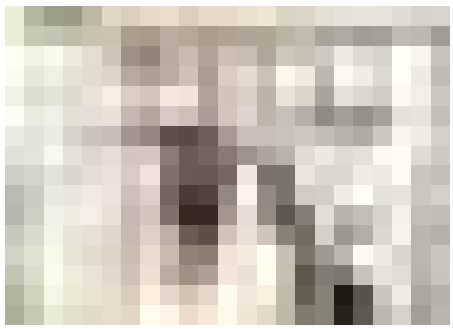
MMC, Chennai, Tamil Nadu

GMKMC, Salem, Tamil Nadu

KGMU Lucknow, U.P

GMC, Calicut, Kerela

AMCH, Dibrugarh, Assam



Dr. ALM PGIBMS, Taramani, TN

GMC, Trivandrum, Kerela

AFMC, Pune

JNIMS, Imphal, Manipur

JMC, Jorhat, Assam

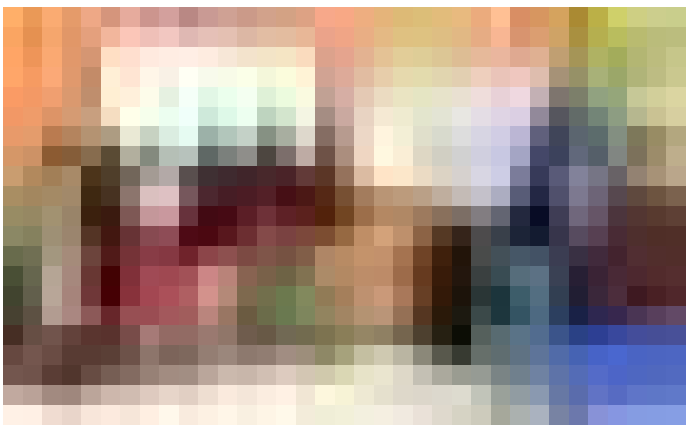
RIMS, Imphal, Manipur

NSCB Medical College, Jabalpur, MP

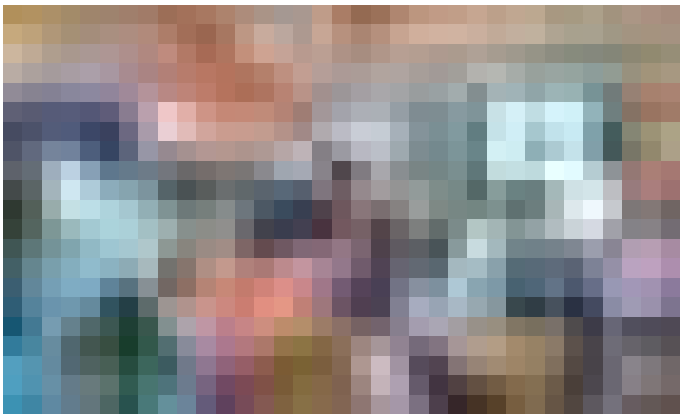
Other Activities Conducted by Multidisciplinary Research Units

Health camp at MRU- SVMC, Tirupati, Andhra Pradesh

Renal impairment screening camp at MRU- GMC, Kottayam, Kerala



Health Awareness Campaign organized by MRU- Govt. Mohan Kumaramangalam Medical College, Salem, Tamil Nadu



Orientation programme for MBBS students in MRU- Maulana Azad Medical College and Associated Hospital, New Delhi

Chapter 7

Establishment Of Model Rural Health Research Units (MRHRUs)

Introduction

7.1 Public health system in India has a wide network. Over the last more than 76 years, preventive, diagnostic and therapeutic services have been provided through this network managed by States. It has been observed that a big gap exists between Primary Health Centres (PHCs)/ Community Health Centres (CHCs) and tertiary care hospitals with state-of-the art-facilities created by the Centre and also by some of the State Governments.

7.2 Further, wide variations exist in the pattern of diseases prevalent in different geographical areas and local conditions which require development of State/area specific and disease-specific strategies to provide better healthcare facilities, thus ensuring that modern technology is available to the general public. Transfer of research findings/technologies at the rural level has been found to be a major lacuna in providing quality medical services to the rural population.

7.3 To bridge the gap, Department of Health Research rolled out a central sector umbrella scheme for Development of Infrastructure for Health Research in 2013-14, i.e. during 12th Five Year Plan (2012-13 to 2016-17). The umbrella scheme has 02 sub-schemes, namely (i) establishing Multidisciplinary Research Units (MRUs) in Government Medical Colleges and Research Institutes, and (ii) **establishing Model Rural Health Research Units (MRHRUs) in rural areas under the mentorship of ICMR institutes**.

7.4 The scheme was extended from 2017-18 to 2019-20 to be co-terminus with the 14th Finance Commission Period. Subsequently, Department of Expenditure vide its Notification No.42(02)/PF-II/2014 dated 10.01.2020 approved an interim extension to all ongoing schemes till 31.03.2021 or till the date of recommendations of 15th Finance Commission came into effect, whichever was earlier.

7.5 The Standing Finance Committee chaired by Secretary (DHR) in its meeting on 15.03.2021 appraised the scheme and subsequently the Competent Authority approved it for continuation during the period of 15th Finance Commission (2021-22 to 2025-26) with the financial outlay of Rs. 192.36 crore for MRHRUs.

7.6 MRHRU scheme is based on the experience of establishing such a unit at Ghatampur under the ICMR – National JALMA Institute of Leprosy and other Mycobacterial Diseases, Agra, where the methods of diagnosis and treatment as well as epidemiology were shown to be workable deep at the grass root rural settings.

7.7 Objectives of the Scheme

- To create infrastructure for transfer of technology to the rural levels for improving quality of health services to rural population.

- To ensure an interface between the New Technology Developers (Researchers in Medical institutions; State or Centre), Health Systems Operators (Centre or State Health Services) and the Beneficiaries (Communities in rural areas).
- To ensure geographical spread of health research infrastructure in the country.

7.8 Approval Mechanism

- Proposals for setting up MRHRUs are submitted by the State Health/Medical Education Departments in consultation with ICMR Mentor Institute, to the Department of Health Research.
- These are considered by the Technical Evaluation Committee (TEC) of Experts and its recommendations are forwarded to the Approval Committee for consideration.

Composition of TEC:

I. Prof. Sushma Bhatnagar,
Chief, Institute Rotary Cancer Hospital & Head
National Cancer Institute (NCI), Jhajjar, Haryana

II. Prof. Sandeep Bansal,
Consultant Professor & Ex-Head, Department of Cardiology
Vardhman Mahavir Medical College & Safdarjung Hospital, New Delhi

III. Prof. Achal Kumar Srivastava,
Professor (Clinical Neurophysiology), Department of Neurology
All India Institute of Medical Sciences, New Delhi

IV. Prof. Piyush Gupta (Retd.),
Ex. Principal (Pediatrician)
University College of Medical Sciences, New Delhi

V. Prof. Rajesh Sagar,
Professor, Department of Psychiatry
All India Institute of Medical Sciences, New Delhi

VI. Prof. Mongjam Meghachandra Singh,
Director-Professor & Head, Deptt. of Community Medicine
Maulana Azad Medical College, New Delhi

Composition of Approval Committee

1. Secretary, Department of Health Research……...…… Chairman
2. A S & F A(Health) or His Nominee.....……..Member
3. Joint Secretary, Department of Health Research…….....……Member
4. Head, HRD Division, Indian Council of Medical Research…….....…....……..Member

Funding Norms

7.9 Approved MRHRUs are eligible for one-time **non-recurring grant-in-aid** for (i) civil construction and (ii) purchase of equipment, and **recurring grants** for (i) salaries and (ii) contingencies/ consumables/training etc. as per the following norms:

(Rs. Crore)

Non-Recurring		Recurring (per annum)	
Civil Construction	2.075 (to be released in two instalments of Rs.1.00 crore and Rs.1.075 crore)	Salaries	0.42
Equipment	1.0 (to be released in two instalments of Rs.0.50 crore each)	Contingencies/ Consumables/ Training, etc.	0.50

Operational Mechanism

7.10 ICMR mentoring institute devises a suitable internal mechanism for speedy execution of the civil works, procurement & installation of equipment, selection & posting of requisite staff with the active involvement of the State Health/Medical Education Department This involves:

(i) A tripartite Memorandum of Agreement to be signed between the Department of Health Research, State Health Department and the ICMR Mentoring Institute.

(ii) Provisioning of 620 sq. meters of land free of cost by the State Govt. in close proximity of Primary Health Centre (PHC) / Community Health Centre (CHC) for establishing MRHRU.

(iii) Finalisation of layouts/maps for establishing MRHRU.

(iv) Tendering and hiring the agencies for construction/renovation of space provided for the setting up of MRHRU.

(v) Tendering and procuring equipment.

(vi) Engaging contractual staff for MRHRU.

7.11 Staff Structure

(i) Project Management & Implementation Unit (PMIU) in DHR:

A Project Management & Implementation Unit (PMIU) consisting of regular government/contractual staff in Department of Health Research looks after the MRHRU related activities like policy formulation, monitoring, budgetary control etc. The composition of PMIU in DHR is as under:

S.No.	Designation	No. of posts
1	Project Manager	01
2	Finance Manager/Consultant Finance & Accounts	01
3	Administrative Officer	01
4	Scientist 'C'	02
5	Data Entry Operator	02
6	Multi Tasking Staff (MTS)	01

(ii) Staff in MRHRUs:

A number of issues regarding the existing manpower structure of MRHRU were raised during discussions in many fora. Accordingly, manpower structure as given in the policy guidelines was restructured during 2024-25 Vide No. R.12011/02/2024-HR dated 26.06.2024. The staff restructuring at MRHRU is as under:

S. No.	Designation	No. of Post(s)
1	Project Research Scientist–II (Medical/Non-Medical)	01
2	Laboratory Technician (Project Technical Support-III)	02
3	Field Investigator (Project Technical Support-III)	01
4	Field Worker (Project Technical Support-II) or Research Nurse (Project Nurse-II)	04
5	Assistant (Multipurpose admin)	01
6	MTS	01

Monitoring Mechanism

7.12 Progress of research work of MRHRUs is closely and regularly monitored by holding review meetings, visits by DHR officials and performance conclave.

7.13 During 2024-25, MRHRU Conclave was held on 16th April, 2024 to review the performance of MRHRUs in terms of research projects initiated, research projects completed, indexed research publication, contingency expenditure, land and building status, studies leading to clinical trials/implementation research and projects leading to policy or clinical practice change or transfer of technology etc. Suggestions for improving performance were also shared with the units whose performance was not found satisfactory in terms of the above parameters. Consequently, 13 online meetings with MRHRUs were also held to assess their progress.

MRHRU Conclave held in April, 2024

7.14 The National Institution for Transforming India (NITI) Aayog and the Prime Minister's office have also developed Output Outcome Monitoring Framework (OOMF) and Dashboard for Analytical Review of Projects across Nation (DARPAN) portals respectively for uploading data of Govt. schemes on quarterly and annual basis. The requisite data in respect of MRHRU scheme is regularly fed on these portals. The major Output & Outcome performance indicators of the OOMF portal are:

	Output	Outcome
1	Number of Research Projects approved by Local Research Advisory Committee (LRAC) in MRHRUs	Number of Research Studies completed at MRHRUs
2	Number of Research Projects that obtained required funding	Number of Research Publications from MRHRUs
3	Number of Research Projects initiated	Projects that lead to clinical practice or policy change or transfer of technology

7.15 The performance indicators of the DARPAN portal are as under:

1	Number of Publication
2	Number of MRHRUs approved
3	Number of Research Projects
4	Fund Released

Research Awards

7.16 After performance evaluation of all MRHRUs, MRHRU Tirunelveli was awarded as Best MRHRU by Smt. Anupriya Patel, Hon'ble Minister of State for Health & Family Welfare and Chemicals and Fertilizers, Government of India during DHR-ICMR Health Research Excellence Summit 2024.

Local Research Advisory Committee (LRAC)

7.17 For operating the MRHRU, a Local Research Advisory Committee (LRAC) is constituted which considers and approves research proposals received from the State Government and ICMR mentor institute. LRAC/mentor institute also monitor the progress of research proposals. The LRAC is the recommendatory body for all proposals of the MRHRUs.

The composition of LRAC shall consist of the following members:

1	Chairperson	Medical Person preferably a Senior Professor level/Director level person of proven record of work in rural translational/Implementational research.
2	Co-Chairperson	
3	One Microbiologist with credential of work in diagnostics/epidemiology	
4	Two Clinicians/Academicians with expertise in Non-communicable diseases (NCDs),one of them having expertise in mental health	
5	One Academic Pediatrician	
6	One Academic Obstetrician & Gynaecologist	
7	Any other Expert depending upon Disease as Identified in project	
8	Principal/Dean	Linked State Govt. Medical College and professor/Head from Linked State Govt. Medical College as Special Invitees.
9	Director	Medical Education Department of State Govt./Nominee.
10	Director	Health & Family Welfare Department, State Govt./Nominee
11	Director	Mentor Institute of Indian Council of Medical Research (ICMR)
12	Nodal Officer	Mentor Institute of Indian Council of Medical Research (ICMR)
13	Nominee from DHR	

Physical Achievements

7.18 Since the inception of the scheme, the following 36 MRHRUs have been sanctioned till 31.12.2024 : -

S. No.	State/Union Territory	Location of MRHRU	Linked Medical College	ICMR Mentor Institute
1	Andaman & Nicobar Islands	PHC Bambooflat, South Andaman District	Andaman & Nicobar Institute of Medical Sciences, Sri Vijaya Puram (Port Blair)	ICMR-Regional Medical Research Centre, Sri Vijaya Puram, Andaman & Nicobar Islands
2	Andhra Pradesh	Old RHTC Premises, Chandragiri	S. V. Medical College, Tirupati	ICMR-National Institute of Nutrition, Hyderabad, Telangana
3	Arunachal Pradesh	CHC Sagalee, Papumpare	Tomo Riba Institute of Health & Medical Sciences (TRIHMS), Neharlagun	ICMRNE-Regional Medical Research Centre, Dibrugarh, Assam
4	Assam	PHC Chabua	Assam Medical College, Dibrugarh	ICMRNE-Regional Medical Research Centre, Dibrugarh, Assam
5	Bihar	PHC - Kurhani, Muzzafarpur	Sree Krishna College and Hospital, Muzzafarpur	ICMR-Rajendra Memorial Research Institute of Medical Sciences, Patna, Bihar
6	Chhattisgarh	CHC Jheet, Patan Block, Durg District	Pt. Jawahar Lal Nehru Memorial Medical College, Raipur	ICMR-National Institute of Research In Tribal Health, Jabalpur, Madhya Pradesh
7	Dadar & Nagar Haveli, Daman & Diu	RHTC-Kilvani, Daman & Diu	NAMO Medical Education & Research Institute, Daman & Diu	ICMR - National Institute of Immunohaematology, Parel, Mumbai, Maharashtra
8	Gujarat	RHTC Sachin, Surat	Govt. Medical College, Surat	ICMR-National Institute of Occupational Health, Ahmedabad, Gujarat
9	Haryana	CHC Khotpura, Panipat	Kalpana Chawla Govt. Medical College & Hospital, Karnal	ICMR-National Institute of Cancer Prevention and Research, NOIDA, Uttar Pradesh
10	Himachal Pradesh	CHC Haroli, Una	Dr. Rajendra Prasad Govt. Medical College, Tanda, Kangra	ICMR-National JALMA Institute for Leprosy & other Mycobacterial Diseases, Agra, Uttar Pradesh
11	Jammu & Kashmir	PHC Khag, Budgam	Govt. Medical College, Srinagar	ICMR-National Institute of Child Health & Development Research, Delhi
12	Jharkhand (2)	CHC Angara, Ranchi	Rajendra Institute of Medical Sciences (RIMS), Ranchi	ICMR-National Institute of Malaria Research, New Delhi & National Institute of Malaria Research, Field Unit Itki, Ranchi, Jharkhand
13		CHC Namkum	Rajendra Institute of Medical Sciences (RIMS), Ranchi	ICMR-Regional Medical Research Centre, Bhubaneshwar, Odisha
14	Karnataka	PHC Sirwar, Manvi Taluk, Raichur	Raichur Institute of Medical Sciences, Raichur	ICMR-National Institute of Traditional Medicine, Belagavi, Karnataka

Contd...

S. No.	State/Union Territory	Location of MRHRU	Linked Medical College	ICMR Mentor Institute
15	Kerala	CHC Chettikade, Alappuzha	Govt. Medical College, Alappuzha	ICMR-National Institute of Virology, Pune, Maharashtra
16	Madhya Pradesh	PHC Badoni, Datia	GR Medical College, Gwalior	ICMR-National Institute of Research In Tribal Health, Jabalpur, Madhya Pradesh
17	Maharashtra	MRHRU Dahanu, Palghar	Grants Medical College and JJ Group of Hospital, Mumbai	ICMR - National Institute for Research in Reproductive and Child Health, Mumbai, Maharashtra
18	Maharashtra	Rural Hospital Vani Taluka Dindori, Nasik	Government Medical College, Dhule, Maharashtra	ICMR - National Institute for Research in Reproductive and Child Health, Mumbai
19	Meghalaya	CHC Sohra, East Khasi Hills	Health Authority of East Khasi Hills District	ICMRNE-Regional Medical Research Centre, Dibrugarh, Assam
20	Mizoram	PHC Aibawk	Zoram Medical College, Mizoram	ICMRNE - Regional Medical Research Centre, Dibrugarh, Assam
21	Nagaland	PHC Niuland, Dimapur	PHC Niuland, Dimapur	ICMRNE - Regional Medical Research Centre, Dibrugarh, Assam
22	Odisha (2)	CHC Tigiria	S.C.B. Medical College, Cuttack	ICMR-Regional Medical Research Centre, Bhubaneshwar, Odisha
23		CHC Sheragada, Ganjam,	MKCH Medical, College, Berhampur	ICMR - Regional Medical Research Centre, Bhubaneshwar, Odisha
24	Punjab	CHC Bhunga, Hoshiarpur	Govt. Medical College, Amritsar	ICMR-National Institute of Child Health & Development Research, Delhi
25	Puducherry	CHC Karikalampakkam	Indira Gandhi Medical College & Research Institute, Puducherry	ICMR – Vector Control Research Centre, Puducherry
26	Rajasthan	Bhanpur Kalan, Govt. Health Clinic, Jaipur	SMS Medical College, Jaipur	ICMR - National Institute for Implementation Research on Non-Communicable Diseases, Jodhpur, Rajasthan
27	Tamil Nadu (2)	State Rural Health Centre, Tirunelveli	Tirunelveli Medical College, Tirunelveli	ICMR - National Institute of Epidemiology, Chennai, Tamil Nadu
28		PHC Thoppur, Thuvariman, Madurai	Madurai Medical College, Madurai	ICMR – National Institute for Research in Tuberculosis, Chennai
29	Tripura	Kherengbar, Hospital, Khumulwng	Agartala Medical College, Agartala	ICMR - Regional Medical Research Centre, Dibrugarh, Assam
30	Telangana	PHC, Janampet, Mahbubnagar	Govt. Medical College, Mahbubnagar	ICMR - National Institute of Nutrition, Hyderabad, Telangana

Contd...

S. No.	State/Union Territory	Location of MRHRU	Linked Medical College	ICMR Mentor Institute
31	Uttar Pradesh (5)	CHC Pali (Tharrapar) Shahjanwa, Gorakhpur	B R D Medical College, Gorakhpur	ICMR - Regional Medical Research Centre, Gorakhpur
32		CHC Kheragarh, Agra	S N Medical College, Agra	ICMR - National JALMA Institute for Leprosy & Other Mycobacterial Diseases
33		CHC Nagram, Lucknow	R M L Institute of Medical Sciences, Lucknow	ICMR – Regional Medical Research Centre, Gorakhpur
34		CHC Dadha, Gautam Buddha Nagar	Govt. Institute of Medical Sciences, Kasna, Greater NOIDA	ICMR - National Institute of Cancer Prevention and Research, Noida
35		CHC Shankargarh, Prayagraj	Moti Lal Nehru Medical College, Prayagraj	ICMR – National Institute of Malaria Research, New Delhi
36	West-Bengal	North Bengal Medical College (NBMC), Darjeeling	North Bengal Medical College, Darjeeling	ICMR - National Institute of Cholera & Enteric Diseases, Kolkata, West Bengal

List in alphabetical order

Note: Of the 36 MRHRUs sanctioned, 06 are in the North-Eastern Region

Distribution of Model Rural Health Research Units in the States:

7.19 Physical Targets for Establishing new MRHRUs during 2021-22 to 2025-26

Year	No. of MRHRUs to be Established
2021-22	02
2022-23	02
2023-24	02
2024-25	02
2025-26	03

Note: The proposals for establishing new MRHRUs are considered and approved on first come first serve basis subject to their fulfilling prescribed guidelines, rules and procedures. The geographical spread of these units is also kept in view.

7.20 Financial Achievements

(Rs. Crore)

Year	Budget Estimates (BE)	Revised Estimates (RE)	Actual Expenditure
2013-14	10.00	12.50	12.40
2014-15	20.00	13.00	13.00
2015-16	10.00	6.50	6.50
2016-17	6.00	6.00	6.00
2017-18	9.00	11.00	8.12
2018-19	13.00	10.00	10.00
2019-20	15.00	19.00	17.50
2020-21	20.00	16.00	11.39
2021-22	20.00	18.00	17.99
2022-23	20.00	19.00	12.78
2023-24	20.00	20.00	19.12
2024-25 (expenditure upto 31.12.2024)	20.00	18.01	15.16

7.21 **Research Performance**

As per the reports received from MRHRUs for the year 2024-25 (from April, 2024 to December, 2024), a total of 65 research studies/projects were initiated on different aspects of diseases and 18 Research Papers have been published.

7.22 Prominent features of the Scheme

❖ **Population-Based Health Survey (PBHS)**

The Department of Health Research, MoHFW directed all MRHRUS to conduct repeated cross-sectional surveys among households at annual intervals in specified geographical areas across India during 2024-25. The major aim of this survey is to assess health status and annual trend of change in health status of communities residing in the field practice areas of these units. The comprehensive health survey will record data for multiple health Indicators for identifying disease prevalence or understanding community needs in the various health domains. These are:

i. Non-Communicable Diseases (NCDs): Hypertension, Diabetes Mellitus, Obesity, Respiratory health, kidney and liver disease

ii. Reproductive and maternal health

iii. Child health

iv. Nutrition

v. Mental Health

vi. Ageing

vii. Injuries and accidents

viii. Infectious diseases: Serosurveys of selected infections

The data obtained from these units will also help the State Authority to implement/revise health-based needs and programs in the community.

❖ **Multi-Centric Research Projects by MRHRUs**

The MRHRU scheme approved for 2021-22 to 2025-26 has provision for undertaking of multi-centric studies by MRHRUs. Operational guidelines for multi-centric studies were notified in December 2023 and 03 multi-centric projects were approved by the Project Selection Committee (PSC) and Grants-in-aid amounting to Rs. 1.67 crore was released.

❖ **Development of Dashboard of the Scheme & Hands-on Workshop**

DHR Electronic Project Management System (DHR e-PMS) Dashboard has been developed to provide user-friendly system for online submission of information related to research activities and related documents of the unit (MRHRU). The dashboard has been developed with the help of ICMR IT Team for real-time monitoring of the MRHRUs. It provides information in respect of MRHRUs, including but not limited to funds sanctioned/utilized, LRAC members/meeting details, number of LRAC approved – initiated, ongoing and completed projects, number of publications, projects that contributed to policy or clinical policy change etc. Dashboard became functional in November, 2024 and a hands-on workshop for MRHRU staff was organized by DHR on 19.11.2024.

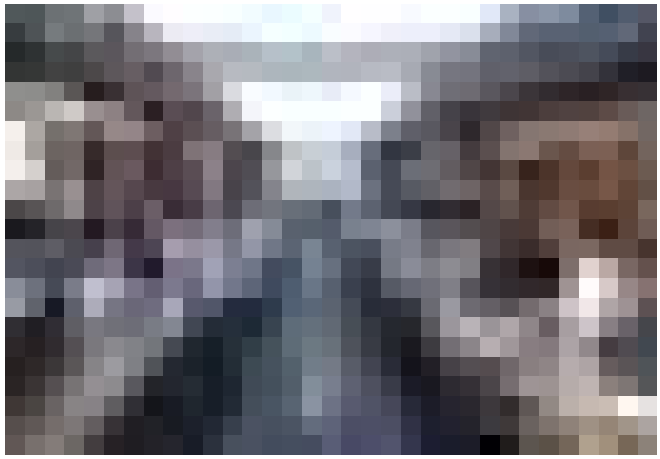
❖ **Integrated Primary Health Care Models for Palliative Care, Elderly Care and Mental Health (I-PEM)**

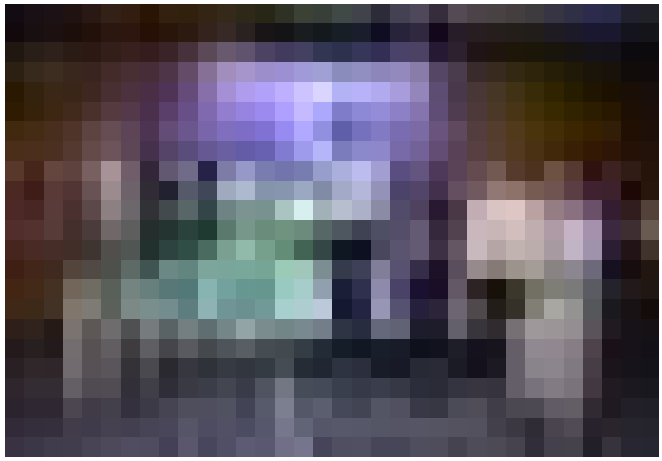
The National Institute for Transforming India (NITI) Aayog desired, the Department of Health Research to develop an Integrated Primary Health Care Model for Palliative Care, Elderly Care and Mental Health (I-PEM) involving collaboration between Multi Disciplinary Research Units (MRUs)/ Model Rural Health Research Units (MRHRUs) of the Department of Health Research (DHR) and Health & Wellness Centres (HWCs) of the Department of Health & Family Welfare (DoH&FW). Grants-in-Aid @ 15.45 Lakh to 06 identified MRUs/MRHRUs have been released for necessary data collection based on which the Health Care Models would be piloted in the selected regions. In Addition to this GIA of Rs 1.00 Lakh to 12 participating units in this project has been released to provide incentives for ASHA workers for necessary data collection. The study is planned in two phases. In Phase-I, the data collection is achieved and data cleaning and further analysis is in process. Based on which the Health Care Models would be piloted in the selected region in Phase-II.

❖ **Clinical trial by MRHRUs**

Existing network/infrastructure of MRHRUs are utilised for undertaking clinical trials. MRHRU Sirwar, Karnataka has undertaken clinical trial study "Evaluation of Add-on value of Iron-Rich Snack with Iron Folic Acid in the management of Iron-Deficiency Anaemia: A Cluster-Randomized Controlled Trial", targeting reproductive age group women.

Hands-on Workshop on Dashboard for MRHRUs





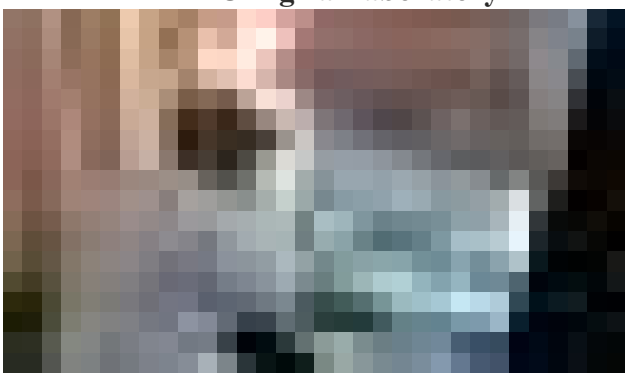
Laboratory Set Up at MRHRUs

MRHRU Tirunelveli Laboratory

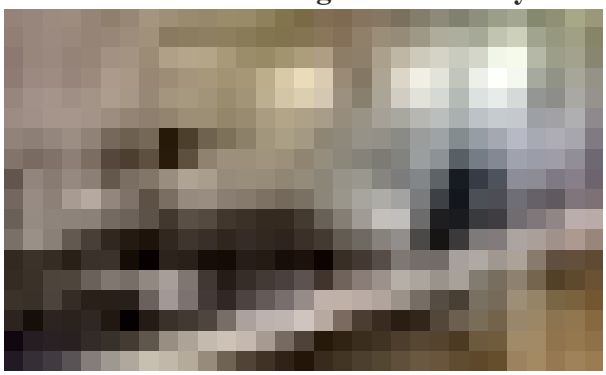
MRHRU Dahanu Laboratory

MRHRU Tigria Laboratory

MRHRU Chandragiri Laboratory



MRHRU Angara Laboratory



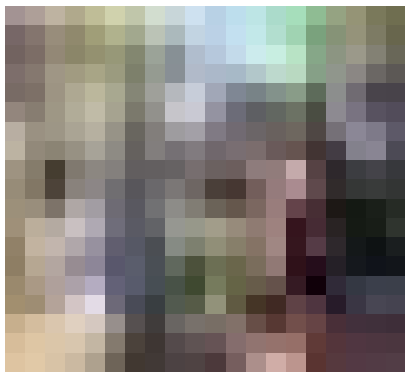
MRHRU Tirunelvelli Laboratory

MRHRU Tripura Laboratory

MRHRU Una, Haroli Laboratory

Population-Based Survey conducted in MRHRUs

MRHRU Kurhani



MRHRU Meghalaya

MRHRU Gorakhpur

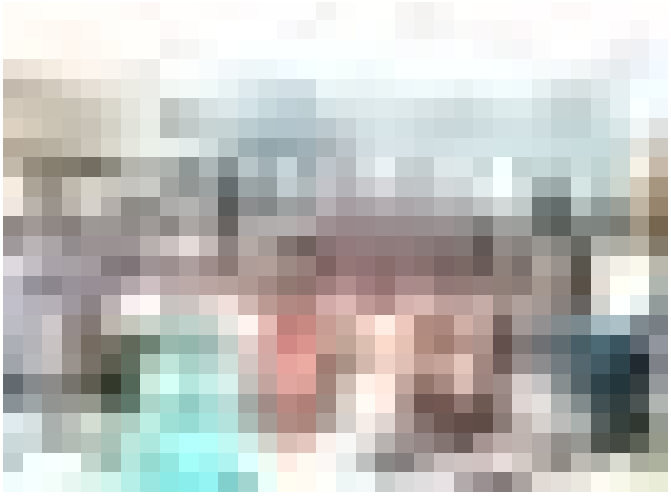
MRHRU Tripura

MRHRU Chandragiri

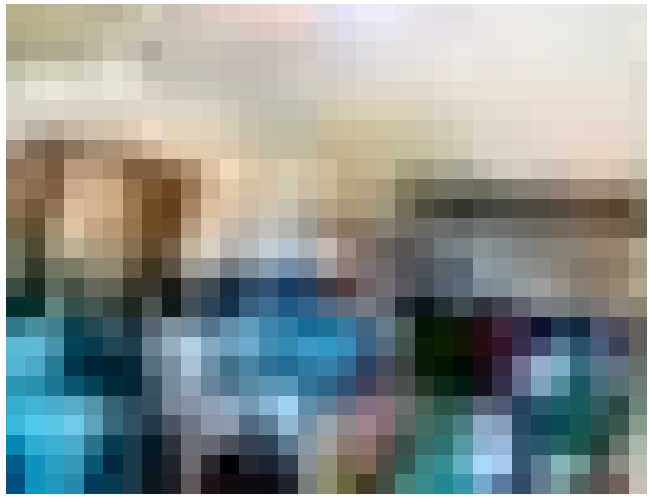
MRHRU Jheet

MRHRU Dahanu

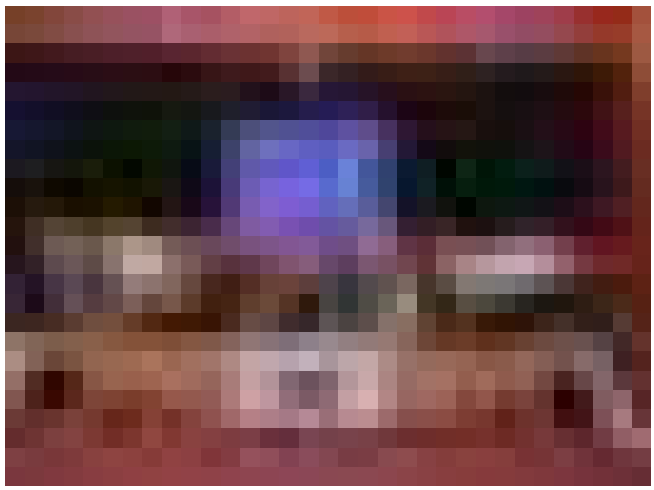
Training and Workshops conducted by MRHRUs



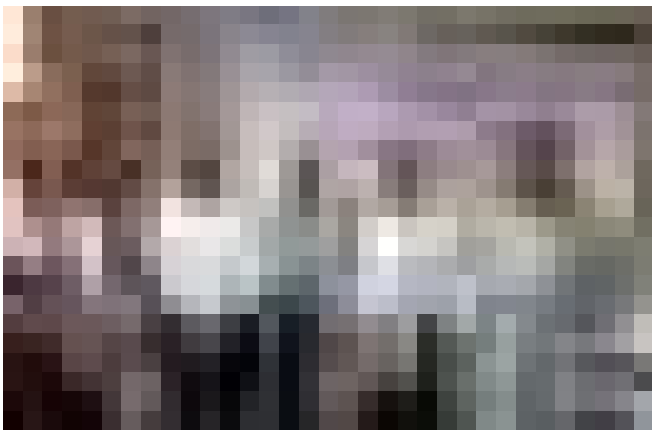
Training of Anganwadi Workers on infant and young child at MRHRU Dahanu, Maharashtra



Training on Spacing contraception to ASHAs and ANMs at MRHRU Dahanu, Maharashtra



Symposium on "Sickle Cell Disease: Issues and Challenges in Tribal Regions" organized by MRHRU, Angara



Workshop on Research Methodology conducted at MRHRU Tripura

Health Camps Organised by MRHRUs

MRHRU Darjeeling

MRHRU Tripura

MRHRU Andaman & Nicobar

Chapter 8 Grant-in-aid Scheme for Inter-sectoral Convergence & Coordination for Promotion and Guidance on Health Research

8.1 The scheme was launched during 2013-14 aimed at providing support in the form of grant-in- aid for carrying out research studies to identify the existing knowledge gap and to translate the existing health leads into deliverable products. Special focus is on encouraging innovation, their translation, and implementation by collaboration and cooperation with other agencies by laying special stress on implementation research so that there is a better utilization of available knowledge. Continuation of the scheme from 2021-22 to 2025-26 (for 15th Finance Commission Period) was approved on 18th March 2021 at a total estimated cost of Rs. 124.71 crores.

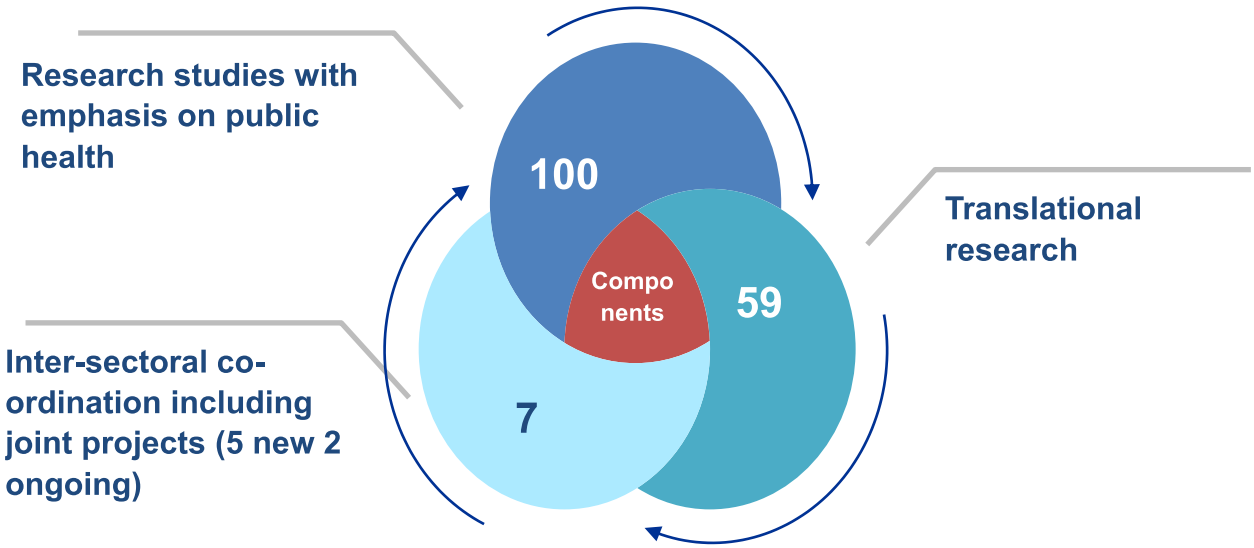
8.2 Objectives of the Scheme

- To support and encourage focused and deliverable research for estimation of disease burden/ development of new technologies/process, diagnostics, to address health research issues for affordable healthcare in the country.
- To support studies on the issues pertaining to technology access particularly in the context of Gender & Child health care and under privileged.
- Translation of leads into products & processes for adoption in public health systems.
- Development of collaborative health research projects involving different Science & Technology departments/organizations.

8.3 Status of Implementation

i. Physical Achievement:

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Research Studies with Emphasis on Public Health	40	74	22	8	40	2	26	19	5	28	67	100 (Ongoing Projects Supported)
Translat-ional Research	-	12	11	-	4	-	1	24	38	30	58	59 (Ongoing Projects Supported)
Inter-Sectoral Coordina-tion	-	5	3	-	3	-	3	-	4	-	2	7 (5 New Project 2 Ongoing Project)
*Cost-effective analysis	-	9	5	3	2	-	1	Being undertaken through HTA.				
Total projects supported	**40**	**100**	**41**	**11**	**49**	**2**	**31**	**43**	**47**	**58**	**127**	**166**



Inter-sectoral co-ordination: Joint projects funded under GIA scheme in 2024-25:

01

Institute: CSIR-CDRI, Lucknow

Topic: Bulk Synthesis and Dog Toxicity Study of Small Molecule Smac Mimetic as an Anticancer IND Candidate.

02

Institute: CSIR-Indian Institute Of Chemical Technology, Hyderabad

Topic: HDAC Inhibitor a potential clinical candidate for Idiopathic pulmonary fibrosis (IPF)

03

Institute: CSIR- Indian Institute of Integrative Medicine, Jammu.

Topic: Clinical development of IIIM290 CDK9T1 inhibitor for metastatic pancreatic cancer.

04

Institute: CSIR- Indian Institute of Integrative Medicine, Jammu.

Topic: Development of a probiotic formulation containing Lactiplantibacillus plantarum Lp91 (MTCC 5690) and its preclinical safety and efficacy study for human use..

05

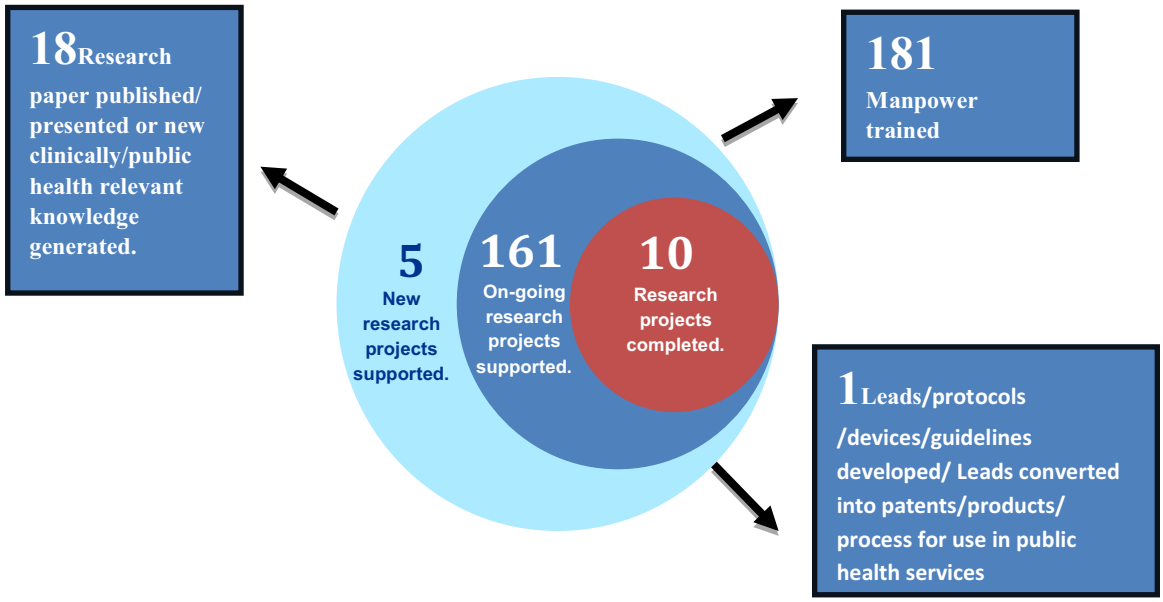
Institute: ICAR- National Dairy Research Institute, (NDRI) Karnal.

Topic: Pre Clinical efficacy safety and toxicity of colostrum whey protein derived formulations ('Pro Pep') in animal model.

ii. Financial Achievement:

Year	Actual Expenditure for GIA scheme (Rs. in Crores)
2013-14	4.95
2014-15	23.26
2015-16	13.99
2016-17	15.99
2017-18	28.14
2018-19	4.5
2019-20	16
2020-21	15.98
2021-22	15.43
2022-23	22.43
2023-24	28.8
2024-25 (up to 31st Dec, 2024)	**22.94**

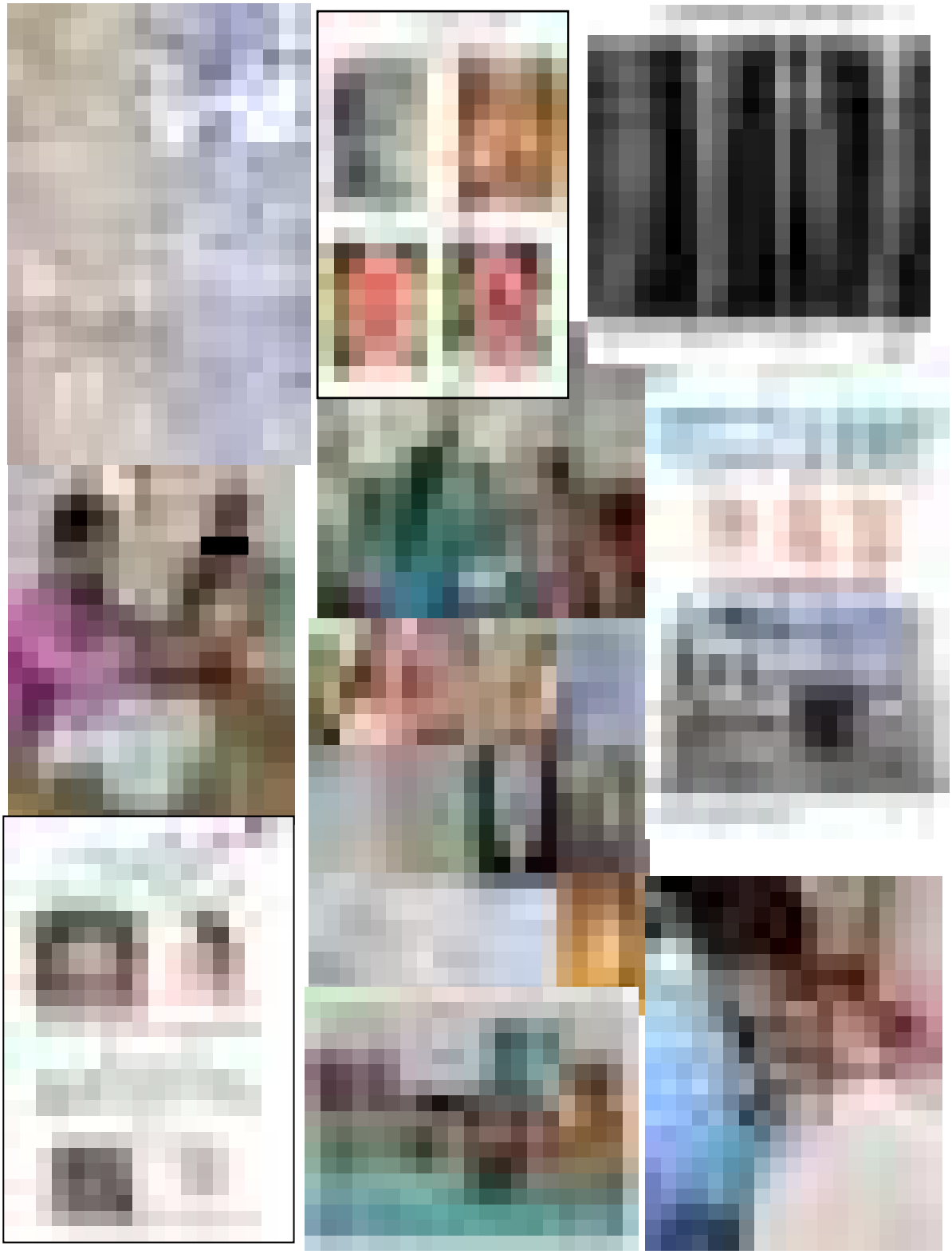
8.4 Significant achievements of the Scheme during the Year 2024 (till December 31st 2024)

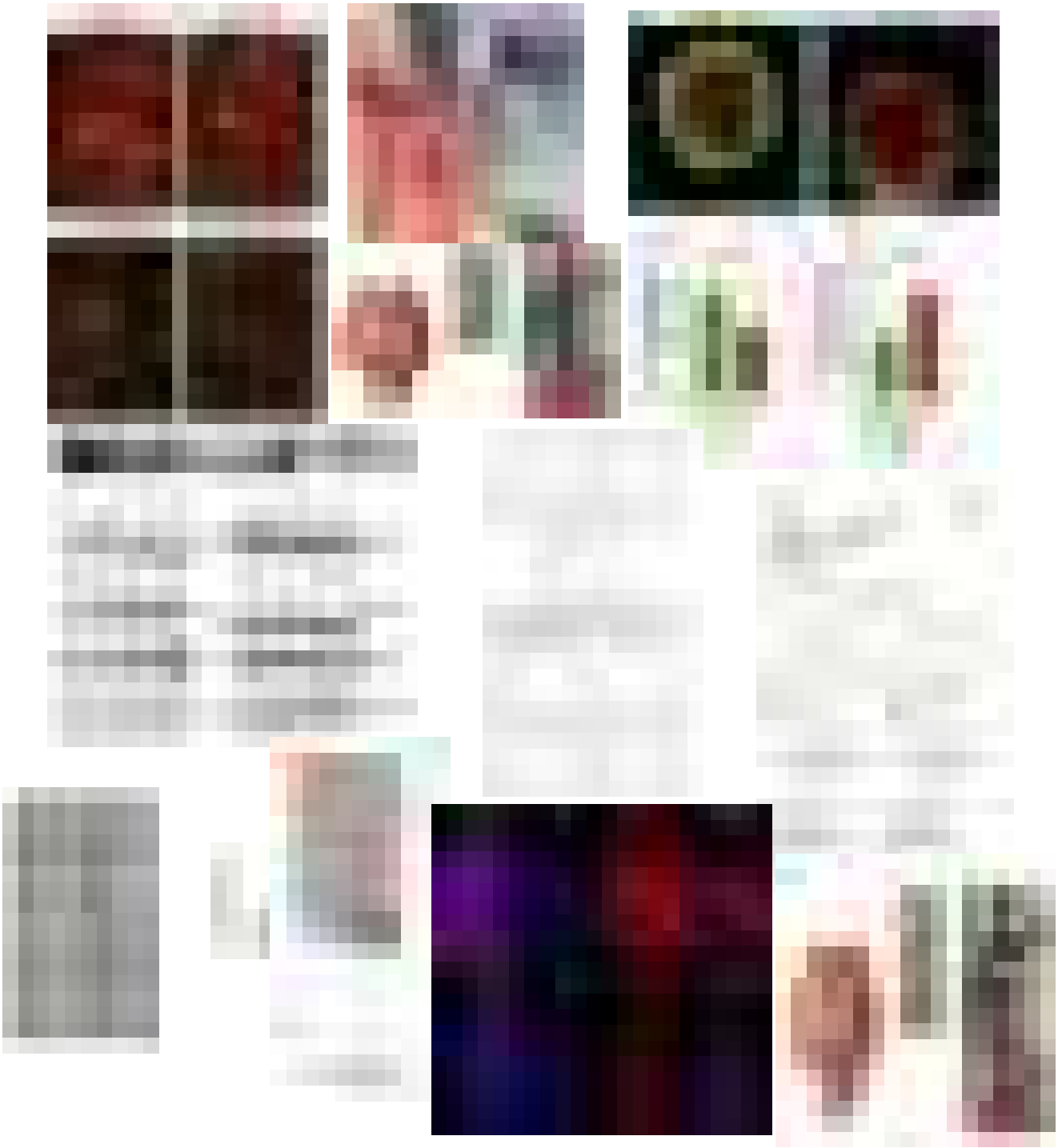


8.5 Scientific achievements in the completed projects funded under the scheme

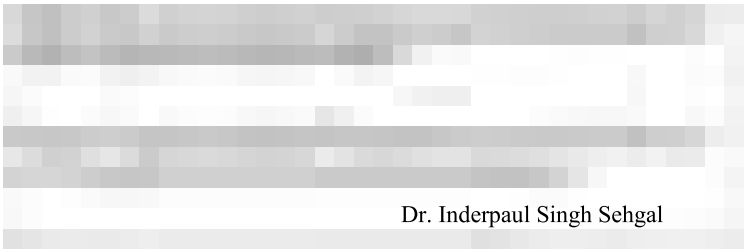
- Mobile based application for Infectious Disease Symptoms tracking in AWWs and Schools.
- Development of comprehensive Cognitive Retraining manual focusing on domains – Memory, Attention, Emotion Processing, Language, and Visuospatial orientation.
- Development of Home-based rehabilitation manual for the control arm of the project, to practice at home.
- An e- Health intervention for early identification, screening and intervention for gaming disorder among Indian population.
- Development of 1-Napthol as new biomarker by using 1-napthol acetate as a substrate for stimating the acetylcholinesterase levels in human blood.
- Development of Digit in Noise Test in Hindi and implementing a combination of online and in-person hearing health care among (https://pgihearingcare.com/wp).
- In-vivo & in vitro biomechanical characterization of brain tissues and brain tumors by magnetic resonance elastography.

Glimpses of some completed and ongoing research projects funded under Grant in Aid Scheme





Glimpses of the feedback received from the investigators for the Project Management and Implementation Unit (PMIU) Grant in Aid Scheme



Dr. Inderpaul Singh Sehgal

Dr. Kalaiselvi Selvaraj

Dr. V. Dhananjayan

Chapter 9 Human Resource Development for Health Research

9.1 Introduction

The Human Resource Development Scheme of Department of Health Research is intended to create a pool of talented health research personnel in the country by upgrading skills of faculty of Medical Colleges/Institutes, mid - career Scientists, medical students, etc., by specialized training in priority areas of health research in leading national and international institutions. The trainees are encouraged to develop and take up research projects for addressing critical national and local health problems. Financial assistance is provided to Institutions for up-gradation of infrastructure so that they may provide training with state of the art technologies.

9.2 Guidelines of HRD scheme were amended in May 2024, adding seven new components enhancing scheme's scope. The scheme in its current format essentially covers the following components:

- Short-Term Studentship (STS)
- MD/MS/DM/MCH/DNB/DrNB/MDS Thesis Support Program
- MD/MS-Ph.D. Program
- Fellowship For Best Achievement In Biomedical Research (FAB-22)
- International Travel Grant Support For Non-DHR/ICMR Scientists & Researchers
- Workshops Funding Grant In Biomedical Research
- Non-Medical Fellowships For Ph.D. (Biomedical Research Eligibility Test - BRET)-
- Short-Term Fellowship Abroad
- Long-Term Fellowship Abroad
- Short-Term Fellowship At Indian Institutes
- Long-Term Fellowship At Indian Institutes
- Women Scientists Fellowship
- NRI/PIO/OCI Research Support Programme
- Support To Institutions and Scientific Professionals /Bodies / Associations
- Start-Up Grant for Induction into Biomedical & Health Research

9.3 Objectives:

- To increase the overall availability of trained personnel for health research from Medical Colleges across the country through scholarships, Fellowships and career advancement Scheme etc. for faculty, etc. and young medical doctors and other Scientists to take up medical and health research as a career.
- To focus on the creation of a cadre of trained medical/health researchers in specific identified priority

areas of health research viz., Clinical Trials; Toxicology; Good Clinical Practices (GCP); Good Laboratory Practices (GLP); Quality Control (QC) & QA; Genomics; Proteomics; Clinical Psychology, Geriatrics; Modern Biology; Biotechnology; Stem cells; Genetics; Drugs chemistry; and operational research etc.

- To create support, nurture and encourage the trainees from Medical Colleges, etc. to forge linkages with other Scientists from universities, research Institutes etc. to develop multidisciplinary and multi-sectoral teams necessary for addressing critical national and local health problems.
- To establish suitable online teaching and learning facilities to facilitate training in health research in various subjects in a more effective manner and for promoting biomedical/health research.

9.4 The scheme is approved during 15th Finance Commission Period (2021-22 to 2025-26) and support under the program is imparted in following categories:

❖ **Short-Term Studentship (STS):**

Short-Term Studentship (STS) program, earlier run by Indian Council of Medical Research (ICMR), aims to encourage interest in biomedical and clinical research among undergraduate medical, and dental students. The program provides a platform for students to gain hands-on research experience under the guidance of experienced mentors. Selected students undertake a short-term project during their vacation & explore diverse areas of medical research.

a) Short Term Fellowship (STS)-2023: A total of 1038 students were selected and stipend amounting to ₹5,19,00,000/- was disbursed.

b) Short Term Fellowship (STS) STS-2024 (1st and 2nd year): For the year 2024-25, a total of 2,065 students were recommended for selection from NMC/DCI-recognized medical and dental colleges in India. The grant amounting to ₹3,09,75,000/- was disbursed to support the selected students in carrying out their research work.

c) Short Term Fellowship (STS) -2024 (3rd year): 506 students were selected from NMC/DCI-recognized Medical/Dental Colleges across India. The stipend and certificate will be issued after submission of the final report in the financial year 2025-2026.

❖ **MD/MS/DM/MCh/DNB/DrNB/MDS Thesis Support Program:**

The program aims to support and encourage medical/dental college students pursuing post-graduation courses to do good-quality biomedical research and also to improve the visibility and dissemination of their research work to a larger research audience. Medical/dental graduates who are admitted to the post-graduation courses in medical/dental institute/colleges in India recognized by NMC/DCI/NBE can apply within one year of PG admission/joining whenever the call is opened annually by DHR.

For the year 2023-24, a total grant of Rs. 25 lakh grant support was released to 101 selected students. In the year 2024-25; total grant of Rs. 1.24 crores also has been released to the selected 506

fellows.

- **Young Medical Faculty Ph.D. Programme:** The program has been designed with broad aim to motivate young medical faculty working on regular positions in INIs/medical colleges in India to pursue Ph.D. and thereby creating a pool of clinician scientists in the country who can undertake impactful biomedical research. Memorandum of Agreement (MoA) was signed with 27 INIs/medical colleges (in NIRF ranking). A total of 102 applications/proposals were received and after scientific evaluation a total of 66 medical faculties (clinical/para-clinical field) were selected as the first batch to pursue PhD under this new initiative in the year 2024-25. The first year grant of Rs. 10 lakh/faculty has also been released to these selected fellows.

- **Fellowship For Best Achievement In Biomedical Research (FAB):**

  It aims to recognize the achievements of the biomedical scientists and young researchers working as a regular faculty/scientist in Institute of National Importance (INIs)/UGC recognized institutions/ICMR Institutes/NMC recognized medical colleges for the research work which has been published & disseminated in national & international journals by the selected scientists in the field of biomedical research, as an research incentive to encourage and motivate them for future impactful biomedical research. A one-time research fellowship of Rs. one lakh will be awarded, to the selected scientists which can be used for several research purpose like; journal publications charges, travel for attending international and national conferences/seminar/symposium/workshop and research contingency. The call for proposals for the said scheme has been opened in the month of December 2024.

- **International Travel Grant Support for Non-DHR/ICMR Scientists & Researchers**

  The program aims to provide financial support researchers/scientists/PG students, for attending and presenting their research accomplishments/findings in international conferences/seminars/symposia for wider dissemination of the research work or mentoring/talk on any topic in biomedical sciences in workshops for training young researchers/faculties/medical students etc. A total of 248 applicants have been recommended for financial assistance in 2024-2025.

- **Workshops Funding Grant in Biomedical Research**

  The Workshops Funding Grant program supports the organization of workshops aligned with the DHR mandate, focusing on niche areas in biomedical and health research. This initiative aims to train faculty, researchers, and students across India, enhancing their skills and knowledge in specialized topics within biomedical sciences. During 2024–2025, a total of 24 workshops were approved for funding under the program.

- **Biomedical Research Fellowships For Scholars With Non-medical Background**

  The program is designed to motivate & support young science post-graduate applicants to pursue a Doctor of Philosophy (Ph.D.) under various disciplines in the field of biomedical sciences. Fellowships are awarded to pursue doctorate at UGC-Recognized Institutions, Universities,

Research Institutions, or Institutes of National Importance and 27 ICMR Institutes (registered under AcSIR-ICMR Faculty of Medical Research). The Biomedical Research Eligibility Test (BRET-2024) conducted by the National Testing Agency (NTA) on behalf of DHR-ICMR, introduced a new question paper pattern emphasizing aptitude, cross-disciplinary knowledge, and domain-specific expertise. The exam covers diverse subject areas, including Microbiology (Bacteriology, Virology, Parasitology, Entomology, Mycology), Biochemistry, Biostatistics, Veterinary Science/Medicine, Public Health, Nursing, Biotechnology, Social Behavioral Sciences (Anthropology, Sociology, Psychology), Nutrition, Pharmacology, and Biological Sciences (Life Sciences, Human Biology, Environmental Sciences, Zoology, Botany).The updated pattern ensures a comprehensive evaluation, promoting interdisciplinary learning and fostering innovation in health research. During 2024–2025, a total of 506 candidates were selected under this program 6.

❖ **Short Term Fellowship / Long Term Fellowship for training in Abroad**

In the year 2024-25, 10 long term fellowships (abroad) have been supported till date. Besides that, a total of 45 and 20 candidates have been provisionally selected for Short Term and Long-Term international Fellowships respectively.

Component	Financial Support
Short Term Fellowship in Abroad (15 days to 3 months)	A stipend of US$ 3000 per month which includes accommodation and other expenses. A maximum of Rs. 75,000/- which includes the cost of visa, SEVIS fee, taxi charges from place of duty to airport and back. (ii) A maximum of Rs. 20,000/- for overseas medi claim insurance expenses.
Long Term Fellowship abroad (6-12 months)	A stipend of US$ 3000 per month which includes accommodation and other expenses. A maximum of Rs. 75,000/- which includes the cost of visa, SEVIS fee, taxi charges from place of duty to airport and back. (ii) A maximum of Rs. 20,000/- for overseas medi claim insurance expenses.

❖ **·Short Term/Long Term Fellowships in Indian Institute**

Component	Financial Support
Short Term Fellowship in Indian Institute (1-3 months)	stipend up to Rs. 40,000 per month will be provided for a period of stay in the host institute, which is at a different station from the parent Institute. However, training in the same institute would not be considered for stipend and grant. One-time contingency grant of Rs. 30,000 (maximum) to meet the expenses for local conveyance, attending meetings
Long Term Fellowship in Indian Institute (6-12 months)	stipend up to Rs. 40,000 per month will be provided for a period of stay in the host institute, which is at a different station from the parent Institute. However, training in the same institute would not be considered for stipend and grant. One-time contingency grant of Rs. 30,000 (maximum) to meet the expenses for local conveyance, attending meetings

In the year 2024-25, 01 long term fellowship Indian has been awarded under this programme till date, in addition 06 short term fellowships have been awarded.

Fellowship Programme for Women Scientists:

This fellowship programme aims at encouraging women candidates to undertake biomedical research after a break in their career. In the year 2024-25 a total of 83 fellowships have been awarded till date including 57 new fellowships.

❖ **NRI/PIO/OCI Research Support Programme:**

This programme has been designed to provide contractual research positions to the Indian scientists settled abroad who are willing to come back to India on a fulltime basis or for short duration to pursue medical/ health research in India and take up health research projects in collaboration with Indian scientists, particularly in areas of national priority. In the year 2024-25, 01 NRI fellowship has been awarded and 02 ongoing cases have been supported under this programme.

❖ **Support to Institute for imparting training:**

This programme aims at providing support to selected domestic Institutions for providing training in specially designated programmes/ identified priority areas. A grant upto Rs. 25 lakhs is provided for equipment, up-gradation, etc. and a grant of Rs. 10 lakhs per year upto a period of 5 years is provided for recurring expenses and for conducting training programmes. In the year 2024-25, 32 institutes have been supported till December 2024. Approximately 2400 young researchers/ faculty members/ scholars received various kind of trainings such as advanced molecular biology, proteomics, genomics, and genetics etc.

❖ **Start Up Grant For Induction Into Biomedical & Health Research**

Recently the Programme guidelines have been revised to enhance the beneficiary pool. This programme now supports regular faculties and biomedical researchers who have recently completed Ph.Ds. (within the last 5 years) in biomedical/health sciences and having a maximum age of 45 yrs. Proposals received from top-ranking Research Institutions in NIRF rankings shall be given preference. A sum of Rs. 16 Lakhs per year or up to Rs. 48 Lakhs per research project for three years is given. The call for project proposals for this scheme has been opened in the month of December 2024. So far in the current financial year, 09 new start-up grants fellowship have been awarded under HRD scheme.

❖ **Fellowship Programme for Young Scientists:**

The Fellowship programme aims at fulfilling the objectives of creation of inclination/ attitude of research among the young bright students from the medical colleges/ universities. In the year 2024-25, 47 ongoing fellowships have been supported/ funded under this programme. This programme has been subsumed into other components of the scheme.

9.5 Major initiatives of the scheme in 2024-25

❖ Regular webinars and workshop with the medical colleges, universities, research institutions and

stakeholders were conducted throughout the year to expand the reach of the scheme.

❖ During the Grant Writing workshop held in RMC NE Dibrugarh in the month of October 2024, a booklet on Quantitative and Qualitative Research Methodology and Grant Writing was launched for the guidance of young researchers and scholars.

9.6 Status of Implementation of the Scheme

The achieved physical and financial targets of the scheme since the financial year 2024-25 are shown as below:

Year-wise Physical Achievement of HRD Scheme

Year	Number of fellowship supported
2013-14	13.00
2014-15	42.00
2015-16	70.00
2016-17	104.00
2017-18	191.00
2018-19	92.00
2019-20	200.00
2020-21	127.00
2021-22	196.00
2022-23	232.00
2023-24	230.00
2024-25	4291*

* till 31.12.2024

Year-wise Financial Achievements of HRD Scheme

Year	Budget Estimate	Revised Estimate	Actual Expenditure
2013-14	45	4.5	1.51
2014-15	19	5	4.98
2015-16	8	10	9.46
2016-17	13	16	15.39
2017-18	30	26	24.28
2018-19	30	15	13.29
2019-20	33	27	27.48
2020-21	34	18	16.32
2021-22	27	27	24.56
2022-23	30	30	27.02
2023-24	33.86	29.8	28.59
2024-25	81	65	46.57*

*** till 31.12.2024**

9.7 Significant Achievements of Scheme in 2024-25

- In the financial year 2024-25, 4291 fellowships / grants have been awarded and a total of 55 research paper have been published in peer review Index journals.
- Under support to institute category, 2147 researchers have been trained and 32 institutes have been supported in the different biomedical areas.

9.8 Some of the Illustrious publications:-

- Alzheimer's Disease Neuroimaging Initiative. Longitudinal Patterns of Cortical Atrophy on MRI in Patients With Alzheimer Disease With and Without Lewy Body Pathology. Neurology. 2022 Oct 24;99(17):e1843-e1852. doi: 10.1212/WNL.0000000000200947. PMID: 36123123; PMCID: PMC9620811. Impact factor: 10.1, ISSN No: 0028-3878
- "Nanoencapsulation of apocynin and vanillic acid into Hydroxypropyl Beta Cyclodextrin method: Preparation, characterization, and evaluation of bioavailability. At international conference on "Bridging the Gap: On the Intersection of Science, Technology, Education, Commerce and management" (Best Research Paper award)
- "Nanoencapsulated bioactives ameliorated Fumonisin B1 induced aberrant lipid metabolism in C57BL/6 mice model". Held at 11th International Conference of Laboratory Animal Scientists' Association (LASA), India, On Advancements of 3R's in Biomedical Research, Laboratory Animal Science and Welfare:International Perspectives. (Best poster award)
- "T-2 toxin induced toxicity in HT- 29 cells" , under communicated to Environmental Research journal (Elseiver).
- Microsatellite polymorphism based genetic variation in two sympatric species of Drosophila: D. bipectinate and D. malerkotliana. Ecological Genetics and Genomics 100272, 2024.

❖ “In vitro Study on Anti- proliferative and Anti- cancer Activity of Picrosides in Triple Negative Breast Cancer” Deepika Soni, Divya Wahi, Saurabh Verma*. Med Oncol. 2024 May 8; 41(6):143. doi: 10.1007/s12032- 024-02397-3. PMID: 38717628

Chapter 10 Health Technology Assessment in India (HTAIn)

Introduction

10.1 India's Universal Health Coverage (UHC) goal aims to provide healthcare access to its vast population. To achieve this, the National Health Policy emphasizes increasing public healthcare spending to 3% of GDP. This shift aims to significantly reduce out-of-pocket expenses for citizens.

10.2 To maximize the impact of this increased investment, the Government of India recognizes the crucial need for efficient resource allocation. In order to support this humungous task, the Department of Health Research (DHR) has established the Health Technology Assessment (HTA) mechanism.

10.3 HTA is a multidisciplinary process that systematically evaluates the medical, social, economic, and ethical aspects of healthcare technologies. It aims to ensure that these technologies are safe, effective, and cost-effective, ultimately providing the best value for patients. By conducting rigorous HTA, the government can make informed decisions about healthcare interventions, ensuring that every rupee spent maximizes health outcomes for the Indian population. The HTA India is now an attached office under the department of Health Research.

Health Technology Assessment in India (HTAIn)

10.4 Department of Health Research, MoHFW initiated a pilot programme on Health technology Assessment (HTA) in April 2017 for evaluation of appropriateness and cost effectiveness of available and new health technologies in the country as part of "Research Governance" mandate of the Department. In June 2021, the HTA was approved as a sub scheme under the umbrella Scheme of Human Resource and Capacity Development. Health Technology Assessment in India (HTAln) has been approved for establishment as an attached office with 4 divisions by the Hon'ble Minister of Health and Family welfare. The Department of Expenditure has also approved the constitution of the attached office in Department of Health Research

10.5 HTAIn is responsible for analysing evidence on the cost-effectiveness, clinical effectiveness, and equity implications of deploying health technologies, including medicines, devices, and health programs. Through Health Technology Assessments (HTA), HTAIn supports efficient utilization of the limited health budget and aims to improve access to quality healthcare while reducing out-of-pocket expenses for citizens.

10.6 As a fully functional mechanism, HTAIn plays a crucial role in informing healthcare decisions. In the past four years, HTAIn has provided valuable support to various divisions within the health ministry at both the central and state levels, enabling evidence-based decision-making across the healthcare spectrum.

10.7 **Objectives and Significance of HTAIn:**

- To undertake HTA studies aiming at maximising health in the population, reducing out of pocket

expenditure (OOP) and reducing inequity.

- To support the process of decision-making in health care at the Central and State policy level by providing reliable information based on scientific evidence.
- Develop systems and mechanisms to assess new and existing health technologies by a transparent and inclusive process.
- To appraise health interventions and technologies based on available data on resource use, cost, clinical effectiveness, and safety.
- To collect and analyse evidence in a systematic and reproducible way and ensure its accessibility and usefulness to inform health policy.
- Disseminate research findings and resulting policy decisions to educate and empower the public to make better informed decisions for health.

10.8 Structure of HTAIn

Health Technology Assessment in India (HTAIn) comprises an in-house Secretariat, a Governing Board, Technical Appraisal Committee's (TAC), a topic prioritization committee, Resource Hubs, Resource centres and Technical Partners (TPs).

Fig: HTAIn Structure

HTAIn Secretariat

- The HTAIn Secretariat serves as the central coordinating body within the organization. It facilitates communication and collaboration among User Departments, the Technical Appraisal Committee (TAC), Technical Partners, and Resource Centers.
- The Secretariat comprises a multidisciplinary team, including Scientists, Economists, Health

Policy Analysts, Financial Consultants, Program Managers, Data Entry Operators, and Multi-Tasking Staff. The Secretariat provides essential support to Technical Partners and Resource Centers, including coordinating study activities and offering necessary assistance as required. In certain cases, the Secretariat may also directly undertake the study of specific topics.

- ❖ Furthermore, the Secretariat is responsible for organizing and conducting all TAC and Board meetings, as well as stakeholder consultation meetings. To ensure transparency throughout the study process, the Secretariat maintains regular communication and receives updates from Technical Partners and Resource Centers

10.10 Topic Prioritization Committee

A Topic Prioritization Committee was established this year to prioritize the topics received by the HTAIn Secretariat. This committee assesses topics based on their relevance, the availability of evidence on clinical effectiveness, and ethical and equity considerations. The committee then guides the development of proposals for submission to the Technical Appraisal Committee. To date, the Topic Prioritization Committee has convened five meetings, reviewing a total of 64 studies for prioritization.

10.11 Technical Appraisal Committee (TAC)

- ❖ The Technical Appraisal Committee (TAC) is a multidisciplinary body comprising experts from various fields, including economics, clinical medicine, research, social sciences, and health policy. Depending on the specific study, the TAC may include co-opted members with relevant expertise. An eminent individual typically chairs the Committee. The TAC plays a crucial role in the HTA process, providing guidance and oversight at various stages, including feasibility assessments, topic allocation, proposal development, review of outcome reports, and formulation of recommendations. The Committee ensures the quality and rigor of HTA studies conducted by HTAIn.
- ❖ As of December 31, 2024, forty-six (46) TAC meetings have been held at the Department of Health Research (DHR) to review HTA proposals submitted by Technical Partners and to discuss potential challenges that HTAIn may encounter in the Indian context, such as defining the appropriate perspective, addressing equity issues, and ensuring the availability of robust evidence. In the current academic year, seven (7) TAC meetings were conducted, reviewing more than 70 studies.

10.12 HTAIn Board

The HTAIn Board was established in 2017 as the highest decision-making body within the HTAIn governance structure. It is responsible for reviewing and endorsing/approving the outcomes and recommendations of HTA studies approved by the Technical Appraisal Committee (TAC). The Board comprises a diverse group of stakeholders, including policymakers, clinicians, bureaucrats, and experts from various government bodies (both central and state). One board meeting was organized this year approving the final recommendation given on 17 studies.

10.13 Regional Resource Hubs / Centers

- ❖ The Department of Health Research (DHR) conducts Health Technology Assessments (HTAs)

through a network of Regional Resource Centers recognized for their expertise in this field. In addition to conducting the HTA studies, these centers play a crucial role in

a) Capacity building: Assisting in building the capacity of State/UT governments in HTA.
b) State support: Providing support to States/UTs in conducting HTA studies.
c) Study execution: Undertaking HTA studies allocated to them by the HTAIn Secretariat.
d) Liaison with State/UT government officials to raise awareness about the importance of Health Technology Assessment (HTA) for evaluating health interventions.

❖ To enhance governance and technical capacity, six high-performing Resource Centers strategically located across the country have been designated as Resource Hubs in the current financial year. These hubs will:

a) Provide support to other centers: Offer guidance and support to other centers in conducting HTA studies.
b) Conduct state sensitization workshops: Organize workshops to raise awareness about HTA among state-level stakeholders.
c) Support HTA implementation: Facilitate the implementation of HTA findings at the state level.

❖ ·Currently, the following institutes have been established as Regional Resource Centers/Hubs:

HTAIn Resource Hubs

1. Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh.
2. National Institute for Research in Reproductive and Child Health (NIRRCH), Mumbai
3. Indian Institute of Public Health (IIPH), Shillong
4. National Institute of Epidemiology, Chennai
5. Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry.
6. Indian Institute of Public Health (IIPH), Gandhinagar

HTAIn Resource Centers

1. Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Trivandrum
2. National Institute for Research in Tuberculosis (NIRT), Chennai
3. Regional Medical Research Center (RMRC), Bhubaneswar
4. Kalam Institute of Technology (KIT), Hyderabad
5. All India Institute of Medical Sciences, Rishikesh
6. State Cancer Institute and King George Medical University, Lucknow
7. National Centre for Disease Informatics and Research, Karnataka
8. Indian Institute of Public Health, Hyderabad
9. National Institute of Virology, Pune
10. All India Institute of Medical Sciences, Jodhpur
11. Indian Institute of Science (IISc.) Bengaluru

12. Indian Institute of Technology Delhi
13. Banaras Hindu University, Varanasi
14. GMC, Tanda, Himachal Pradesh
15. Indian Institute of Technology, Kanpur.
16. Tata Medical Hospital, Mumbai
17. Armed Forces Medical College, Pune
18. All India Institute of Medical Sciences, Bhopal
19. Indian Institute of Public Health-Delhi

❖ In the year 2024-25, three new centres were identified as Resource centres by the Department making the total resource centres to 19 in addition to the 6 hubs.

10.14 Technical Partners

Technical Partners are institutes of the Central/ State Government which have been identified by HTAIn secretariat, with regards to their capacities, expertise and previous experience in the area of HTA/ Multi-centric research. Technical Partners are the research conducting body for HTAIn with their existing capacity/ manpower. The outcome reports of the studies conducted by technical partners are submitted to the HTAIn Secretariat for approval from the TAC and Board.The following institutes have been identified as Technical Partners of HTAIn, so far:

1. All India Institute of Medical Sciences (AIIMS), Delhi
2. National Institute of Medical Statistics (NIMS), Delhi
3. National Health Systems Resource Centre (NHSRC), Delhi
4. Public Health Foundation of India (PHFI), Delhi
5. Institute of Economic Growth (IEG), Delhi
6. Indian Institute of Health Management Research (IIHMR), Jaipur
7. Indian Institute of Public Health, Bhubaneshwar
8. Indian Institute of Technology, Chennai
9. Indian Institute of Technology, Mumbai
10. National AIDS Research Institute (NARI), Pune

10.15 Stakeholders

Stakeholders may include the user department e.g. Central/ State Govt., NHM, RSBY or NPPA, public health authorities, policy makers, medical insurers, regulatory agencies, industrial associations (e.g. manufacturers, suppliers, wholesalers, distributors and retailers), academicians or methodological experts, researchers, social groups, NGOs, patient group and so on. Stakeholders are individuals, organizations or communities that have a direct interest in the process and/or outcomes of the study under consideration by the HTAIn, therefore their participation is required to maintain the integrity of HTAIn and for a wider acceptance of its recommendations. Thus, a stakeholder's consultation meeting is called after completion of every study to take their feedback and inputs. Outcome reports are also uploaded on the website for the

feedback and suggestions. Conflicts of interests, if any, are addressed making the process transparent.

10.16 Process of HTAIn

- The User Department send their topic(s) to the Secretariat according to their priority area to conduct an assessment.
- The topic is reviewed by the HTAIn secretariat and is reviewed for prioritization by the topic prioritization committee. After prioritization, the topic(s) is presented to the TAC and a suitable Technical Partner/ Resource Centres is identified to allocate those topic(s) to conduct the study.
- The respective TP/ Resource Centres then submit a study proposal that contains the policy question(s), research question(s), objective(s), methodology, timeline, manpower required and the estimated budget.
- The proposal is submitted to the TAC for approval. TP/Resource hubs present the proposal before the TAC.
- After the appraisal and approval of the proposal by the TAC, TP/ Resource Centers conduct the HTA study and after completion, the Outcome Report is submitted to the Secretariat for recommendations of the TAC.
- Once the outcome report is reviewed and recommended by the TAC, it is submitted to the Board for final approval. The report is also uploaded in the website to get comments from Stakeholders or a meeting conducted with stakeholders to get their comments.
- The recommendations presented to the HTAIn Board after approval are subsequently sent to the User Department for implementation.

Key Phases of HTAIn ProcesFig. Overview of HTA

10.17 HTAIn Studies completed:

- Cost effectiveness of a microchip-based cellulose acetate electrophoresis rapid test (Gazelle) in comparison to HPLC for Sickle cell diagnosis and Beta Thalassemia.

- Cost Effectiveness Analysis of Thiamine Supplementation among pregnant and post-partum women to prevent infantile beriberi deaths
- HTA on iBreast for screening for Breast Cancer
- Effectiveness and cost-effectiveness of the COPD Prevention and Control Program in Kerala (SWAAS)
- HTA report on Pneumococcal Conjugate Vaccine to prevent mortality and morbidity of pneumococcal disease in Indian Adults: A Health Economic Evaluation
- HTA on Durgama Anchalare Malaria Nirakarana (DAMaN) Programme in Odisha
- HTA report on SMART Logistic networks with Drones for TB care and management
- HTA report on Cost-effectiveness of implementing the project SANKALP in the Rewari district of Haryana in India
- HTA Proposal Indo Japan mobile Diagnostic van enabling FDR Xair XD 2000 Main Portable Handheld X-ray device
- Price regulation & value Based Pricing for Anti-Cancer Drugs: Crizotinib for lung cancer, Nivolumab for Metastatic non-small cell lung cancer, Anzalutamide for prostate cancer
- HTA Outcome Report on Fractional flow reserve
- HTA Report on Cost Utility Analysis of Total Knee Replacement Vs Non-Surgical Management for Osteoarthritis Among the Older Adult Population (50 years and above): A Health Technology Assessment
- HTA Report on Cost effectiveness analysis for implementation of smoking cessation strategies at primary health care settings in Tamil Nadu
- HTA Report on vagal nerve stimulation
- Health Technology Assessment Report On Cost-Effectiveness Of TNF-Alpha Inhibitors, B-Cell Inhibitors And Jak Inhibitors For The Treatment Of Rheumatoid Arthritis In India
- AI X-Ray screening and interpretation tools for Tuberculosis (qXR v4.0, Genki and Mine 2
- HTA Proposal on Complete Profiling of Tuberculosis (TGS)

10.18 Other Major Activities

a) Launch of DHR website, HTA management information system (MIS) and the topic submission portal

- The HTAIn website was revamped and a management information system and a topic submission portal were integrated newly in to the revamped portal. The MIS will collate data on all key point indicators, track study status and progress, also will allow single window access of information related to individual resource centres. The topic submission portal will allow all stakeholders to submit their studies to HTAIn for health technology assessment.

- The revamped website and the portals were launched by Prof. V K Paul, NITI Aayog, in presence of Secretary DHR and JS, DHR during the HTA Conclave on 23rd Dec 2024, organized by HTAIn, DHR.

a) Launch of the Basic Certificate Course in Health Technology Assessment (HTA) for decision-makers

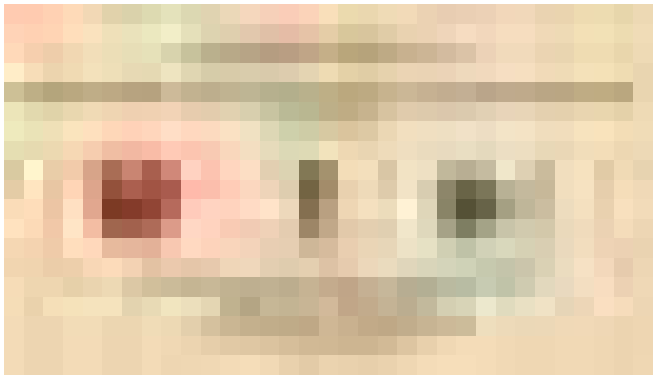
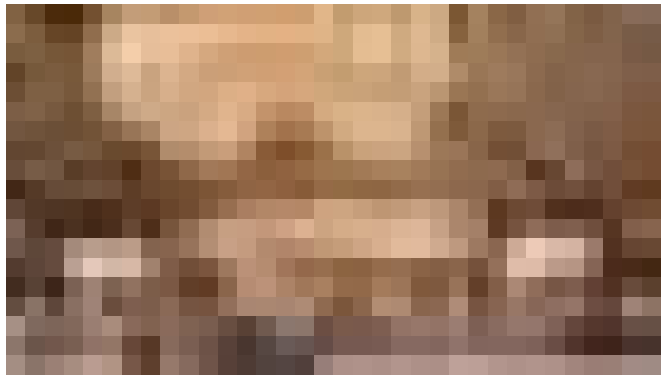
"DHR, in collaboration with PGIMER, Chandigarh & iGOT Mission Karmayogi, developed the first-of-its-kind-Basic Certificate Course in Health Technology Assessment (HTA) for decision-makers. The course was launched by Prof. V.K. Paul in the presence of Secretary DHR & JS, DHR during the HTA Conclave on 23rd Dec 2024, organized by HTAIn, DHR.

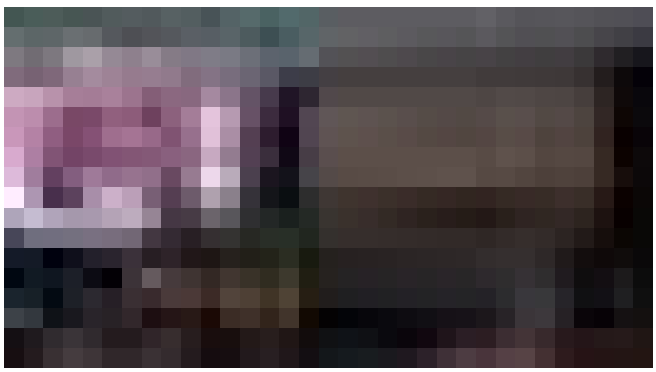
10.19 Capacity building on HTA- 2024-25

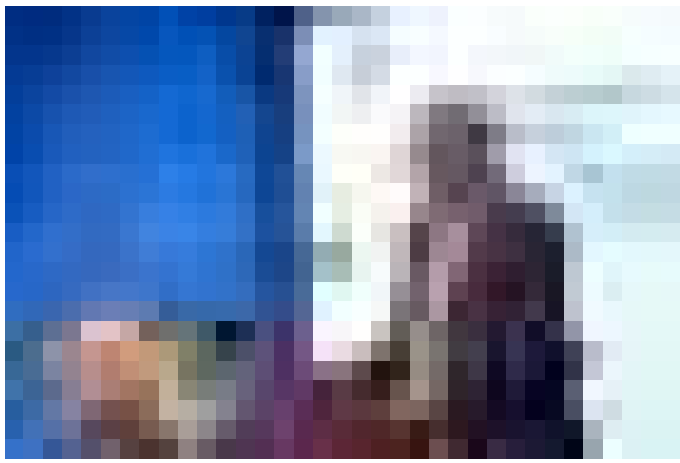
- Regional Consultative Workshop on Health Technology Assessment for Evidence-Based Informed Decision Making in India on the 16th of January 2024
- Health System Costing" at ICMR-NIV, Pune: NIV Pune: 6th February 2024
- Workshop: Overview of Systematic Review & Meta-analysis: NIE, Chennai, 16th Feb, 2024
- Regional Consultative Workshop on Research Priority for Providing Accessible and Affordable Healthcare for North East States of India 21st and 22nd February 2024
- 2nd TB innovation workshop on 16th of February 2024
- Economic Evaluation workshop on the (DHR HTAIn): 9th-10th March 2024
- Sensitization for Innovators on Health Technology Assessment -18th March 2024

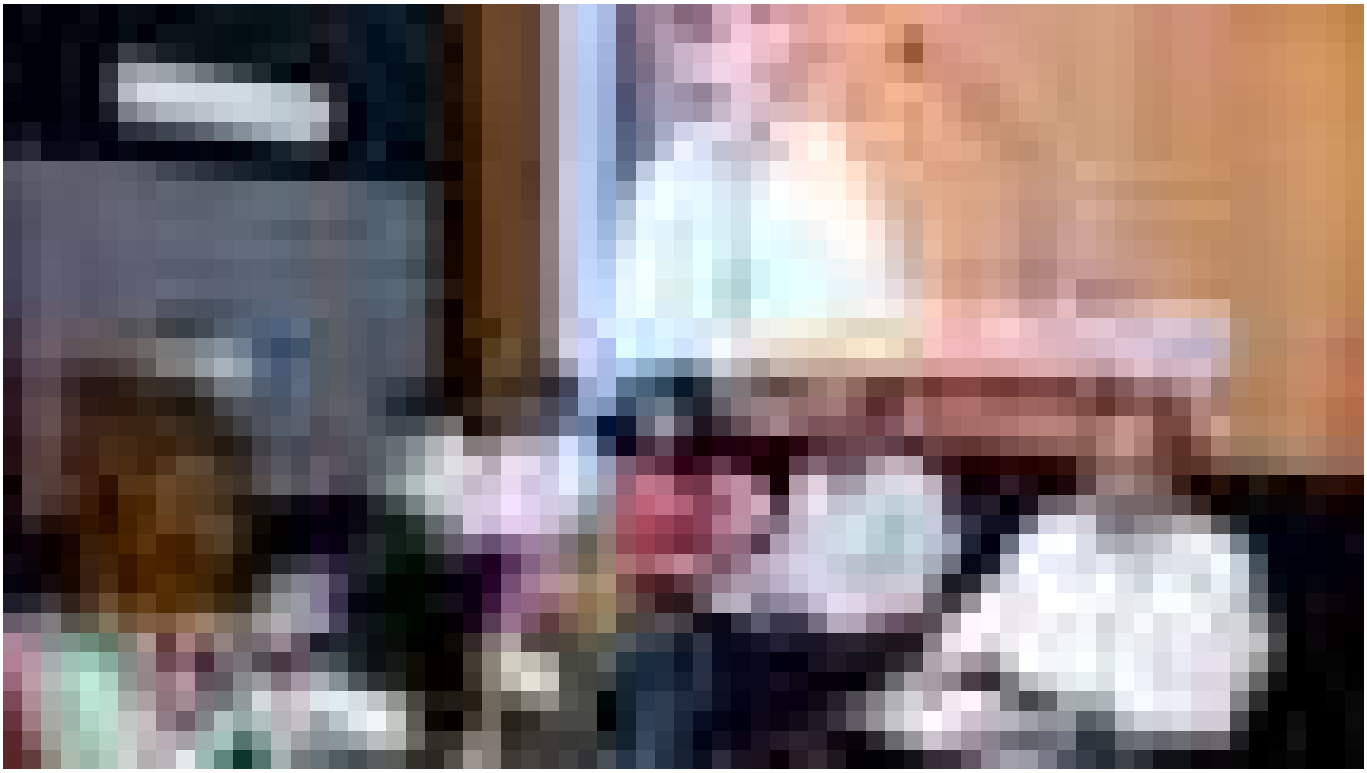
- Workshop on Evidence Synthesis in Non-Communicable Disease Control : NCDIR: 16th April 2024
- International Workshop on Communicating Science for Policy making: A Health Technology Assessment Perspective: 25th April 2024
- Dissemination workshop on HTA report on oral cancer screening: KSSSCI, Lucknow: 7th May 2024Sensitization workshop at JJ Medical College Mumbai: NIRRCH: 22nd May
- Systematic Reviews & Their Role in Health Technology Assessment: IIPH Hyderabad: 5th June 2024.
- Brainstorming on Indigenous HPV Vaccine Program Introduction Strategy in Maharashtra and Identifying New Topics for HTA, conducted at State Health Society Resource Centre (SHSRC) Pune: NIRRCH: 6th June 2024.
- Evidence Synthesis of Systematic Reviews: RMRC, Bhubaneshwar:18th June 2024
- State Consultative Meeting on Health Technology Assessment for Evidence-Based Health Policy-Making in India at Indian Institute of Science Bangalore on 27th June 2024
- An HTA sensitization meeting was held with Puducherry state government officials: JIPMER, Puducherry: 18th July 2024
- State Consultative Meeting on Health Technology Assessment for Evidence-Based Health Policy-Making in India at Indian Institute of Technology (IIT) Kanpur on 23rd August 2024
- Health System Costing Workshop: NIRRCH: Sept 3-4, 2024
- Workshop on Economic evaluation & Systematic review 11th -12th September 2024
- Sensitization Programme on Health Technology Assessment for Tamil Nadu State Health Officials: NIRT, Chennai:18th Sept 2024
- HTA Introduction" at AIIMS Jodhpur with MD/MS/MCH/DM PhD Scholars, MSc and MPH students: AIIMS Jodhpur: 19th Sept 2024
- Workshop: Introduction of Health technology Assessment: NIE Chennai: 24th Sept, 2024
- Workshop on, Health Technology Assessment in Healthcare "Unlocking the Human Potential: A Future of HTAIn" 30th September 2024
- HTA workshop on Systematic Reviews and Meta-Analysis: KSSSCI Lucknow: 3rd Oct 2024
- State sensitization workshop on Health Technology Assessment for Evidence Based Decision Making in India at Dadra & Nagar Haveli and Daman & Diu: 4th October 2024
- Workshop on Health Technology Assessment and RMNCH+A Planning and Management for District RCH Officers, Government of Maharashtra: 8th -10th October 2024
- Workshop on Health technology Assessment: AFMC, Pune: 5th Nov 2024
- Training of Government of Karnataka (GoK) Medical Officers regarding Health Technology Assessment (HTA) by Resource Centre at ICMR-NCDIR: 8th Nov, 2024
- Economic evaluation of healthcare programs: IIPH, Delhi: 18th -22nd Nov, 2024
- Training on "Strategic Approaches for HTA" supported by ITEC, MEA, DHR: IIPH Gandhinagar: December 2-15th, 2024
- Cancer Innovation Workshop: HTAIn Secretariat: 18th December
- HTA Conclave ARISE: 23rd December 2024

Representative images of Capacity Building Programs





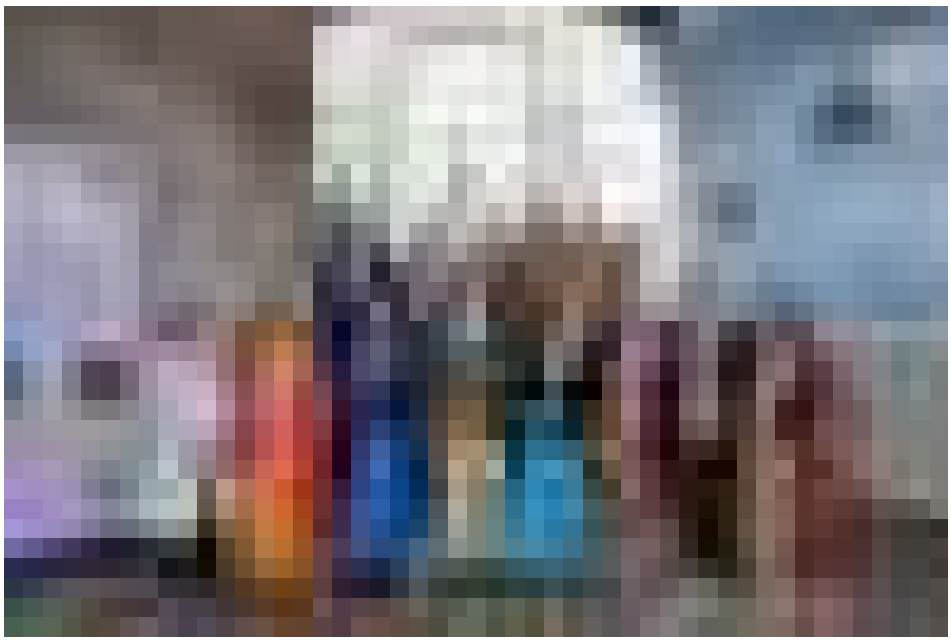


10.20 Major Highlights of 2024-25

- Launch of Master in Health Economics & technology Assessment (MSc HETA)
- 3 new resource centers were initiated
- 17 studies completed with Board Approval
- 57 HTA studies are ongoing
- HTAIn website was revamped with a management information system
- Online topic submission portal was developed
- HTA Compendium – A 7-year milestone was released
- 31 capacity building /Sensitization Programs
- 28 publications from HTAIn Resource centres
- Regional Consultative Workshop on Research Priority for Providing Accessible and Affordable Healthcare for North East States of India 21st and 22nd February 2024

10.21 Overall Summary

- Total HTA topics received: 270
- Total Studies completed: 86
- Total studies ongoing: 57
- Total Studies implemented: 53
- Total publications 217



TEAM HTAIn -2024-25

S No.	Zone	Established Centre (DIAMOnDS Regional Hub)	To be Established Centre (DIAMOnDS Centre)
1	North	AIIMS (New Delhi)	K.S.S.S.C.I. (Lucknow)
			Pt. B.D. Sharma P.G.I.M.S. (Rohtak)
			G.M.C. (Jammu)
			Dr. R.P. G.M.C. (Tanda)
2	South	CMC (Vellore)	J.I.P.M.E.R. (Puducherry)
			Cancer Institute (WIA) (Chennai)
			N.I.M.S. (Hyderabad)
			R.C.C. (Trivandrum)
3	North East	TMC (Kolkata)	A.I.I.M.S. (Bhubaneswar)
			R.I.M.S. (Imphal)
			C.C.H.R.C. (Silchar)
			A.I.I.M.S. (Patna)
4	West	TMH (Mumbai)	A.I.I.M.S. (Jodhpur)
			A.I.I.M.S. (Bhopal)

Map showing 18 Institutes having DIAMOnDS Labs

Chapter 11

Development of Tools/ Support to Prevent Outbreaks & Epidemics

11.1 During the 12th Plan period, a provision for revolving fund of Rs. 85 crores for 5 years was approved to facilitate rapid mobilization in the event of outbreak/disaster response to infectious disease outbreaks or natural/man-made disasters. The purpose of this budget line was to provide support in outbreaks management in coordination with relevant departments of MoHFW.

11.2 In the year 2021, the said budget line was apprised as a central sector scheme entitled "DEVELOPMENT OF TOOLS/ SUPPORT TO PREVENT OUTBREAKS & EPIDEMICS" for implementation during 15th finance commission period (2021-22 to 2025-26), with the budget provision of Rs. 50.71 crores for five years.

11.3 The aim and objectives of the scheme is to specially facilitate focused research to assist in dealing with emerging and re-emerging diseases, development of diagnostics kits, formulation of case management modules and preventive strategies, to provide the labs with essential kits, diagnostics and training of the available staff in times of National crisis. A Resource Centre is also established at National Institute of Virology (NIV), Pune which is envisaged to provide training, capacity building, and quality control and to ensure quality assurance of functional VRDLs. The scheme is completely need based and funds are sanctioned to various Medical Colleges / Institute to cater any outbreak situation. Budget to the tunes of Rs. 8.0 crores have been approved for this financial year 2024-2025.

11.4 The financial achievements of the Scheme are given in the table below:

Year	BE	RE	Actual Expenditure (upto Dec. 2024)
2024-25	8	8	5.49

Achievements	Exp. (in Rs. Crore)
Centre for One Health Kerala for "Establishing an early warning system through environmental surveillance of Avian influenza in Kerala"	0.251
To expand PAN India respiratory virus surveillance (ARI-SARI) of DHR-ICMR VRDLs to all the VRDLs of West Bengal and Kerala	2.7036
Evaluation of performance characteristics of four widely used rapid diagnostic tests for Scrub typhus IgM in India (JIPMER Puducherry)	0.1828
National Institute of Epidemiology (NIE), Chennai for "Model for Integrated Influenza Surveillance in Tamilnadu (MIST)"	0.8
RCVDL, NIV Pune for "Laboratory training and viral serological diagnostics QC and EQA program for VRDLs"	1.5533
TOTAL	**5.4907**

Chapter 12 Implementation of Schemes in North Eastern Region

12.1 Establishment of MRUs in State Government Medical Colleges:

(Rs.in lakh)

Sl. No	Name of state	Name of the Medical College with sanctioned MRU	Funds released from NE Head (Rs. In Lakh)			Funds released from General Head (Rs. In Lakh)
			2013-14 to 2020-21	2021-22 to 2023-24	2024-25 upto 31.12.2024	2024-25 upto 31.12.2024
1	Assam	Silchar Medical College and Hospital, Silchar	459.90	86.85	30.37	-
		Fakhruddin Ali Ahmed Medical College, Barpeta	459.97	219.41	53.02	-
		Jorhat Medical College, Jorhat	308.73	90.77	41.72	-
		Assam Medical College & Hospital, Assam	-	348.47	43.28	27.57
		Gauhati Medical College & Hospital, Guwahati, Assam	-	288.00	39.56	-
		Tezpur Medical College, Tezpur, Assam	-	140.00	0.00	36.09
		Diphu Medical College & Hospital, Diphu, Assam	-	140.00	120.82	-
2	Arunachal Pradesh	Tomo Riba Institute of Health & Medical Sciences, Naharlagun, Arunachal Pradesh	-	75.0	15.0	-
3	Manipur	Regional Institute of Medical Sciences, Imphal	519.52	88.14	42.83	-
		Jawaharlal Nehru Institute of Medical Sciences (JNIMS), PoroMadhya Pradeshat, IMadhya Pradeshhal, Manipur	-	14000	0	-
4	Mizoram	Zoram Medical College, Falkawn, Mizoram	-	72.6	38.3	-
5	Nagaland	Healthcare Laboratory & Research Centre, Naga Hosital Authority, Kohima, Nagaland	-	45.6	48.0	-
6	Tripura	Agartala Government Medical College,Agartala	652.29	100.32	113.84	-
Total			**2,400.41**	**1,883.2**	**586.7**	**63.7**

12.2 Establishment of MRHRUs in North Eastern States:

(Rs. In Lakh)

S. No	State	Location of MRHRU	ICMR mentor institute	Funds released		
				2013-14 to 2020-21	2021-22 to 2022-23	2024-25 up to 31.12.2024
1	Assam	PHC Chabua	ICMR-Regional Medical Research Centre, Dibrugarh	492.49	120.42	22.84
2	Tripura	Kherengbar Hospital, Khumulwng	ICMR-Regional Medical Research Centre, Dibrugarh	490.78	111.26	15.00
3	Nagaland	PHC, Niuland, Dimapur	ICMR-Regional Medical Research Centre, Dibrugarh	150.00	157.50	-
4	Meghalaya	CHC Sohra, East Khasi Hills	ICMR-Regional Medical Research Centre, Dibrugarh	149.99	157.50	-
5	Arunachal Pradesh	CHC Sagalee, Papumpare	ICMR-Regional Medical Research Centre, Dibrugarh	150.00	157.50	-
6	Mizoram	PHC, Aibawk	ICMR-Regional Medical Research Centre, Dibrugarh	150.00	157.50	-
Total				**1583.26**	**861.68**	**37.84**

12.3 Grant-in-aid Scheme for Inter-Sectoral Convergence and Coordination for Promotion and Guidance on Health Research in North Eastern States:

S. No	State	Name of the Institute	Funds released (Rs. In Lakh)			
			2014-15 to 2021-22	2022-23	2023-24	2024-25 up to 31.12.2024
1	Assam	ICMR-Regional Medical Research Centre, Dibrugarh	46.48	41.54	15.26	-
2	Assam	Assam Medical College. Dibrugarh	-	9.51	-	-
3	Manipur	National Institute of Technology, Imphal	9.20	-	6.89	-
4	Meghalaya	North Eastern Hill University, Shillong	98.34	-	14.47	-
5	Mizoram	Mizoram University, Aizawl	-	41.07	12.52	10.52
6	Assam	AIIMS, Guwahati	-	-	-	17.99
Total			**154.02**	**92.12**	**49.14**	**28.51**

12.4 Implementation of HRD Schemes in North Eastern Region for the year 2024-25

S.No	Component of the Scheme	State	Name of the Institute	Funds Released (Amount in Rs.)
1	Support to Institute	Arunachal Pradesh	Rajiv Gandhi University - Papum Pare Arunachal Pradesh– 791112	10,88,800.00
2	Support to Institute	Assam	ICMR Regional Medical Research Centre, Dibrugarh	27,64,700.00
3	Start Up Grant	Assam	Dibrugarh University	15,78,352.00
4	Start Up Grant	Assam	ICMR Regional Medical Research Centre, Dibrugarh	12,17,460.00
5	Short Term training Indian Institute	Assam	Tinsukia College	1,10,000.00
6	Short Term training Indian Institute	Assam	Dibrugarh University	1,50,000.00
7	Long Term training Indian Institute	Assam	Assam Agricultural University	2,70,000.00
8	Women Scientist	Assam	ICMR Regional Medical Research Centre, Dibrugarh, Assam	16,00,208.00
9	Women Scientist	Assam	Assam Medical College ,Dibrugarh, Assam	18,40,732.00
10	Women Scientist	Assam	KaviKrishna Laboratory ,KAMRUP ,ASSAM	19,28,044.00
11	Women Scientist	Assam	CSIR-North - East Institute of Science and Technology(CSIR-NEIST) ,Jorhat, Assam	17,25,932.00
12	Women Scientist	Assam	ICMR Regional Medical Research Centre, Dibrugarh, Assam	15,70,608.00
13	Women Scientist	Assam	Gauhati University ,Kemrup Meto ,ASSAM	18,69,244.00
14	Support to Institute	Assam	All India Institute of Medical Sciences,(AIIMS) Guwahati, Silbharal, Changsari, Karnrup Assam	42,94,000.00
15	Women Scientist	Assam	National Institute of Pharmaceutical Education and Research (NIPER)- Guwahati ,KAMRUP ,ASSAM	18,46,432.00
16	Support to Institute	Meghalaya	North Eastern Indira Gandhi Regional Instt. of Health and Medical Sciences, EAST KHASI HILLS, MEGHALAYA	25,66,826.00
17	Women Scientist	Mizoram	Department of Zoology, Mizoram University	18,48,620.00
18	Women Scientist	Mizoram	Department of Zoology, Mizoram University	18,79,620.00
19	Women Scientist	Mizoram	Mizoram University ,AIZAWL ,MIZORAM	15,03,182.00
20	Women Scientist	Mizoram	Mizoram University	10,28,632.00
21	Women Scientist	Nagaland	Directorate of Health and Family Welfare ,KOHIMA, NAGALAND	20,39,450.00
22	Support to Institute	Sikkim	Himalayan Pharmacy Institute	25,06,000.00
Total				**3,72,26,842.00**

A special call was launched for online research proposals for North East Region Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura on dated 03.09.2024 in different components (Women Scientist, Short Term Training at Indian Institute & Long-Term Training at Indian Institute, Support to Institute and Start up Grant) under "Human Resource Development (HRD) for Health Research Scheme" during the Financial year 2024- 25. Against this special call 35 proposals were received out of which 17 proposals got selected.

12.5 Establishment of VRDLs in Government Medical College:

(Rs.in lakh)

Sl.No.	Name of State	Name of VRDL	Funds Released	
			2013-14 to 2023-24	2024-25(till 31st Dec 2024)
1	Assam	RMRC Dibrugarh	1,142.50	35
		Gauhati Medical College, Guwahati	635.32	-
		Tezpur Medical College, Tezpur	297.25	-
		Jorhat Medical college, Jorhat	308.15	-
		Fakhruddin Ali Ahmed Medical College, Barpeta, Assam	328.43	-
		Silchar Medical College, Silchar	363.84	-
		Diphu Medical College & Hospital, Diphu, Assam(NEW)	197.10	46.4
		Lakhimpur Medical College & Hospital, Lakhimpur, Assam	197.10	46.4
		AIIMS Guwahati	197	31.4
		Nagaon Medical College & Hospital, Nagaon, Assam	-	197.1
2	Arunachal Pradesh	Tomo Riba Institute Health and Medical Sciences (TRIHMS), Naharlagun (NEW)	197.10	31.4
3	Manipur	Regional Institute of Medical Sciences (RIMS), Imphal	640.07	43.0
		Jawaharlal Nehru Institute of Medical Sciences (JNIMS), Imphal	329.03	-
4	Meghalaya	North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong	529.52	-
5	Mizoram	Zoram Medical College, Mizoram	310.85	15
6	Tripura	Government Medical College, Agartala	337.18	-
		Total	**6,010.54**	**445.7**

Chapter 13 Centre for Evidence based Guidelines

13.1 The Centre for Evidence based Guidelines was established in February 2023 at the Department of Health Research in collaboration with DGHS, NHSRC, various program divisions of DoHFW, and other stakeholders under the umbrella of Ministry of Health & Family Welfare (MoHFW). The main mandate is to develop evidence-based guidelines by systematically reviewing available evidence and applying the GRADE methodology to assess the certainty of evidence. In addition, the centre conducts capacity-building activities, including workshops on systematic reviews and the GRADE approach, as well as training sessions to enhance the competency of Guideline Development Group (GDG) and other stakeholders in guideline development methodologies. Through these initiatives, it ensures that healthcare decisions are informed by the best available evidence, ultimately improving patient care and health outcomes.

Four evidence-based guidelines are currently under development:

a) Stem cell therapy guidelines in various disease conditions

b) Guidelines for prevention, screening, diagnosis, treatment, and palliation of lung cancer

c) Empirical use of antibiotic in various clinical conditions

d) Malaria treatment guidelines

13.2 In September 2024, the Centre established 28 Technical Resource Centres (TRCs) across the country to assist in evidence synthesis by conducting systematic reviews and meta-analyses, thereby enabling consistent, high-quality guideline development.

13.3 Workshops organized by Centre for Evidence based Guidelines

a) GRADE methodology workshop for systematic review teams of lung cancer guidelines was held on August 1st and 2nd, 2024 at DHR

- A two-day in-person workshop on the GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) methodology was conducted on August 1–2,

2024, at the Department of Health Research (DHR). The primary objective was to provide comprehensive training to 25 systematic review teams involved in developing lung cancer guidelines. The workshop aimed to ensure uniform application of GRADE criteria across all systematic reviews, fostering consistency and methodological rigor in evaluating the evidence.

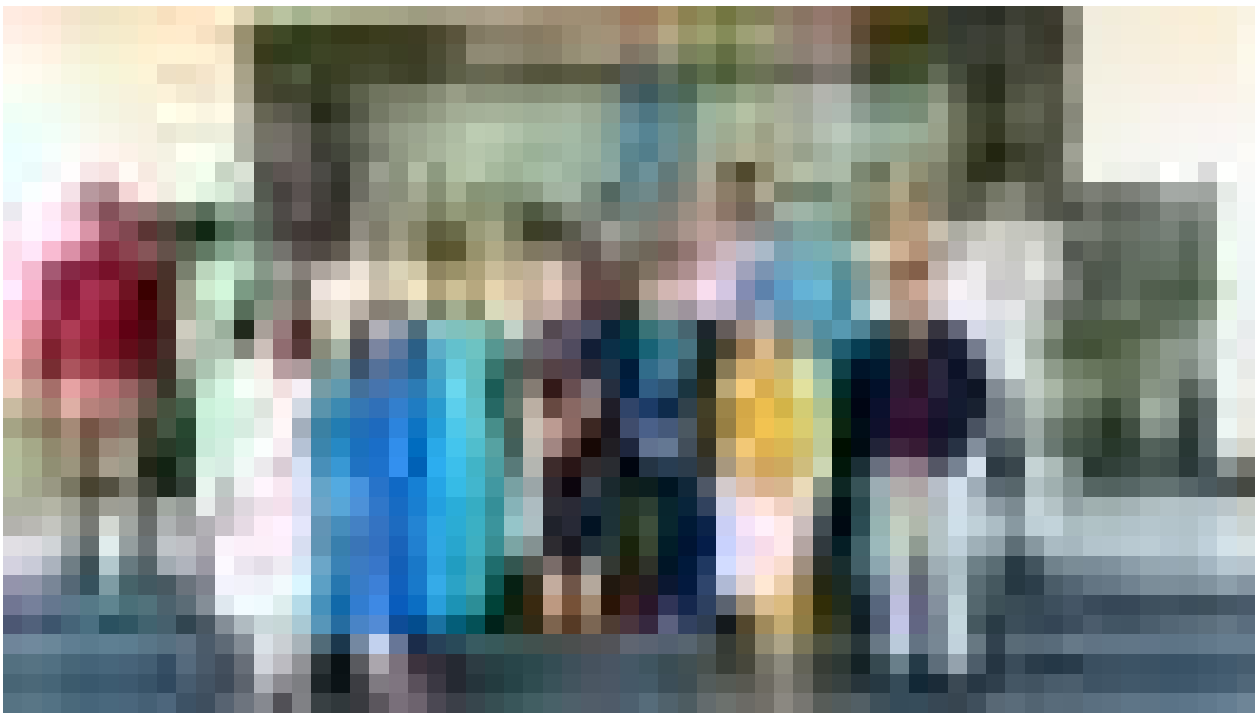
- During the workshop, participants were introduced to the theoretical underpinnings of GRADE, including its core components such as assessing the certainty of evidence, grading recommendations, and understanding the evidence-to-decision framework. Extensive hands-on training sessions enabled participants to practically apply GRADE methodology to real-world datasets.

b) Centre for guidelines scientists as resource persons for systematic review workshops

1. Evidence-based Guideline Development using the GRADE Approach was held on 19-20 October 2024, at PGIMER Chandigarh organized by ICMR Advanced Centre for Evidence Based Child Health (ACEBCH)

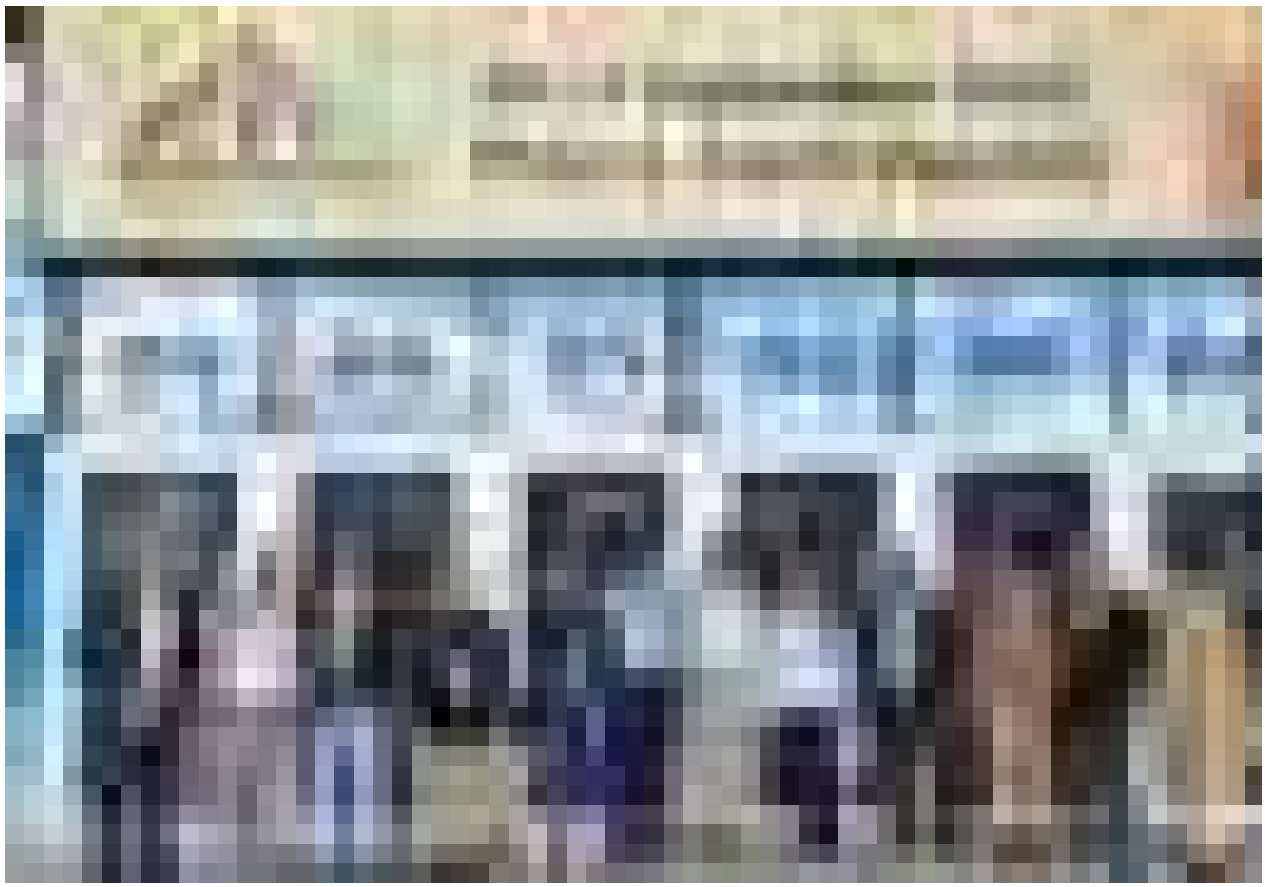
2. Systematic review workshop for MPH scholars at ICMR-RMRC, Bhubaneswar, from 2nd to 5th April, 2024

3. Training cum workshop on Systematic Review and Meta-Analysis, held from 24 to 26 July 2024 at ICMR–RMRC, Gorakhpur



c) Participation in International Conferences

Scientists from Centre for Evidence based Guidelines participated in Global EvidenceSummit



13.4 SystemAtic Reviews And Networking Support in Health (SARANSH)

- The SARANSH initiative was launched to strengthen regional capacity in conducting systematic reviews and meta-analyses across the country. This program provides funding support to medical institutes and colleges to organize high-quality, hands-on workshops focused on systematic reviews and meta-analysis methodologies.
- A key objective of SARANSH is to foster collaborative networking between participating institutes/colleges and the DHR-Centre for Evidence-Based Guidelines. This partnership aims to enhance the quality and scope of systematic reviews, aligning them with evidence-based guideline development processes.
- Eight SARANSH workshops have been successfully conducted out of 10 in different regions of the country. Rest two workshops will be conducted in January-February 2025.

S.No	States/UTs covered	Date and venue of the workshop
1	Gujarat & Rajasthan	14-19 October 2024, All India Institute of Medical Sciences, Jodhpur
2	Maharashtra, Daman & Diu and Dadar & Nagar Haveli	21-25 October 2024, All India Institute of Medical Sciences, Nagpur
3	Madhya Pradesh, Chhattisgarh & Odisha	12-16 November 2024, All India Institute of Medical Sciences, Bhopal
4	Karnataka & Goa	18-22 November 2024¸Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal
5	Tamil Nadu, Kerala, Puducherry & Andaman & Nicobar Islands	2-7 December 2024, Amrita School of Dentistry, Amrita Vishwa Vidyapeetham, Kochi
6	Uttar Pradesh & Uttarakhand	4-7 December 2024, King George Medical University, Lucknow
7	Assam, Manipur, Tripura, Arunachal Pradesh, Meghalaya, Mizoram, Nagaland & Sikkim	9-13 December 2024, National Institute of Pharmaceutical Education and Research, Guwahati
8	Punjab, Jammu & Kashmir, Ladakh, Himachal Pradesh, Chandigarh, Haryana & Delhi	18-22 December 2024, All India Institute of Medical Sciences, New Delhi

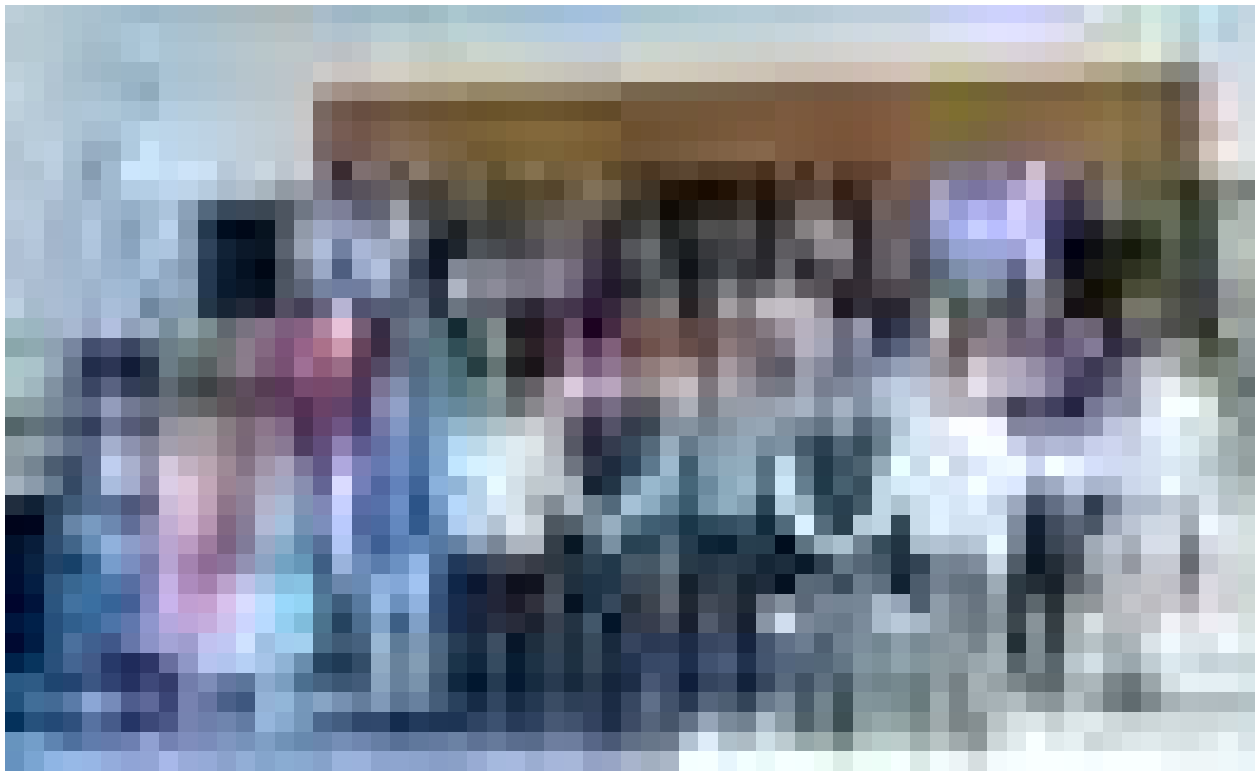
AIIMS, Jodhpur

AIIMS, Nagpur

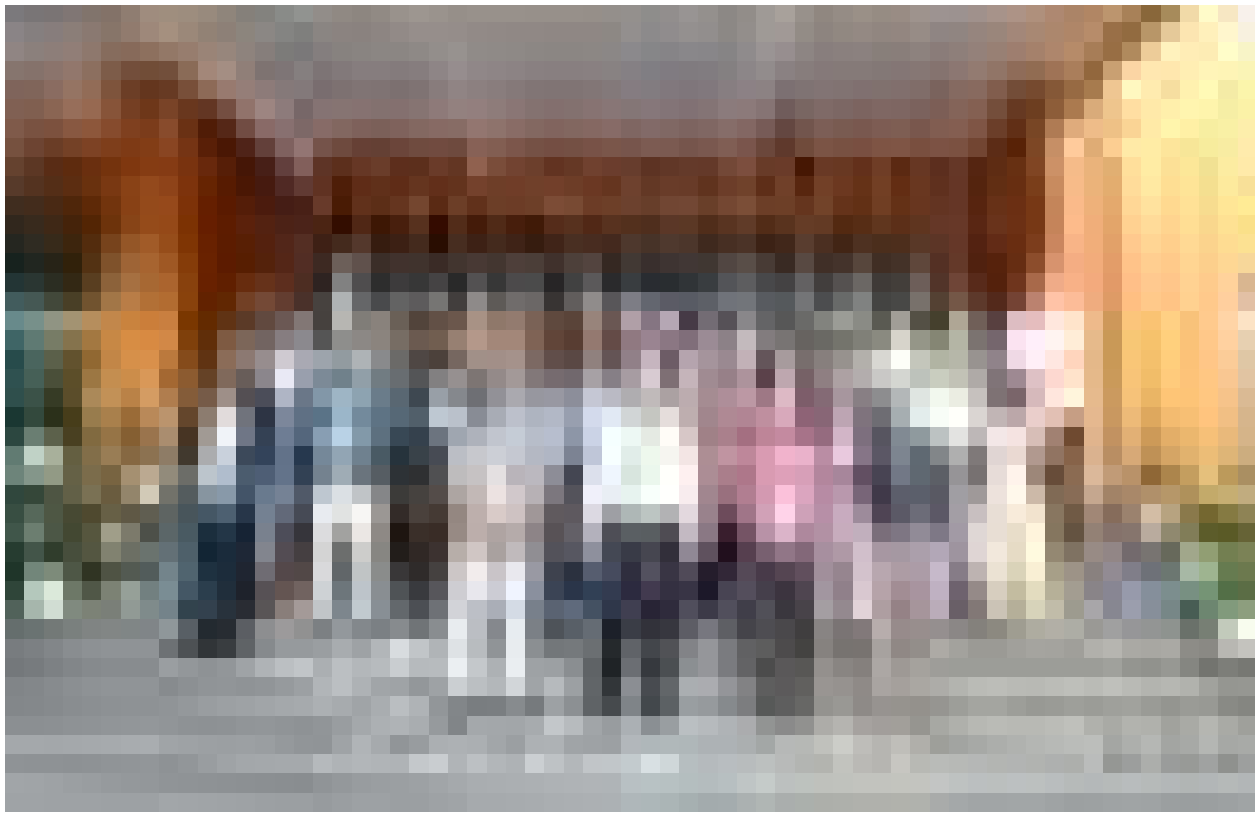
AIIMS, Bhopal

Manipal Academy of Higher Education, Manipal

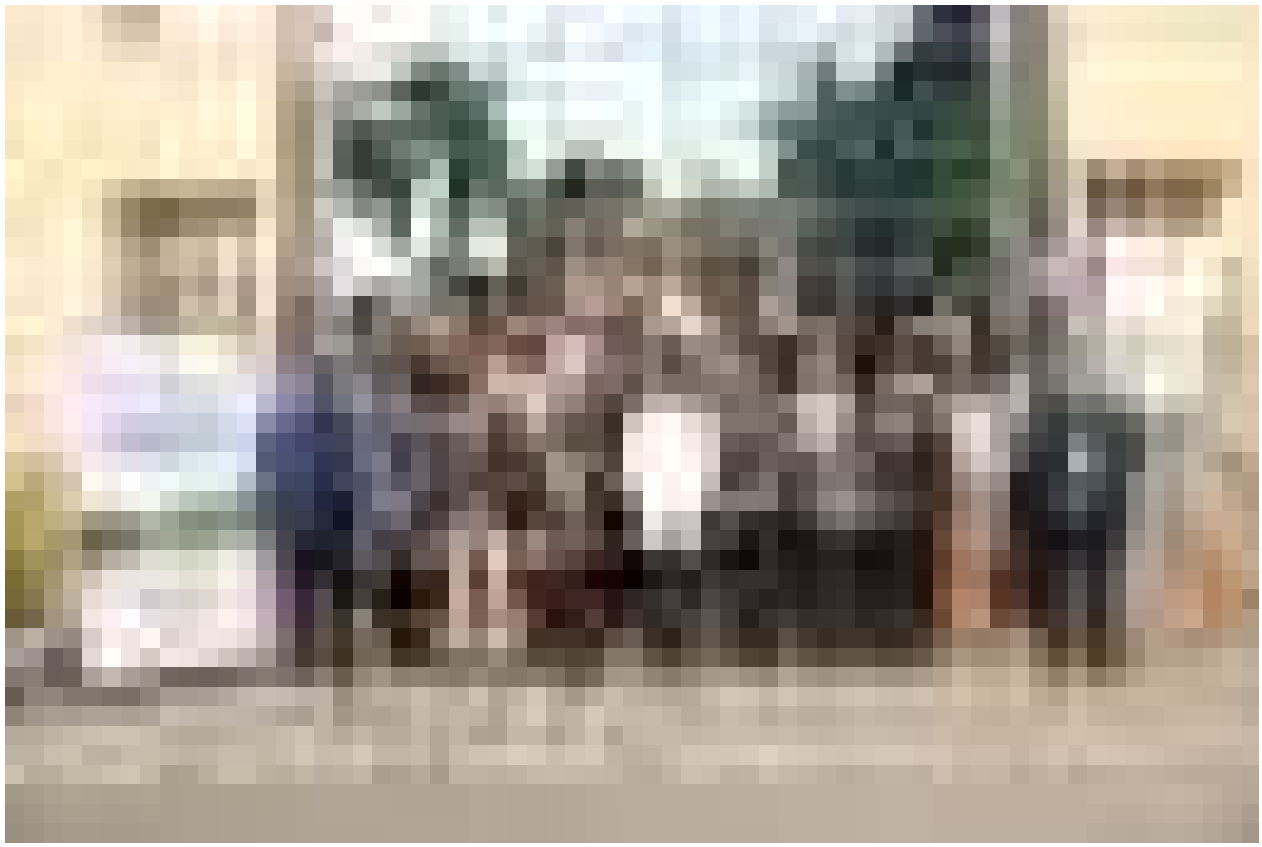
Amrita Vishwa Vidyapeetham, Kochi



KGMU, Lucknow



NIPER, Guwahati



AIIMS, New Delhi

Chapter 14

National Ethics Committee Registry for Biomedical and Health Research (NECRBHR)

14.1. NECRBHR under the Department of Health Research, Ministry of Health and Family Welfare is functional since September 2019 as notified in the 'New Drugs and Clinical Trials Rules, 2019'. Ethics Committees (ECs), reviewing biomedical and health research, involving human participants, register with DHR through a dedicated web portal (Naitik portal; https://naitik.gov.in/) enabling online submission, receipt and processing of applications for EC registration

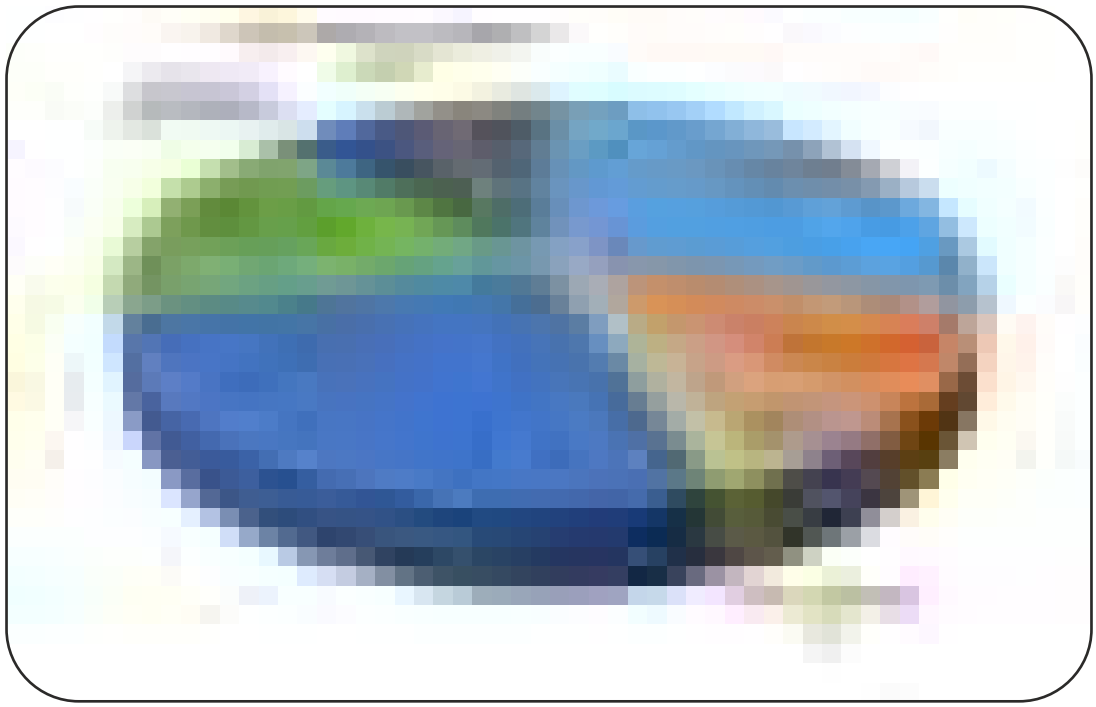


Figure: Types of organisations on Naitik portal in the year 2024 (total no= 267), others category includes, NGO, Trust, Ayurveda, Public health Organisation, Private Clinic, Public Health Institution, Society, Professional Association, Pharmacy College, Registered Healthcare

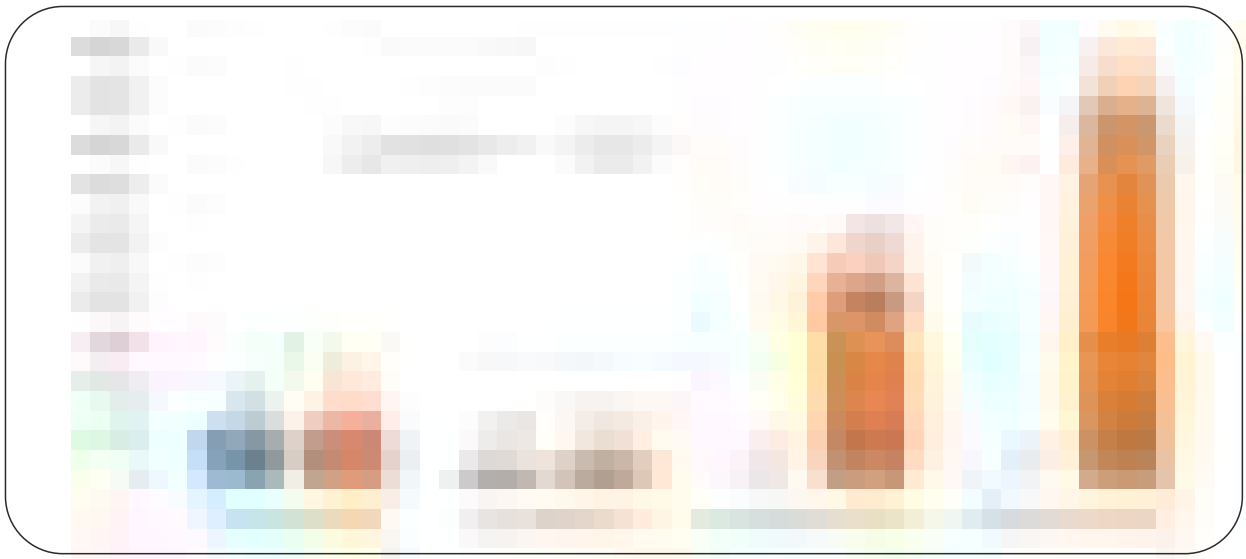


Figure: Comparison of total number and registered number on the Naitik portal with respect to medical colleges, dental college, nursing college and pharmacy college.

Chapter 15 Indian Council of Medical Research

Introduction

15.1 The Indian Council of Medical Research (ICMR), headquartered in New Delhi, is India's apex organization for formulating, coordinating, and promoting biomedical research. As one of the world's oldest medical research institutions, ICMR operates under the Department of Health Research (DHR) within the Ministry of Health and Family Welfare, Government of India. Its research agenda aligns closely with national health priorities, focusing on communicable diseases, fertility control, maternal and child health, nutritional disorders, environmental and occupational health issues, and non-communicable diseases such as cancer, cardiovascular conditions, diabetes, blindness, and mental health disorders. These efforts aim to reduce the national disease burden and promote the health and well-being of India's population.

15.2 ICMR plays a pivotal role in shaping the future of medical research by fostering capacity building and professional development. It organizes training programs, workshops, and short-term research studentships to equip aspiring researchers with the necessary skills and knowledge. Additionally, research fellowships and short-term visiting fellowships are offered to early-career scientists, while Emeritus Scientist positions enable retired experts to continue contributing to critical research areas.

15.3 Globally, ICMR has established collaborations with institutions across all continents through Memoranda of Understanding (MoUs). These partnerships focus on addressing pressing health challenges, including cancer, diabetes, infectious diseases, and vaccine development. They facilitate the exchange of knowledge, joint research projects, and the organization of scientific events such as workshops and seminars.

15.4 Intramural Research

- Intramural research, carried out through ICMR's network of 27 specialized institutes, involves funding projects aligned with the institute's own research priorities or those identified by the Department of Health & Family Welfare (DoHFW) and various state governments. The 27 institutes fall under 3 major categories: Disease- specific (4); Subject Area-specific (19); Region-specific (4)
- These institutes receive intramural funding through a competitive grant mechanism encouraging high-quality proposals that address pressing health challenges, ensuring that research efforts remain responsive to national and regional needs. Through these grants, scientists and researchers within the institutes can undertake cutting-edge investigations, develop innovative solutions, and contribute to the evidence base shaping India's health policies and practices.

15.5 Extramural Research

Extramural research is funded by ICMR at research institutes, medical colleges, and non-governmental organizations across the country. It supports investigator-initiated projects through various grant mechanisms designed to cater to different stages of research and levels of complexity.

15.6 Small Grants: Small grant proposals, intended primarily for proof-of-concept studies, receive funding of up to ₹2 crores and can be carried out over a maximum duration of four years. This funding allows emerging ideas and innovative approaches to be rigorously tested before moving on to more advanced stages of research.

15.7 Intermediate Grants: Intermediate grant proposals, on the other hand, are suited for larger-scale and more decisive studies that build on established preliminary data. With funding ranging from ₹2–8 crores over a similar four-year period, these grants enable researchers to delve deeper into their investigations, generate robust evidence, and potentially develop interventions that can shape health policies and practices.

15.8 Centres of Advanced Research (CAR): For highly experienced research teams with a demonstrated track record of excellence, Centers for Advanced Research (CAR) grants offer a chance to undertake comprehensive, multidisciplinary studies aimed at addressing critical healthcare challenges. Each CAR is eligible for funding of up to ₹15 crores over five years, facilitating in-depth inquiries that can yield transformative insights and solutions. These centers often integrate clinical, laboratory, field-based, and policy-oriented research components, ensuring that their outputs are both scientifically rigorous and pragmatically relevant.

15.9 National Health Priority Research: Complementing these funding mechanisms is ICMR's National Health Research Program, a mission-mode initiative that directs research efforts toward ten areas of pressing national importance: One Health, antimicrobial resistance (AMR), tuberculosis (TB), vector-borne diseases, cancer, ambulatory care for non-communicable diseases (NCDs), acute emergency care, anemia, stunting and wasting, and neonatal mortality. These priority areas reflect the country's most urgent health challenges, calling for solution-oriented research that can be translated into scalable interventions and informed policy-making. Through strategic investments, capacity building, and collaboration among diverse stakeholders, ICMR seeks to ensure that the research it supports not only advances scientific understanding but also translates into tangible improvements in health outcomes and service delivery across India.

15.10 Major activities & achievements (2024-25)

1. **DHR-ICMR 2024-29 Action Plan for Viksit Bharat:** It is a comprehensive strategy aimed at transforming India's health sector over the next five years. This ambitious plan focuses on indigenous innovation, advanced research, and global collaboration to build a self-reliant and robust healthcare system capable of addressing the nation's most pressing health challenges. The DHR-ICMR 2024-29 Action Plan aims to transform India's healthcare ecosystem by focusing on six key areas: promoting indigenous and affordable health technologies; providing solutions for

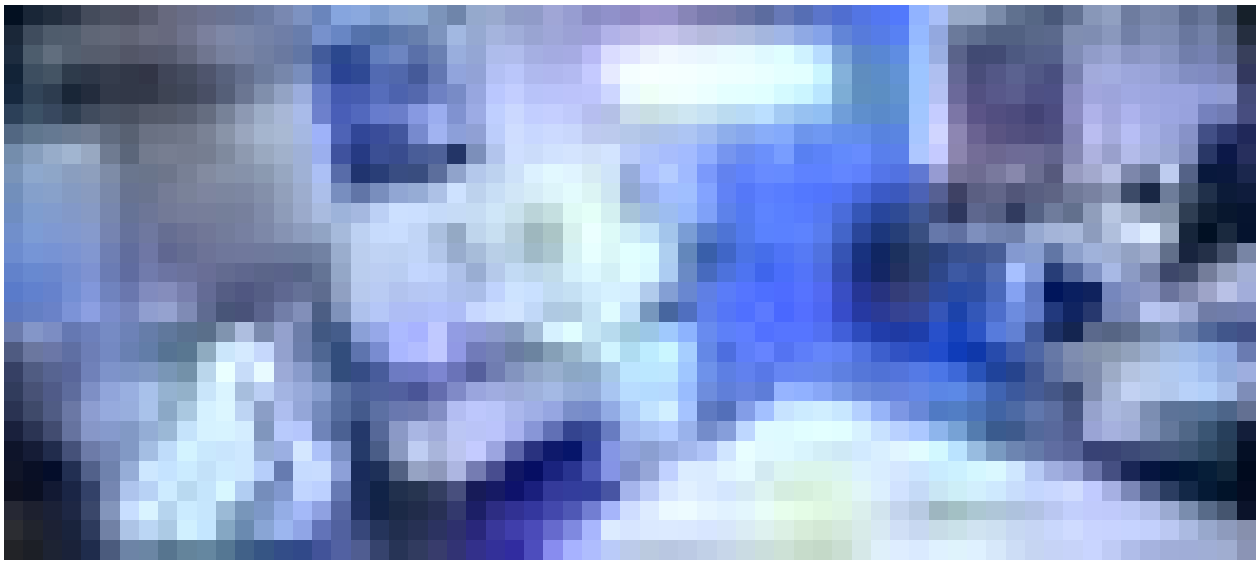
difficult and resistant health problems such as anemia, antimicrobial resistance (AMR), non-communicable diseases (NCDs), child malnutrition, and climate change impacts; advancing digital health solutions; ensuring research evidence translation into action; enhancing technology-driven surveillance and accelerating development of medical countermeasures and elevating India's global ranking in medical research thereby contributing significantly to medical advancements and improved health outcomes nationwide.

2. **MedTechMitra Platform:** In alignment with the vision set forth by NITI Aayog; Indian Council of Medical Research (ICMR) in collaboration with the Central Drugs Standard Control Organization (CDSCO), established the 'MedTechMitra, platform. This initiative aims to empower healthcare innovators across India by providing them with comprehensive support to facilitate the progression of innovative technologies through critical development stages, often referred to as "valleys of death," to ensure they reach their logical conclusions. Till now, more than 200 innovators have been supported through this initiative.

3. **National One Health Mission:** India's pioneering National One Health Mission (NOHM) is a collaborative effort involving 13 Government Departments aimed at synergizing priority activities across sectors. NOHM underscores India's commitment to integrated and holistic R&D for early detection of epidemics and pandemics, emphasizing a 'One Health' approach. Under NOHM, the establishment of the National Institute of One Health (NIOH) in Nagpur signifies a pivotal step towards fostering research and development. The recent approval of a Scientist H-level post of Director further underscores India's dedication to NOHM's multi-ministerial and multi-sectoral approach, integrating human, animal, plant, and environmental sectors for disease control and pandemic preparedness.

Key Initiatives under NOHM:

a. Successful conduct of "VishanuYudhAbhyas"; a mock drill for testing the synergy between different players of outbreak/pandemic response team at state and national level. The Mock drill was conducted in August 2024 in Ajmer, Rajasthan.



b. Setting up surveillance studies for detecting zoonotic spill-over at probable locations like slaughter houses and waste water.

c. Establishment of a national inter-sectoral network of BSL-3 & BSL-4 labs for swift response to outbreaks and early diagnosis.

d. Successful conduction of biosafety and biosecurity training, including hands-on simulation exercises, by NIV to ensure preparedness for biological risks.

e. Ongoing efforts to develop Medical Counter Measures (MCMs) for Pandemic Preparedness, in collaboration with relevant public-private partnerships, focusing on diseases such as Nipah Viral Disease and Kyasanur Forest Disease.

f. Establishment of the One Health Webinar Series, facilitating discussions among international and national experts from diverse sectors to address emerging and re-emerging diseases.

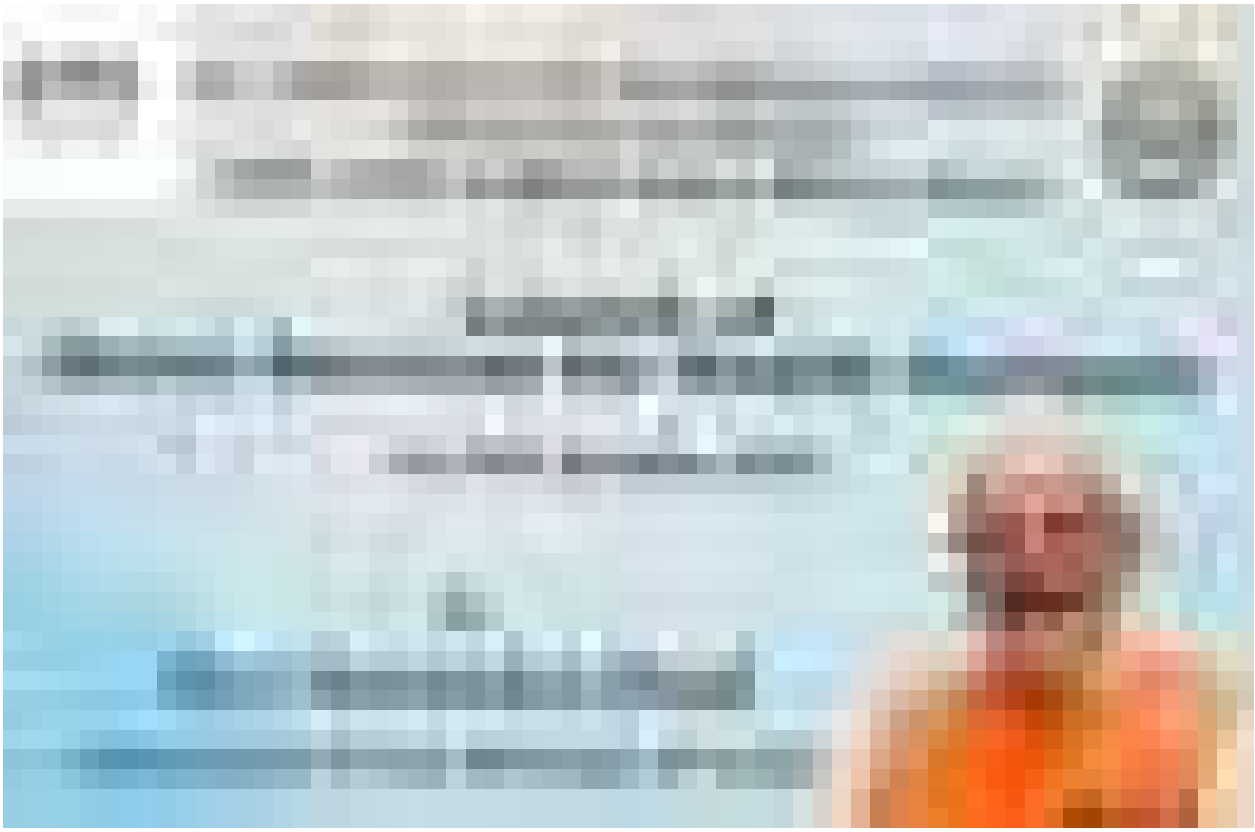
4. ICMR launched the **"First in the World" Challenge**, inspired by the success of Chandrayaan- This high-risk, high-reward research and development scheme is designed to foster the creation of health technologies that are unprecedented globally. The program will fund projects at various stages from proof of concept design to prototype and final product development.

5. Additionally, under the Pradhan Mantri – Ayushman Bharat Health Infrastructure Mission (PM-ABHIM), ICMR is **upgrading existing Viral Research & Diagnostic Laboratories (VRDLs) to Infectious Disease Research and Diagnostic Laboratories (IRDLs).** This enhancement includes bacteriology, mycology, and parasitology, expanding diagnostic capabilities beyond virology. These laboratories will strengthen India's capacity for comprehensive surveillance and rapid response to infectious diseases.

6. ICMR has launched the **ICMR Data Repository**, a centralized, secure, and accessible platform of high-quality datasets, ensuring data integrity and privacy.
7. ICMR has also launched **The UNNATI Initiative** (Upgrading Norms for Nutrition, Growth, and Development Assessment of Indian Children) that aims to establish India-specific growth and development standards for children, addressing limitations of existing WHO benchmarks.
8. Moreover, ICMR is initiating efforts to **develop drugs for rare diseases**, focusing on affordable and effective therapies for conditions such as Gaucher Disease, Sickle Cell Disease, and others. Ongoing projects range from clinical trials to animal studies and design phases, aiming to reduce dependence on imported treatments and improve accessibility for patients in India.
9. **Intent PHASE I Clinical Trials:** The initiative to establish infrastructure for early-phase clinical trials was born out of a meeting chaired by the Cabinet Secretary on November 16, 2021, identifying the critical need for Phase I clinical trial capacity in India. The focus is on funding projects aligned with national health priorities and ready for Phase I trials. Significant progress has been made with four key projects initiated under this initiative. These include the development of a small molecule for cancer (AUR 107) in collaboration with Aurigene, with trials underway at two ICMR Phase I sites; a vaccine for influenza (Mynflu001) developed with Mynvax, also being trialed at two ICMR sites; a Zika vaccine in collaboration with Indian Immunologicals Limited, trialed at one ICMR site; and CAR-T cell therapy for Chronic Lymphocytic Leukemia (CD-19 CART cell) in partnership with ImmunoAct, with trials at two ICMR sites. This effort underscores a strategic push towards bolstering India's early-phase clinical trial capacity and addressing critical health challenges.
10. **Health Research Capacity Building** initiative is advancing the training and development of physician-scientists and non-medical researchers through structured programs. The newly established AcSIR-Faculty of Medical Research (AcSIR-FMR) registered its first tranche in August 2024, enrolling 31 medical scientists from ICMR. For non-medical PhD researchers under AcSIR-FMR, 40 Junior Research Fellows (JRFs) and 14 technical staff from ICMR have been enrolled, highlighting a strong commitment to nurturing diverse talent in health research.
11. **Launch of ICMR - Research Infrastructure Sharing Ecosystem (I-RISE) Policy:** Access to advanced research infrastructure is often a limiting factor for many institutions, especially the start-ups and smaller institutes. The I-RISE Policy is a landmark initiative that democratizes access to state-of-the-art research facilities. By creating a collaborative network where equipment and resources are shared, we not only optimize utilization but also foster a culture of inclusivity and collaboration. This policy ensures that talent and potential are not hindered by a lack of resources, paving the way for groundbreaking discoveries irrespective of geographical or institutional boundaries.

12. **Launch of Guidelines for Technology Development Collaboration:** Innovation thrives at the intersection of academia, industry, and government. These guidelines are designed to streamline partnerships, facilitating joint ventures that leverage the strengths of each sector. By promoting transparent technology transfer and collaborative development, ICMR accelerates the journey from lab to market. This synergy is crucial for translating research into tangible products and services that can enhance healthcare delivery and contribute to economic growth. It is a significant step towards realizing the vision of a self-reliant India, where homegrown innovations address our unique health challenges.
13. **Launch of Guidelines for Utilization of CSR Funds for Health Initiatives:** Corporate Social Responsibility (CSR) funds represent a vast reservoir of potential for social good. By providing clear guidelines for their utilization in health initiatives, we align corporate contributions with national health priorities. This framework encourages the private sector to invest in impactful health programs, driving innovation and expanding access to quality healthcare services. It is an embodiment of the principle that improving public health is a collective responsibility, and together, we can create a healthier nation where no one is left behind.
14. **Launch of Intellectual Property Rights (IPR) Policy of ICMR:** In today's knowledge-driven economy, intellectual property is a valuable asset. The IPR Policy of ICMR safeguards the intellectual contributions of our researchers and collaborators. By protecting innovations, we incentivize creativity and ensure that inventors receive due recognition and reward. This policy also facilitates strategic partnerships and commercialization opportunities, ensuring that innovations benefit society while contributing to the nation's economic development. It aligns with the "Make in India" initiative, fostering a self-sustaining ecosystem of innovation and entrepreneurship.
15. **Healthcare delivery by Drones:** Under the visionary leadership of Hon'ble Prime Minister Shri Narendra Modi and with steadfast support from the Hon'ble Union Health Minister, Shri J. P. Nadda, ICMR in collaboration with AIIMS, Bibinagar launched the groundbreaking 'Drone Services for Health Outreach' initiative in October 2024. This transformative project, inaugurated by the Hon'ble Prime Minister and Health Ministers, aims to revolutionize healthcare delivery in remote tribal areas, showcasing India's commitment to leveraging advanced technology for the greater good. Moving forward by the Prime Minister's long-term vision, this initiative marks India's first year-long drone health outreach program. The project targets flying over 10,000 kilometers, transporting more than 1,000 TB sputum samples, and training over 100 healthcare workers, The project introduces a district-level model for efficient transport of TB sputum samples from rural and tribal areas in Yadadri Bhuvanagiri district, Telangana by using drones. This one-year pilot is the first attempt to integrate drone services into the National TB Elimination Program aiming towards the goal of ending TB by 2025. More than 40 remote healthcare centers—including Sub Centers, PHCs, and CHCs will be connected with

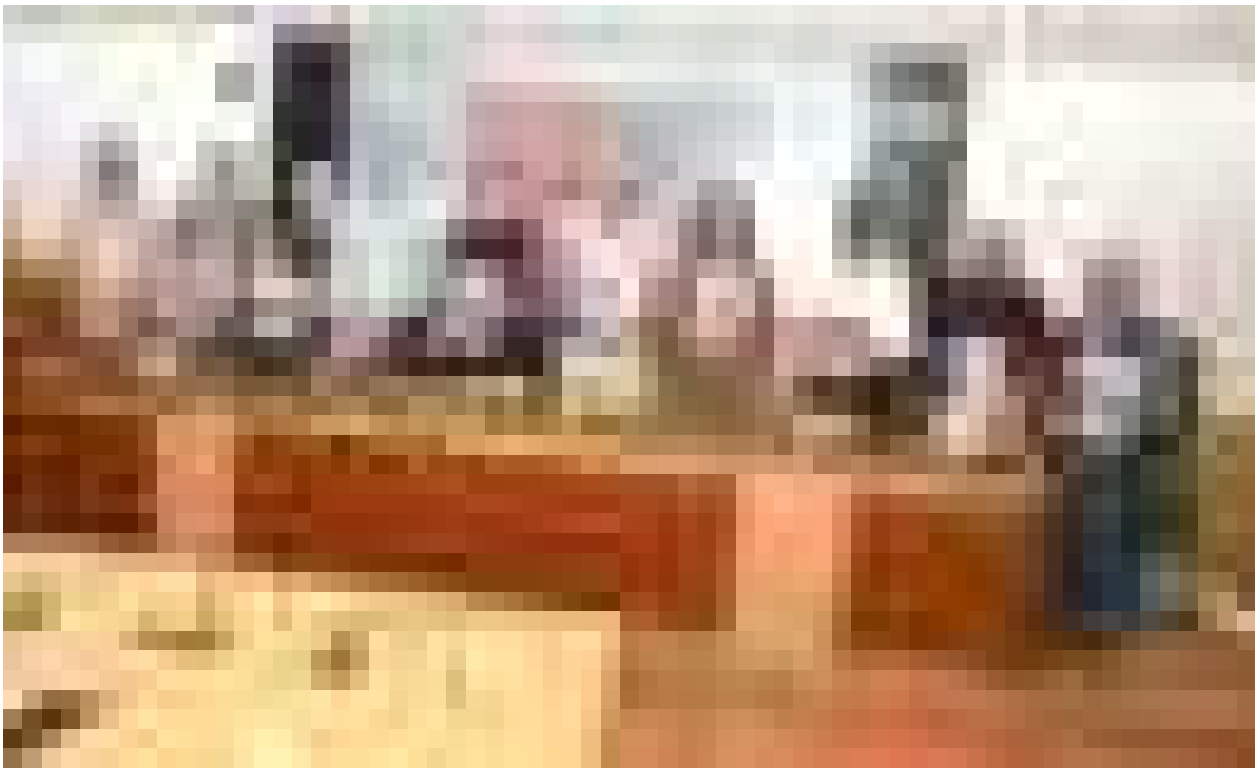
four TB testing units covering the entire district. This will reduce the time required to transport samples, improve diagnostic efficiency, and enhance patient compliance by minimizing dropouts in underserved communities.



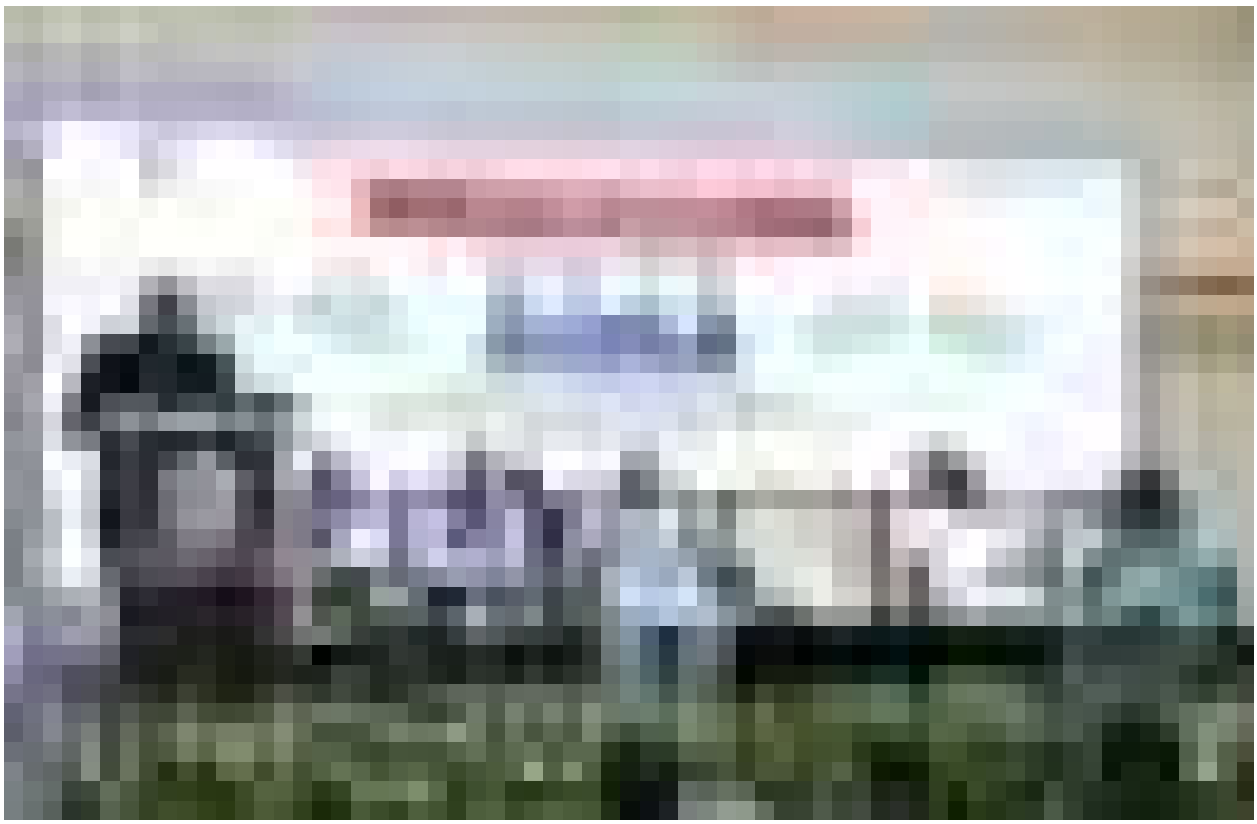
Launch of Drone Services For Health Outreach at AIIMS Bibinagar by Hon'ble PM

Another successful demonstration of transporting oncopathological samples by drones was conducted earlier this year. This ground-breaking initiative, the first of its kind in the country, was the result of collaborative efforts between ICMR, Kasturba Medical College (KMC) at Manipal Academy of Higher Education (MAHE), Manipal, and Dr. TMA PAI Rotary Hospital in Karkala, Udupi. During its inaugural flight, the drone efficiently transported intraoperative surgical biospecimens laparoscopically excised (from the patient presented with abdominal pain) from peripheral hospital to Tertiary Care Hospital. Drone covered a distance of approximately 37 kilometers in 16 minutes, which takes around 50-60 minutes by road. Upon arrival, the sample was promptly analysed histopathologically using frozen section, which was found to be a non-cancerous (non-malignant) lesion. The report was conveyed back electronically to the peripheral hospital and subsequently, the surgeon proceeded with the surgery based on the report.

16. **Launch of Dengue Vaccine Trial:** ICMR has signed a MoU with Panacea Biotec for conducting a study titled "A Phase III,Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate theEfficacy, Immunogenicity and Safety of Single dose of Dengue Tetravalent Vaccine,Live Attenuated (Recombinant, Lyophilized) – "DengiAll" of Panacea Biotec Limited inHealthy Indian Adults." Panacea Biotec has earlier undertaken phases I/II clinical trialsof the dengue vaccine in India. This recombinant vaccine has been developed by NIH,USA and technology has been transferred to a number of companies across the world.The phase III clinical trial protocol has been approved by DCGI and trial has beeninitiated.
17. ICMR unveils **Dietary Guidelines for Indians (DGI)** to promote healthy diets and lifestyles, warding off nutrient deficiencies and non-communicable diseases. Expert-backed & scientifically validated, developed the guidelines serve as a comprehensive resource for policymakers, educators, healthcare professionals & individuals alike.
18. Launched the **National Biostatistics Helpline (BIOSTAT LINE)** in collaboration with National Academy for Medical Sciences, India for medical postgraduates & young researchers. This facility is a dedicated website with an online facility, supported by highly qualified biostatisticians and epidemiologists to help medical post-graduates with their thesis and young faculty members across the country to facilitate and resolve the queries about their research work.
19. Released the **Standard Treatment Workflows Volume 4** featuring 5 specialties & 32 diseases. It will help in ensuring quality medical services and saving live.

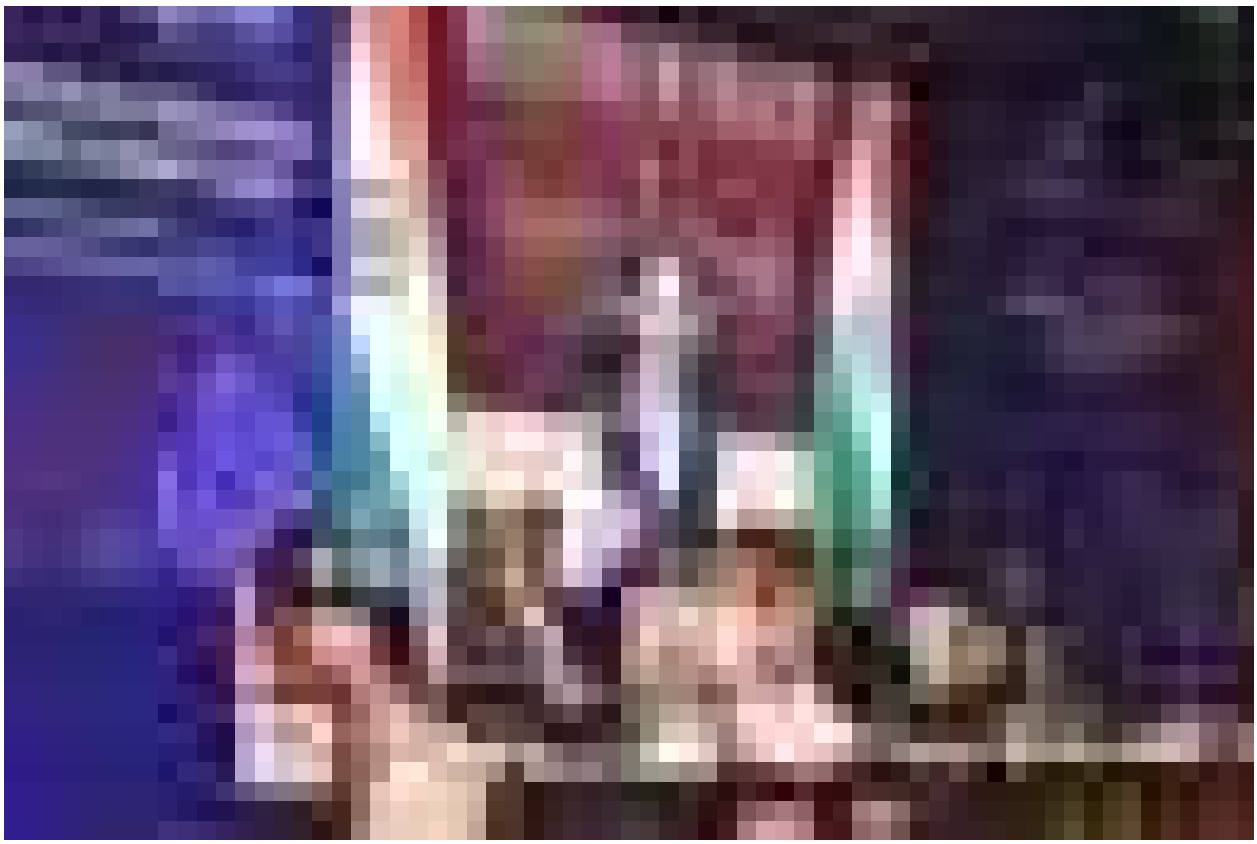


20. **DHR-ICMR mPRAGATI's Metal Additive Manufacturing (M-AM) Facility** inaugurated at IIT Delhi . It will transform production, ensuring near-net shape products with top-notch quality & material integrity.
21. Inaugurated the **Ayush-ICMR Advanced Centre for Integrative Health Research (AI-ACIHR)** at four selected AIIMS locations. The AI-ACIHR will focus on crucial health domains.
22. Based on the HTA study carried out at ICMR-NIRT, the Ministry of Health & Family Welfare, Govt. of India recommended introduction of new shorter and more efficacious BPaLM regimen for Multi drug-resistant TB treatment in India.
23. ICMR has been honored with the prestigious 2024 UN Inter-Agency Task Force Award for outstanding achievements in advancing multisectoral action on the prevention & control of NCDs, mental health, and the broader NCD-related SDGs.
24. Launched NutriAIDE App – Building Smart Food Environments for Improved Nutrition and released books titled, "Dietary Guidelines for Indians-2024" and "Know Your Vegetables"
25. Implementation of e-Notification application in Population Based Stroke Registry sources of Registration
26. Joint MoHFW-ICMR Guidelines for Ethical Use of Leftover De-identified/ Anonymous Samples for Commercial Purposes released
27. ICMR signed a Letter of Agreement with Bill Melinda Gates Foundation (BMGF)
28. MoU was signed between ICMR and NIHFW on Standard Treatment Workflows (STWs) and other Academic & Research Collaboration, fostering cooperation to advance vital health research on India's priorities identified by ICMR.
29. MoU was signed between the AFMS and ICMR for Collaborative Research and training, aimed at joint efforts in the field of biomedical research and academics to address multidisciplinary scientific and health problems relevant to the nation and Indian Armed Forces.
30. The BSL-3 Lab network and scientists of ICMR were sensitized towards the role of National Joint Outbreak Response Team in outbreak investigations under the National One Health Mission
31. Training on Biosafety cum Biosecurity for handling and diagnosis of high-risk animal pathogens in BSL3/ABSL-3 laboratories for various participants including Scientists, Associate Professors, Assistant Professors, and Lab Technicians.
32. Foundation Day celebration of ICMR-National Institute of Traditional Medicine, Belagavi in the august presence of Hon'ble Vice President of India Shri Jagdeep Dhankhar and Hon'ble Governor of Karnataka Shri Thaawar Chand Gehlot on 27.05.2024.



33. DHR ICMR HEALTH RESEARCH EXCELLENCE SUMMIT

- The Department of Health Research and the Indian Council of Medical Research (DHR-ICMR) hosted the DHR-ICMR Health Research Excellence Summit 2024 at Sushma Swaraj Bhawan, New Delhi on 14.11.2024. This milestone event marked ICMR's 113th Foundation Day and celebrated over a century of the institution's commitment to advancing biomedical research in India.
- The Summit featured distinguished leaders in the healthcare and research sectors, including the Union Minister for Health & Family Welfare, Shri Jagat Prakash Nadda (through video message); the Minister of State for Health & Family Welfare, Smt. Anupriya Patel; Member (Health), NITI Aayog, Dr. V.K. Paul and Secretary DHR & Director General ICMR, Dr. Rajiv Bahl.
- Shri Jagat Prakash Nadda, Union Minister for Health & Family Welfare, addressed the gathering (through video message) and stated that " Today, we celebrate over a century of ICMR's unwavering commitment to advancing health research and improving the lives of millions. ICMR has been at the forefront of biomedical research, playing a pivotal role in addressing some of the most critical health challenges. From combating infectious diseases like tuberculosis, malaria, and COVID-19, to advancing solutions for non-communicable diseases, maternal and child health, and nutritional disorders—ICMR has left an indelible mark on India's healthcare landscape."



- Smt. Anupriya Patel, Minister of State for Health & Family Welfare while inaugurating the summit stated that "ICMR has long been a pioneer in advancing scientific research and innovation in India, with a decorated history of contributions to the country's biomedical and scientific fields. She added that " as we work towards the goal of Viksit Bharat 2047, DHR-ICMR's leadership in research and innovation, through its Extramural and Intramural programs, continues to drive transformative progress in healthcare. India's scientific landscape is undergoing a tectonic shift, and today is a fitting moment to recognize the invaluable contributions of our researchers in building a healthier, more prosperous, and self-reliant India.
- The event also witnessed the launch of several significant initiatives designed to bolster ICMR's contributions to healthcare innovation. Notable among them was the Research Infrastructure Sharing Ecosystem (I-RISE) Policy which is a collaborative platform for expanding access to ICMR's extensive laboratory and research network to foster healthcare innovation. I-Drone initiative of ICMR, which was launched by the Prime Minister Shri Narendra Modi on 29th October, 2024 on the occasion of Ayurveda day, was also demonstrated today by Ms. Anupriya Patel through a virtually operated sortie at PHC, Yadadri Bhavunagari, Telangana.
- The Summit also saw the launch of the ICMR History Book, a comprehensive chronicle detailing over a century of ICMR's achievements and contributions to India's healthcare landscape. Alongside this, new Guidelines on Intellectual Property Policy, CSR Funds, and Technology Transfer were introduced, establishing a robust framework to drive innovation, encourage collaboration, and optimize resource allocation.

Release of coffee table book on ICMR History by Hon'ble MoS, Health, Smt. Anupriya Patel

The Summit celebrated exemplary contributions to medical research by recognizing distinguished researchers from ICMR's institutes and ICMR-supported medical colleges and research institutions across India. Recognitions were given to individuals and teams for Best Research Paper, Best Innovation, Best Team Research and Best Ph.D. Student, as well as institutional distinctions including Best ICMR Institute, Best Extramural Institute, Best Multi-Disciplinary Research Unit, Best Model Rural Health Research Unit, Best Viral Research and Diagnostic Laboratory, and Best Health Technology Assessment Centre.

ANNEXURE-I

BE/RE/Actual Expenditure 2023-24 and BE/RE 2024-25 with actual Expenditure upto December 2024 and BE 2025-26 in respect of Demand No. 47- Department of Health Research

Rs. In crore

		2023-24			2024-25			2025-26
S. No.	Scheme/ programmes	BE	RE	Actuals	BE	RE	Expenditure as on 31.12.2024	BE
1	Secretariat Expenditure	54	45.55	38.47	52.35	42.93	29.09	45.27
2	Health Technology Assessment - attached office	-	-	-	10	17.8	6.67	18.75
3	Establishment of Network of Viral Diagnostic & Research Laboratories for Managing Epidemics. (VRDL)	60	60	60	60	60.99	45.6	57.24
4	Development of Tools to prevent outbreaks of epidemics	10	10	10	8	8	5.49	3.49
5	**Development of Infrastructure for Promotion of Health Research**							
(a)	Establishment of Multidisciplinary Research Units (MRUs) in Govt. Medical Colleges.	60	50	50	60	61.99	43.26	91.65
(b)	Establishment of Model Rural Health Research Units (MRHRUs) in the States	20	20	19.12	20	18.01	13.16	58.53
	Sub-total 5 (a to b)	80	70	69.12	80	80	56.42	150.18
6	**Human Resource and Capacity Development**							
(a)	Human Resource Development for Health Research (HRD)	33.86	29.8	29.07	81	65	45.58	93
(b)	Grant-in-aid Scheme for inter-sectoral convergence and Coordination for Promotion & Guidance on Health Research (GIA)	27	31.8	28.64	39.29	34.46	22.94	27
(c)	Health Technology Assessment in India	24.2	24.2	24.2	24.75	24.75	19.03	27.77
(d)	International Cooperation	7	2	0.36	2	0.5	0.08	2
	Sub-total 6 (a to d)	**92.06**	**87.8**	**82.27**	**147.04**	**124.71**	**87.64**	**149.77**
7	**Prime Minister's Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)**							
(a)	Prime Minister's Ayushman Bharat Health Infrastructure Mission - Main	324.36	254.39	248.53	137.21	137.21	133.43	221.32
(b)	Programme for strengthening Research & Development towards integrated disease control and pandemic preparedness for the National One Health Mission	-	8.47	5.9	75	50	49.99	124.18
(c)	Health emergency preparedness and response (HEPR) Trust Fund	-	-	-	-	0.01	0	4.99
	sub-Total 7 (a to c)	**324.36**	**262.86**	**254.43**	**212.21**	**187.22**	**183.42**	**350.49**
	Sub-total DHR Schemes (3 to 7)	**566.42**	**490.66**	**475.82**	**507.25**	**460.92**	**378.57**	**711.17**
8	Indian Council of Medical Research (ICMR)	2,359.58	2,356.62	2,343.18	2,732.13	2,869.99	2,107.59	3,125.50
	Grand Total	**2,980.00**	**2,892.83**	**2,857.47**	**3,301.73**	**3,391.64**	**2,521.91**	**3,900.69**