

## ALL INDIA INSTITUTE OF MEDICAL SCIENCES

66<sup>th</sup> AIIMS Annual Report, 2021-2022FACULTY AND STAFF

<b>Professor and Head</b>			
Shashi Kant			
<b>Professors</b>			
Sanjeev Kumar Gupta	Kiran Goswami		Anand Krishnan
Baridalyne Nongkynrih	Puneet Misra	Sanjay Kumar Rai	YS Kusuma Kumari
<b>Additional Professors</b>			
Kapil Yadav	Sumit Malhotra	Anil Kumar Goswami	Ravneet Kaur
Harshal Ramesh Salve			
<b>Associate Professors</b>			
Partha Haldar			Rakesh Kumar
<b>Assistant Professor</b>			
Mohan Lal Bairwa			

## **HIGHLIGHTS**

As we draft this report the major brunt of the ongoing COVID19 pandemic is largely on a subsiding trail. The community-based teaching of undergraduate and post graduate students, research and service provision is almost restored to pre-pandemic levels. During the severe second wave that gripped the country from April 2021 to around August 2021, the faculty members of this Department and post graduate students were posted once again for COVID19 care services at AIIMS New Delhi. Nonetheless, the departmental team ensured that routine service provision, teaching and research continued with least disruption. The Faculty members of Centre for Community Medicine (CCM), at AIIMS, New Delhi, continued providing support to Government of India in crafting a response to the pandemic by being part of the National Task Force for COVID19 response and other specific COVID19 committees. Faculty members also provided technical inputs to national health programmes of the Government of India. The Department is spearheading anemia control in country through the **National Centre of Excellence and Advanced Research on Anemia Control** (NCEAR-A); ensuring evidence based decision making for HIV programme of the National AIDS Control Organization (NACO), Government of India through being the **National Institute for HIV Surveillance**; and framing up the comprehensive health sector priorities for Non-Communicable Diseases by being the **WHO collaborating center for Research and Capacity Building on Community-based Non Communicable Diseases (NCD) Prevention and Control**. In addition, through its presence in technical resource groups of Government of India, the Department is actively contributing for strategy framework of National Viral Hepatitis Control Programme, pollution and its effect on health, National Tuberculosis Control Program, Adolescent Health, and Health Sector Strategy frameworks. CCM also houses the Technical Support unit for SRS-based Verbal Autopsy System of the Office of Registrar General of India and WHOSEAR NCD delivery network.

## **EDUCATION**

As the COVID-19 pandemic subsided, gradually the teaching and assessment were resumed physically. However, during the subsequent waves of the pandemic, some of the classes were conducted in online mode as well so that continuity in teaching could be maintained. The Urban Health Posting, Family Health Advisory Services and Rural Postings had to be hence innovated amidst the limited options available, and were replaced to some extent by family-based exercise for clinical case, family workup, management discussion and health education. The undergraduate research exercise was again resumed back to physical mode based on field exercise. During the subsequent waves of the COVID-19 pandemic faculty members as well as postgraduate students were posted in COVID wards; accordingly some of the classes and seminars had to be re-scheduled. Journal clubs were online whenever the pandemic was on a surge. Once the surge subsided, the journal clubs were conducted on a hybrid mode- with some participants attending in physical mode with social distancing along with arrangements for parallel online sessions for the rest of the group.

### **1. Undergraduate MBBS students**

MBBS students of the 7<sup>th</sup> semester, of the All India institute of Medical Sciences, New Delhi, are posted at CRHSP Ballabgarh, in four batches for six weeks each. We had resumed physical residential posting of undergraduate students after hybrid teaching in the year 2022 due to COVID 19 pandemic. During posting students are taught concepts of epidemiology, are given an orientation to community health, including social determinants of health, community aspects of child health and mental health, health systems at various levels, and health programmes. There are special modules to train on Integrated Management of Neonatal and Childhood Illness (IMNCI) and epidemiology. The students also undertake a brief qualitative method based research project under module Orientation of Undergraduates to Community Health (OUCH) during this posting. Each posting of six weeks is concluded by an internal assessment. Two skill modules namely, Glucometer use and Glowing & Gowning were covered during residential posting at CRHSP Ballabgarh.



## **2. Interns**

The interns are posted for a total duration of three months at the CRHSP Ballabgarh. This period is divided into six weeks at SDH, and three weeks at each of the PHCs located at Dayalpur and Chhainsa. The entire posting is residential. At SDH, interns are posted in OPD and Wards that help them in learning basic clinical skills, as well as in-patient management, including conducting normal deliveries. They are rotated in all the available clinical disciplines at SDH under the supervision of respective Senior Resident (SR). During PHC posting, interns participate in health care delivery at the clinics of PHC, sub-centres as well as in antenatal clinics. They are also posted at the delivery hut at each PHC under overall supervision of SR of Community Medicine. They get experience in community level activities such as supervision of health workers, follow-up of patients that have defaulted while on anti-tuberculosis treatment, supervision of sub-centres, undertaking outreach activities, immunization and other ongoing activities at the PHC. Interns are also involved in special activities at PHCs such as Kayakalp assessment, annual census, public awareness generation and school health related activities. At the end of the CRHSP posting interns submit their log-book duly signed by respective SRs under whom they were posted for end posting assessment.

## **3. Postgraduate students of Community Medicine**

The postgraduate students of Community Medicine are posted at CRHSP Ballabgarh for 18 months. This posting is residential. Out of the total duration, they spend 5 months and 10 days each, at the sub-district hospital and both PHCs on a rotation. This gives them adequate opportunity to gain the necessary skills and experiences both at the SDH and PHC. They are encouraged to take active participation in decision making and administration at the PHC. The regular teaching programme includes seminars, family and clinical case presentations, operational research and problem solving exercises based on Health Management Information System and field data. Residents also participated in various activities conducted at the PHCs and in the villages under various National health Programme.

#### **4.B.Sc. Nursing and Post certificate Nursing Students**

B.Sc. nursing students and post certificate nursing students are posted for one and half months at CRHSP Ballabgarh. This posting is residential in nature. They spend one month at SDH and two weeks in either of the two PHCs. They are provided training in antenatal care, management of ward, and immunization. They are posted both in OPD and in ward. They provide health talks, and IEC in OPD, and ward. Training of nursing students is supervised by a Faculty Member from the College of Nursing, AIIMS, New Delhi.

#### **5.In-service Training**

In addition to teaching of students, periodic in-service trainings was conducted for different cadres of staff working at the CRHSP Ballabgarh. The trainings conducted during 2020-21 were as following:

-A refresher training on Neonatal Resuscitation for nursing staff and field health workers of the intensive field practice area was conducted on March, 2021, in collaboration with Faculty members of the College of Nursing.

-A total of 50 hours of in-service training for Health Workers and ASHA workers (24\*2=48) were conducted at PHC Dayalpur and Chhainsa (figures are inclusive). These are conducted during the meetings, each month. Topics were decided based on the training needs identified during field supervision; for the reporting period, these were as following: identification of JSY beneficiaries and facilitating them to avail benefit, management of animal bite cases, management of LBW babies, family planning - methods, importance and how to improve coverage, management of biomedical waste management, Tracking of High Risk Pregnancy and management, post-natal care for mother and newborn including complication management and kangaroo mother care, IMNCI- Identification and management of sick baby, identification, care and management of malnutrition at field level, Training on cold chain management PHC to immunization site and back to PHC, Diagnosis and management of TB cases.

### ***CMEs/Workshops/Symposia/National and International Conferences***

Consultation of WHO SEAR member nations for Curriculum Framework review- 25 June 2021- online

1. Regional training of Network Institutions to deliver People-centred integrated NCD care: 4-8 Oct 2021 – online
2. Preconference workshop on verbal autopsy-based cause of death ascertainment as part of Indian Association of Preventive and Social Medicine, 23<sup>rd</sup> to 26<sup>th</sup> September 2021 at JIPMER, Puducherry, moderated and took sessions on verbal autopsy
3. Preconference workshop on implementation research (15 and 16 September 2021) as part of Indian Association of Preventive and Social Medicine, 23<sup>rd</sup> to 26<sup>th</sup> September 2021 at JIPMER, Puducherry, moderated and took sessions on implementation research
4. Training programme on the use of “Larvicide and Insecticides for the Prevention and Control of Vector Borne Diseases” was organized for staff of DPORC on 07.05.2021 at CCM, AIIMS
5. District level assessment of COVID 19 response as Central-team constituted by Ministry of Health and Family Welfare, GoI (April-2021)
6. MINErVA Network Meeting organized by AIIMS Technical Support Unit (ATSU) under MINErVA by RGI, Ministry of Home Affairs, GoI (July 2021)
7. Training of State Nodal Officer under National Programme of Climate Change and Human Health (NPCCHH) – August 2021
8. Visited Districts Lucknow, Raebareli, Shimla for assessment of Continuity of NCD services during COVID 19 pandemic for WHO – India office and Ministry of Health and Family Welfare , GoI (September 2021)
9. Resource faculty for Plenary sessions on Minerva and Continuity of NCD services during 65th Annual Conference of Indian Public Health Association(IPHA) at Puducherry. (September 2021)
10. Chairperson for scientific poster session during 65th Annual Conference of Indian Public Health Association(IPHA) at Puducherry. (September 2021)
11. Webinar on Integration of VA into CRVS system. New Delhi, 15th November 2021.
12. Webinar on Strengthening Medical Certification of Causes of Death in India. New Delhi, 16th March 2022.
13. Pre conference workshop IPHACON2021- DeCode VA: Deriving Cause of Death from Verbal Autopsies. Puducherry, 10th September 2021

14. Plenary session at IPHA Conference- MINERVA: Excess mortality due to COVID-19. Puducherry, 24th Sept 2021
15. Pre conference workshop IPHACON2021- Implementation Research. Puducherry, 16th September 2021
16. Workshop on Air Pollution and Health Effects Research In collaboration with IIT Delhi under CAPHER India (October 2021)
17. Resource person for Mortality estimation due to HIV by National AIDS Control Organiation, MOHFW, Gol
18. Training of trainers of development of Skill module for SET facility AIIMS
- 19.** Expert committee meeting for documenting best practices for continuity of NCD services during COVID 19 Pandemic organized by CCM AIIMS
- 20.** 49<sup>th</sup> Annual Conference of Indian Association of Preventive and Social Medicine (IAPSMCon 2022) at GMC, Nagpur, Maharashtra Network and TAG meeting under MINErVA for AIIMS and RGI, Ministry of Home affairs, Gol
21. CAPHER India Steering Committee Meeting, AIIMS New Delhi
- 22.** ATSU Meeting to plan and review progress of activities under MINErVA at AIIMS New Delhi
23. Regional Post-Surveillance Meeting for ANC, Prison, and HRGs HIV Sentinel Surveillance 2021 (HSS 2021) for faculty members of various medical institutions, and officials of state AIDS Control Societies of five northern states (Bihar, Jharkhand, Delhi, UP, and Uttarakhand) at Lemon Tree Hotel, Gurugram, Haryana from 4-5 October 2021.
24. A four days “National Post-Surveillance meeting” was organized for Regional Institutes, State AIDS Control Societies (SACS), Central Team Members (CTM), of all the 37 States and union territories of India at The Muse, Sarovar Portico, Kapashera New Delhi from 22-25 March 2022.
25. Technical Working Group meeting to develop integrated service package for Transgender (TG) people on 27th July 2021
26. 7th Meeting of Technical Resource Group on Surveillance of Viral Hepatitis on 2nd July 2021
27. 9th Meeting of Technical Resource Group on Surveillance of Viral Hepatitis - 3rd November 2021
28. 10th Meeting of Technical Resource Group on Surveillance of Viral Hepatitis on 6th December 2021
29. Meeting on set up of Gender Affirmation Clinic and COE in AIIMS New Delhi for transgender persons on 25th November 2021



30. Advisory Board Meeting with IIM Bengaluru on 19th January 2022

**Lectures delivered at CMEs, National and International conferences**

(all lectures, invited talks, plenary lectures, guest lectures, Moderator of a session, Panelist in a panel discussion should be mentioned here **except named Orations** [to be listed in **Awards, Honours and Significant Events**] are to be listed here)

S. No.	Title of talk	Name of the CME/conference	Date	City/Country (only if outside India)
<b>Dr Anand Krishnan</b>				
1.	Impact of COVID-19 on Global NCD targets and indicators.	Webinar on Global best practices in combating COVID-19 and comorbidities	30th June 2021	World NCD Federation, Chandigarh
2.	Defining boundaries and rolling out Public Health Response	Handling subsequent pandemics: Are we ready?”,	24th September 2021.	IPHACON21, Puducherry
3.	Ethical Considerations in Designing Public Health Interventions for future Pandemics	8th national conference of forum for ethics review committees in India (fercicon) 2020-21	22 October 2021	NEIGHRIMS Shillong
4.	Challenges to health promotion and SDGs	National workshop on capacity building of stakeholders for health promotion and sustainable development goals (SDGs)	24 December 2021	Jaipur, Rajasthan
<b>Dr. Baridalyne Nongkynrih</b>				
5.	Leadership for NCD control through WHO PEN	IPHACON 2021 Preconference workshop	11th Sept 2021	Online

6.	Risk-based CVD management and integrated management of hypertension and diabetes	IPHACON 2021	September 2021	Online
7.	Principles of CBME and experience from AIIMS New Delhi	Consultation of WHO SEAR member nations for Curriculum Framework review.	25 June 2021	Online
8.	Introduction to People centered NCD Service Delivery	Induction course for People centred NCD Service Delivery.	02-13 Dec 2021	Online
9.	PEN course WHO SEARO online course on people-centered NCD service delivery	Launch of PEN course for WHO SEARO countries	29 July 2021	Online
10.	Implementation strategies on people-centred NCD service delivery	Regional training of Network Institutions to deliver People-centred integrated NCD care.	4-8 Oct 2021	Online
11.	Improving human resources for NCDs through preservice and in-service education	Tenth Global Conference on Health Promotion for Well-being, Equity and Sustainable Development	13-15 Dec 2021 13-15 December 2021	Online
12.	Orientation towards activities of SEAR NCD network	Induction course for People centred NCD Service Delivery.	2-13 Dec 2021	Online

<b>Dr. Sanjay Rai</b>				
13.	Public Health approach to control the pandemic	Public Health Emergency & Management in response to Covid-19 pandemic	September 10, 2021	Virtual Mode NIHFW, New Delhi
14.	Regional Public Health Dialogue for COVID-19 pandemic and NCD response in Asia: Critical appraisal, lessons, and challenges ahead	International Webinar Series on COVID-19 and NCDs by World NCD Federation	September 2, 2021	Virtual Mode Department of Community Medicine and School of Public Health PGIMER Chandigarh, India
15.	Keynote speaker on COVID-19 trajectory & role of vaccine in India	32 <sup>nd</sup> Annual state conference of The Association of Physicians of India – Rajasthan Chapter – e-RAJ APICON	15-16 October, 2021	Virtual Mode Kolkata
<b>Dr. Kapil Yadav</b>				
16.	Anemia Mukht Bharat - the journey so far	Prevention of Management of Anemia in Aspirational Districts organized by Sukraya and Niti Ayoge	26 February 2022	Virtual Mode
17.	Invisible Evil, Challenges & Way forward on Anaemia	Anaemia, a key nutritional challenges: Strategies & Way Forward" organised by Resource Centre	28 <sup>th</sup> February 2022	Virtual Mode

		for Advancement of Public Health Nutrition (RCAPHN) organized by AIIMS Bhuvneshwar		
<b>Dr. Sumit Malhotra</b>				
18.	Approaches to mortality surveillance-the case for verbal autopsies	Pre-conference workshop, IPHACON 2021- JIPMER Puducherry Decode VA- Deriving cause of death from verbal autopsies	10 September 2021	New Delhi Virtual workshop
19.	Practical examples- assigning cause of death from verbal autopsy	Preconference workshop, IPHACON2021- JIPMER Decode VA- Deriving cause of death from verbal autopsies	10 September 2021	New Delhi Virtual workshop
20.	Health system and interventions	Preconference workshop, IPHACON2021- JIPMER Puducherry Implementation Research	15 September 2021	New Delhi Virtual workshop
21.	What Implementation Research (IR) is and what it is not	Preconference workshop, IPHACON2021- JIPMER Puducherry Implementation Research	15 September 2021	New Delhi Virtual workshop
22.	Self -assessment of proficiency in IR	Preconference workshop, IPHACON2021- JIPMER Puducherry Implementation Research	16 September 2021	New Delhi Virtual workshop
23.	Introduction to MINErVA coding platforms and its work	Technical advisory group (TAG) meeting MINErVA Network meeting	08 October 2021	New Delhi
24.	Deliberations on way forward for MINErVA	Introduction to MINErVA coding platforms and its work	09 October 2021	New Delhi

<b>25.</b>	Care of mothers and neonates born to COVID19 positive mothers, Neonates with Late onset COVID19 Disease Children with COVID where caregivers are not available	Training of State and District trainers – on Pediatric Care in COVID 19	30 June 2021	New Delhi (Virtual)
<b>26.</b>	Testing for COVID 19 in children (Rapid Antigen Test and RT-PCR)	Training of State and District trainers – on Pediatric Care in COVID 19	01 July 2021	New Delhi (Virtual)
<b>27.</b>	Management of pediatric COVID-19 at community, home and HWC level	Training of State and District trainers – on Pediatric Care in COVID 19	02 July 2021	New Delhi (Virtual)
<b>28.</b>	Management of pediatric COVID-19 including identification and referral of suspected MIS-C at PHC level	Training of State and District trainers – on Pediatric Care in COVID 19	06 July 2021	New Delhi (Virtual)
<b>29.</b>	Red flag signs for referral and referral pathways Formats for follow up for home monitoring and post COVID care	Training of State and District trainers – on Pediatric Care in COVID 19	07 July 2021	New Delhi (Virtual)
	Strengthening NCD services in primary health care in India	Regional training of network of institutions to deliver people centred integrated NCD care	04 October 2021	New Delhi
<b>Dr Anil Goswami</b>				
<b>30.</b>	Conducted a Webinar on “Resurgence: Guidance and Effects towards better Prevention and	In Collaboration with Sharp NGO	24.04.2021	Virtual

	Relief''			
<b>Dr. Partha Halдар</b>				
<b>31.</b>	Deciding sample size in context of viral hepatitis for NFHS-5 data	Ninth meeting of the Technical Resource Group on Surveillance of Viral Hepatitis, NCDC	3rd November, 2021	New Delhi
<b>Dr. Ravneet Kaur</b>				
<b>32.</b>	Skills learning- Place in Competency based Medical Education and the AIIMS model	Planning and setting up of clinical-skills learning program for undergraduate students using blended learning technique	27 August, 2021	SET Facility, AIIMS, New Delhi
<b>33.</b>	Planning a Communication Strategy for Public Health	Communication in Public Health	7 September, 2021	Virtual (Hosted by PGIMER, Chandigarh and Ministry of External Affairs, Govt. of India)
<b>34.</b>	Quality Improvement at Point of Care	International Public Health Management Development Program	7 October, 2021	Virtual (Hosted by PGIMER, Chandigarh and Ministry of External Affairs, Govt. of India)

<b>35.</b>	Interim Results - Causes of Death based on VA (2015-17)	Meeting of the Technical Advisory Group and Network - MINErVA	8 October, 2021	Ramalingaswami Board Room, AIIMS, New Delhi
<b>36.</b>	Nutrition and Anemia in Adolescents	National Level Training of State Master Trainers for Adolescent Friendly Health Services under the <i>Rashtriya Kishor Swasthya Karyakram</i>	18 January, 2022, and 15 February, 2022.	Virtual (Hosted by MoHFW, Govt. of India)
<b>37.</b>	Non- Communicable Diseases among Adolescents	National Level Training of State Master Trainers for Adolescent Friendly Health Services under the <i>Rashtriya Kishor Swasthya Karyakram</i>	20 January, 2022, and 2 February, 2022	Virtual (Hosted by MoHFW, Govt. of India)
<b>Dr. Harshal Ramesh Salve</b>				
<b>38.</b>	Blended Learning Model for Skill teaching at TOT of skill module development organized by SET facility AIIMS	TOT of Skill Module Development	August 2021	AIIMS New Delhi
<b>39.</b>	Assessment of Continuity of NCD services by the states/Uts During Covid 19 pandemic in India – Approach and Findings	65th Annual Conference of Indian Public Health Association(IPHA)	September 2021	JIPMER Puducherry

<b>40.</b>	Estimating excess deaths due to Covid-19 pandemic using data from civil registration system	65th Annual Conference of Indian Public Health Association(IPHA)	September 2021	JIPMER Puducherry
<b>Dr. Rakesh Kumar</b>				
<b>41.</b>	Challenges in Covid-19 mortality estimation. presented during the plenary session on Excess Mortality due to Covid-19	65th Annual National Conference of Indian Public Health Association – IPHACON 2021	24 September 2021	New Delhi (Virtual)
<b>42.</b>	Enhancing the use of cause of death data at state and national level	Technical Advisory Group meeting of Minerva Network	9 October 2021	AIIMS- New Delhi
<b>Dr. Mohan Lal Bairwa</b>				
<b>43.</b>	Improving Quality of Medical Certification of Cause of Death in India	Technical Advisory Group Meeting of MINErVA Network, 8-9 October 2021	8 <sup>th</sup> October 2021	New Delhi
<b>44.</b>	WHO SEARO Online Course on Package of Essential Non-Communicable Disease Interventions for Primary Health Care	Regional Training of Network of Institutions to Deliver People-centred Integrated NCD Care, 4 – 8 October 2021	<b>6<sup>th</sup> October</b>	New Delhi
<b>45.</b>	Quality of Medical	Technical Advisory Group Meeting of MINErVA	9 <sup>th</sup> October	New Delhi



	Certification of Cause of Death in AIIMS, New Delhi	Network, 8-9 October 2021	2021	
46.	Assessment of quality of death certification and testing quality improvement solutions in partner institutions	MINErVA Webinar Series – 2 (virtual)	16 <sup>th</sup> March 2022	New Delhi
47.	Careers in Public Health	IPHACON 2021, 23-26 April 2021 (virtual)	26 September 2021	Puducherry
48.	Careers Opportunities for young professionals	Annual Conference of IAPSM, West Bengal Chapter, 3-4 December 2021 (virtual)	4 December 2021	Kolkata

***List of oral papers/posters presented***

should be as per the format provided

S. No	Authors	Title of presentation	Name of the conference	Date	City
1.	P. Ananda Selva Das, Mahasweta Dubey, Ravneet Kaur, Harshal Salve, Baridalyne N	Risk-based CVD management : WHO non-lab-based CVD risk assessment	IPHACON	September 2021	ONLINE
2	Vignesh L, Baridalyne N,	Evaluation of Population Based	IPHACON	September	ONLINE

	Sumit Malhotra, Anand K	Screening (PBS) under NPCDCS using Lot Quality Assessment Sampling (LQAS) technique in Nuh (Mewat) District, Haryana		2021	
3	P. Ananda Selva Das, Ravneet Kaur, Harshal Salve, Baridalyne Nongkynrih	Concordance between lab-based and non-lab based CVD risk charts	EFICON 2021 (2nd Annual conference of Epidemiology Foundation of India)	October 2021	AIIMS Jodhpur <sup>1</sup> (received best paper award)
4	Muthathal S, Malhotra S, Kant S, Goswami K, Perumal V, Kaloilya G*	Psychological well-being of rural adolescent girls in a community of north India: A cross sectional study	65 <sup>th</sup> Annual National Conference of Indian Public Health Association	23 <sup>rd</sup> to 26 <sup>th</sup> September, 2021	JIPMER, Puducherry
5	Dr. Kapil Yadav	AMB- Best performing states, what can we learn from them?	Strengthening Anemia Detection & Diagnosis: Enabling Anemia Mukht Bharat eSummit 2021	17 June 2021	New Delhi
6	Dr. Kapil Yadav	Anemia Mukht Bharat and focus on non-nutritional causes of anemia	Adolescent Health Counsellors under Rashtriya Kishor Swasthya Karyakram (RKSK) MOHFW, GoI and WHO	27 September 2021	New Delhi
7	Dr. Kapil Yadav	National Iodine Deficiency Disorders Control Program - Current Status and Future Strategies	Maternal Iodine Deficiency – An Unfinished Agenda National Institute of Nutrition (NIN)	26 November 2021	Virtual Mode
8	Dr. Kapil Yadav	Role of Food Fortification in Anemia Control	Large Scale Food Fortification Partners Meeting	11 March 2022	Virtual Mode

9	Salve HR, Baridalyne N, Krishnan A,	Assessment of Continuity of NCD services by the states/Uts During Covid 19 pandemic in India – Approach and Findings	65th Annual Conference of Indian Public Health Association(IPHA)	September 2021	Puducherry
10	Preety, K Anand, Rakesh Kumar, HR Salve,	Impact of Pradhan Mantri Ujjwala Yojana (PMUY) on household cooking fuel use and respiratory morbidity among women and under five children and challenges implementation of PMUY scheme	CAPHER - India Workshop	October 2021	New Delhi
11	Mohapatra S, Sharma P, Shwetha JV, Sneha KC, Vibhor Tak, Panigrahi R, Chaudhuri S, Gautam H, Sood S, Das BK, Kapil A, Hari P, Malhotra S, <b>Salve HR</b> , Kant S	Antimicrobial resistance pattern of Community-acquired Urinary Tract Infection from different geographical regions of India*	FIS/HIS International 2020	30.04. 2021	Online
11	Jalal R, Joseph J, Sambyal S, Goyal R, Lodha R, Krishnan A, Kumar R.	Respiratory syncytial virus among under- i five children with acute respiratory nfection attending health care facilities in India: a systematic review and meta-analysis.	ISIRV-WHO Virtual Conference, COVID-19, Influenza and RSV: Surveillance-informed Prevention and Treatment	19 October 2021	Online
12	Joseph J, Jalal R, Sambyal S, Goyal R, Lodha R, Krishnan A, Kumar R.	Incidence of acute lower respiratory infections due to Respiratory syncytial virus in young children in South Asia: a	ISIRV-WHO Virtual Conference, COVID-19, Influenza and RSV: Surveillance-informed	19 October 2021	Online

		systematic review and meta-analysis,	Prevention and Treatment		
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\*- was awarded best poster paper under 'mental health theme' during 65th Annual National Conference of IPHA, held at JIPMER, Puducherry

## **RESEARCH**

### ***Funded projects-Ongoing***

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>1.</b>	National Centre of Excellence and Advanced Research on Anemia Control	Shashi Kant	UNICEF	One year	2022	94.6 Lakhs
<b>1.</b>	Strengthening evidence based advocacy for influenza prevention and control in India N-1814	Anand Krishnan	CDC, Atlanta	Five years	Sep. 2017 - Sep 2022	US \$ 1250,000

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>2.</b>	Advancing Biomedical Interventions for prevention of RSV infection in under-5 Children N-2111	Anand Krishnan	IAVI	3 years	2019- 2022	50 lacs
<b>3.</b>	Establishing a Technical Support Unit For Verbal Autopsy Based Cause Of Death Ascertainment In The Sample Registration System, Registrar General Of India N-1725	Anand Krishnan	Ministry of Home Affairs( RGI)	Five years	2020- 2025	Rs. 3 Cr/ye ar

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>4.</b>	“A Phase III, Randomized Double-Blind, Three arm Placebo Controlled Trial To Evaluate The Efficacy and Safety of 2 vaccines VPM1002 and Immuvac (Mw) in Preventing TB in HHCs of Newly Diagnosed S+ Pulmonary TB patients. mw (MIP) Vaccines In preventing TB In Healthy Household Contacts of New Pulmonary TB Patients I-1060	Co-PI	ICMR	5 years	2019-2024	Rs 65.4 lakhs
<b>5.</b>	Centre of Excellence in Cardio-pulmonary Disorders under NPCCHH	Anand Krishnan	NCDC	6 months	2021-2022	5 lacs
<b>6.</b>	India Primary Health Care Support Initiative	Anand Krishnan	JHU	3 years	2021-2023	60 lacs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>7.</b>	Review of WHO PEN competencies in preservice courses in health and medical courses in SEAR	Baridalyne N	WHO-SEARO	8 months	July 2021 - March 2022	16.7 lakhs
<b>8.</b>	A Multi-Centric Novel Coronavirus (COVID-19) Population-Based Age-Stratified Sero-Epidemiological Study (In Urban, Rural and Tribal Communities at Selected Centers in India: A Prospective Study)	Puneet Misra	W.H.O	One year	Nov 2020- Dec 2021	Rs.2.39 crores
<b>9.</b>	Effect of structured yoga program on stress among frontline healthcare workers during COVID-19 pandemic	Puneet Misra	Department of Science and Technology (DST)	One year	Jan 2021- Jan 2022	Rs. 14.6 Lakhs
<b>10.</b>	Longitudinal follow-up of ongoing Multi-Centric Novel Coronavirus (COVID-19) Population-Based Age-Stratified Sero - Epidemiological prospective	Dr. Puneet Misra				

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
	Study (In Urban, Rural and Tribal Communities) under WHO Unity protocol at Selected Centers in India with added component to see cell-mediated immune response following COVID-19 infection/ vaccination and capacity building of five new sites across India					
<b>11.</b>	HIV sentinel surveillance for India project	Sanjay K Rai	NACO, MoHFW, Gol	2 years	2018-2020	Rs. 2.8 crores
<b>12.</b>	An Event-Driven, Phase3, Randomized, Double-blind, Placebo-controlled, Multicenter Study to Evaluate the Efficacy, Safety, Immunogenicity, and Lot-to-Lot consistency of BBV152, a Whole virion Inactivated SARS-CoV-2 Vaccine in Adults $\geq$ 18Years of Age.	Sanjay K Rai	ICMR	2 years	2020-22	Rs.71.3 lacs



	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>13.</b>	Effectiveness of Covaxin and Covishield vaccines against severe COVID-19 in India, 2021: Multi-centric hospital-based case control study.	Sanjay K Rai	ICMR	2 years	2021-2022	Rs. 10.9 lakhs
<b>14.</b>	An Adaptive, Seamless Phase 1, Followed by Phase 2 Randomized, Double-blind, Multicenter Study to Evaluate the Safety, Reactogenicity, tolerability and Immunogenicity of the Whole-Virion Inactivated SARS-CoV-2 Vaccine (BBV152) in Healthy Volunteers	Dr.Sanjay K Rai	Bharat Biotech	One year	2020-21	Rs. 46 Lakhs.
<b>15.</b>	Improving healthcare access and quality in the context of achieving universal health coverage among scheduled tribes: an implementation research in Visakhapatnam district, Andhra	Dr. Y. S. Kusuma	ICMR	2 ½ years	2020-2022	Rs. 29.2 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
	Pradesh					
<b>16.</b>	COVID-19 vaccine acceptance and uptake: an implementation research among tribal, rural and urban communities in selected districts of four Indian states	Dr. Y. S. Kusuma	ICMR	1 ½ years	2022-2023	Rs 99.1 lakhs
<b>17.</b>	Local governance and the pandemic: role of village/urban ward secretariats in the management of COVID-19 - A case study of Visakhapatnam district of Andhra Pradesh	Dr. Y. S. Kusuma	ICMR	1 year 4 months	2022-2023	Rs. 12.9 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>18.</b>	Effectiveness of point of care testing by front line workers- ANM,AWW, and ASHA) in anemia control	Dr Kapil Yadav	ICMR	Two years	2020-22	98.49 lakhs
<b>19.</b>	Household transmission investigation for coronavirus disease 2019 (COVID-19) in a rural and urban population of North India	Dr Kapil Yadav	WHO	Nine months	2020-2021	63.8 lakhs
<b>20.</b>	Innovation Learning Centre for supporting implementation of Comprehensive Primary Health Care in a selected district of Haryana	Dr. Sumit Malhotra	National Health Systems Resource Centre (NHSRC), Ministry of Health and Family Welfare	Three years	2018-2021	41.45 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>21.</b>	Assessment of Ayushman Bharat- Health and Wellness Centres for comprehensive primary health care – A health systems study	Dr. Sumit Malhotra	National Health Systems Resource Centre, Ministry of Health and Family Welfare,	1	2022	1.4 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>22.</b>	Capacity building of primary health care providers in comprehensive primary health care packages for operationalization of health and wellness centres using tele-mentoring platform in northern parts of India	Dr. Sumit Malhotra	National Health Mission, Haryana	Two years	2020-2022	6.89 Lakhs
<b>23.</b>	IMPETUS: IMPlimentation of an Evaluation and Treatment Package for Uniform Stroke Care and outcomes in the Medical Colleges. An Implementation Research Study.	Dr. Partha Halder (Co-PI)	Department of Health Research (Ministry of Health and Family Welfare- Govt of India)	Five years	2019-24	INR 5.22 Crores

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>24.</b>	Nutritional status of pregnant women as assessed by nutrient intake, anthropometry and selected serum biomarkers in an urban area of Delhi – A community-based study	Ravneet Kaur	AIIMS Intramural	Two years	2019-21	8,25,000/-
<b>25.</b>	Assessment of risk factors for coronavirus disease 2019 (COVID-19) in health workers: a case-control study	Ravneet Kaur	World Health Organization	One year	2020-21	21,63,500
<b>26.</b>	Comparative assessment of various models of Mobile Medical Units in rural and remote areas	Dr. Ravneet Kaur	NHSRC, MOHFW	Two years	2019-21	25 lacs
<b>27.</b>	Assessment of risk factors for coronavirus disease 2019 (COVID-19) in health workers: A case control study	Dr. Ravneet Kaur	World Health Organization	One year	2020-21	21.6 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
28.	CAPHER-Collaborative on Air Pollution and Health Effects Research, India	Dr. Harshal Ramesh Salve	Health Effects Institute (HEI), Boston, USA	2	2021-2023	48.8 lakhs
29.	Preparing NCD Health Emergency Framework and documenting best practices adopted by States/UT for continuing NCD services during COVID 19 Pandemic	Dr. Harshal Ramesh Salve	WHO – India Office	1	2021-2021	27.7 lakhs
30.	Assessment of burden, pattern and determinants of Long COVID in patients attending secondary care hospital in Ballabgarh, Haryana	Dr. Harshal Ramesh Salve	AIIMS Intramural grant	2	2021-2023	8.5 lakhs

	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year-End year</b>	<b>Total funds sanctioned (Rs)</b>
31.	Delhi Cluster – Delhi Research Implementation and Innovation (DRIIV):Tackling air pollution in Delhi NCR	Dr. Harshal Ramesh Salve	Office of Scientific Advisor , GoI	2	2020 - 22	8 lakhs
32.	Effect of glycemic status on initial presentation and treatment response in newly diagnosed sputum positive pulmonary tuberculosis patients: a prospective study	Dr. Rakesh Kumar	AIIMS Intramural	Two years	2019-21	9.85 Lakhs
33.	Efficacy of Energy Dense Nutritional Supplement (EDNS) as adjunct to standard DOTS therapy in improving treatment outcomes in malnourished newly diagnosed sputum positive pulmonary tuberculosis adult patients	Dr. Rakesh Kumar (Co-PI and coordinator)	ICMR	Two and half years	2020-2022	98 Lakhs





**Completed- projects**

<b>S. No.</b>	<b>Title of the project</b>	<b>Name of Principal Investigator</b>	<b>Funded by (Name of funding agency)</b>	<b>Duration (years)</b>	<b>Start year – End year</b>	<b>Total funds sanctioned (Rs)</b>
<b>1</b>	Reducing Premature Mortality due to CVDs (Cardio Vascular Diseases) Identification of Delays and Barriers to acute Cardiac care in National Capital Region – Delhi I-1119	Anand Krishnan	ICMR	2 years	2019 - 2021	25.3 Lakhs
<b>2</b>	Community's compliance to health advisory during COVID-19 pandemic: a socio-ecological framework to understand the compliance with implications on future disease prevention strategies	Y. S. Kusuma	AIIMS, New Delhi	1 year	2020-21	3.5 lakhs
<b>3</b>	Effectiveness of point of care testing by front line workers- ANM,AWW, and ASHA) in anemia control	Kapil Yadav	ICMR	Two years	2020 -22	98.49 lakhs

4	Household transmission investigation for coronavirus disease 2019 (COVID-19) in a rural and urban population of North India	Kapil Yadav	WHO	Nine months	2020 - 2021	63.8 lakhs
5	Mortality burden of ambient PM <sub>2.5</sub> exposure in Delhi NCR	Harshal R Salve	AIIMS – IIT Joint Collaborative Project Grant	Two years	2018 - 2020	8.9 lakhs
6	Community practices in COVID-19 outbreak in rural Ballabgarh, Haryana: A mixed method study	Harshal R Salve	AIIMS Intramural Project	One years	2020 - 2021	2.7 lakhs

### ***Departmental projects (including thesis/dissertations)- Ongoing***

1. Impact of Covid 19 on Immunization
2. Prevalence of GDM in rural area as per GoI guidelines
3. Health and nutrition behavior needs assessment of community-based youth in north India.
4. Prevalence of low back pain and its associated factors among elderly persons in an urban resettlement colony of Delhi.
5. Utilization of maternal healthcare services in a rural area of Ballabgarh, Haryana during Covid-19 pandemic.
6. Nutritional status of women aged 15-24 years in a rural area of Haryana.
7. Patient engagement in disease management in persons with diabetes mellitus or hypertension and its association with outcomes in rural Faridabad
8. Relevance and capture of narratives in verbal autopsies for cause of death
9. Healthy food purchase and retail food environment in an urban resettlement colony of Delhi
10. Effect of Structured Yoga Program on Hypertension, Diabetes, Stress and Wellness in Community Setting, its Feasibility and Long-Term Sustainability.
11. Enhancing mental health literacy and reducing stigma for mental illness among college going students in National Capital Territory of Delhi: An interventional study
12. Prevalence and determinants of selected chronic conditions among adolescents aged 10-19 years in a rural community of north India.
13. Status of COVID-19 specific IgG antibodies among recovered COVID-19 patients residing in a rural community of Faridabad, Haryana
14. Diagnostic and treatment delays among patients with drug-resistant tuberculosis registered under National Tuberculosis Elimination Programme at selected district tuberculosis centres in Delhi-NCR
15. Prevalence of anemia among women in a rural area of Haryana who had received intravenous iron sucrose during pregnancy for treatment of moderate anemia: 6 and 12 months post infusion
16. Estimation of cardiovascular risk among adults aged 30-59 years using updated WHO CVD risk charts in the rural population of Ballabgarh, Haryana
17. Diabetes distress and associated factors among adult patients residing in an urban resettlement colony in New Delhi
18. A Double Blinded Randomized Controlled Trial To Compare The Effectiveness Of Oral Multiple Micronutrient Supplement (MMS) Vs Oral Iron And Folic-acid, for Anemia Prophylaxis Among Non-anemic Pregnant Women In Rural Haryana
19. An Epidemiological study of Haemoglobinopathies and operationalization of A Comprehensive and Integrated Module for Haemoglobinopathy Management at District Level
20. Knowledge and Practices related to Ambient Air Pollution and App- based Air Quality Alert System in an Urban Population in Delhi

21. Assessment of Select Nutritional Problems among Adolescent Girls in an Urban Resettlement Colony, New Delhi- A Mixed Method Study
22. Study of Common Mental Disorders in adolescent living with HIV (ALHIV) attending the pediatric HIV services at AIIMS, New Delhi: A Case–Control Study
23. HIV Self Testing as a Mechanism to Increase the Uptake of HIV Test Among MSM: A Mixed Methods Study
24. Knowledge and acceptability of pre-exposure prophylaxis (PrEP) for HIV among men who have sex with men (MSM) and transgenders (TGs) in Delhi
25. Management of Headache Disorders in adults residing in Rural Ballabgarh: Patient and Healthcare Provider perspective.

***Departmental projects- Completed***

1. Mild cognitive impairment and associated factors among elderly persons in an urban resettlement colony in Delhi.
2. Diabetes and hypertension among elderly persons in an urban resettlement colony of Delhi.
3. Prevalence of anemia among elderly persons in a resettlement colony of Delhi.
4. Evaluation of Population Based Screening (PBS) under National Programme for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) using Lot Quality Assessment Sampling (LQAS) technique in Nuh (Mewat) District, Haryana
5. Assessment of anemia control measures in district Faridabad, Haryana with focus on iron folic acid supply chain and anemia diagnostic facilities: a mixed method study
6. Assessment of Mental Health Services in District Faridabad – A Mixed Method Study
7. Impaired lung function among patients successfully treated for pulmonary tuberculosis at Ballabgarh Tuberculosis Unit, district Faridabad, Haryana

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***Collaborative projects- Ongoing***

<b>Title of the project</b>	<b>Collaborating department/institution</b>
1. A population based prospective cohort study to unravel the causes of stroke and cognitive decline: A cross-cultural perspective	Department of Neurology
2. Advanced nodal centre for surveillance network of AMR in Typhoidal Salmonella in India	Department of Microbiology
3. Emerging drug resistance in community acquired urinary tract infection and molecular insights into dynamics of resistance traits in Indian isolates: A multicentric cross-sectional study	Department of Microbiology
4. Development of longitudinal growth reference and assessment of growth velocity, cardio-metabolic measures and its correlates among children in India– a prospective study	Department of Biostatistics
5. A study to assess the effectiveness of video assisted teaching on knowledge regarding prevention and management of varicose vein among security guards of AIIMS Delhi	College of Nursing
6. A Phase III, Randomized, Double-blind, Three arm Placebo controlled Trial to Evaluate the Efficacy and Safety of two vaccines VPM1002 and Immuvac(Mw) in Preventing Tuberculosis (TB) in Healthy Household Contacts of Newly Diagnosed Sputum Positive Pulmonary TB Patients	Department of Pulmonary Medicine and Sleep Disorders
7. Efficacy of Energy Dense Nutritional Supplement (EDNS) as adjunct to standard DOTS therapy in improving treatment outcomes in malnourished newly diagnosed sputum positive pulmonary tuberculosis adult patients	Department of Pulmonary Medicine and Sleep Disorders
8. Psycho-social Dynamics of Pregnancy Loss: Development of a Multidimensional Scale & Development and Efficacy (a Randomized Control Trial) of a Group Psychological Intervention Module	Department. of Psychiatry

9. Community based assessment of disability among adult population in Delhi using WHO International Classification of Functioning	Community Ophthalmology
10. ICMR National Registry on Venous Thrombo-Embolic Disorders	Department of Cardiology
11. ICMR Task Force Centre on Rational use of drugs	Department of Pharmacology
12. Assessment of quality of death certification practices at AIIMS, New Delhi and testing quality improvement solutions.	Department of Hospital Administration
13. Feasibility of Implementation of Hospital Based Trauma Registry for Road Traffic Injuries at Different Level of Health Care Setting and its Effect on Quality of Patient Care	
14. Combined Transmuscular Quadratus Lumborum Block and Sacral Erector Spinae block versus intrathecal morphine for perioperative analgesics in patients undergoing open gynaecological oncological surgery: an open labeled prospective randomized non inferiority trial	Dept. of Anaesthesiology, Pain Medicine and Critical Care
15. GIS based Surveillance of people with dementia and its risk factors among people residing in South Delhi by multidisciplinary collaborative approach- a pilot cross sectional survey for customized care plan and policy planning.	Department of Geriatric Medicine
16. Development and validation of dental trauma awareness tool for school teachers AIIMS Research	Centre for Dental Education and Research
17. Implementation of an Evaluation and Treatment Package for Uniform Stroke Care and outcomes in the Medical Colleges (IMPETUS).	Department of Neurology
18. Indian Multiple Sclerosis and Allied Demyelinating Disorders Registry and Research Network	Department of Neurology
19. Development and implementation of National Burn Registry at 14 burn centers in India	Department of Burns, Plastic and Reconstructive Surgery



20. Yoga Effect on Quality of Life Study among patients with Idiopathic Pulmonary Fibrosis (YES-IPF)	University of Washington
23. SARS CoV-2 reinfection and infection following vaccination among AIIMS Delhi employees	Clinical Research Unit, Research Section
24. SARS CoV-2 reinfection and infection following vaccination among AIIMS Delhi employees- Phase 2	Clinical Research Unit, Research Section

***Collaborative Projects- Completed***

<b>S. No.</b>	<b>Title of the project</b>	<b>Collaborating department/institution</b>
1	Transmission dynamics of COVID-19 and its control in India and at the state level: A mathematical modeling -based study” (A-COVID-26)I	Department of Laboratory Medicine

## **PUBLICATIONS**

### **Journal articles**

1. Shrestha P, Deepak R, Bhalla AS, Gupta Y, Sikka K, Irugu DVK. Vitamin D and Interleukins in Chronic Rhinosinusitis with Polyposis. Indian J Otolaryngol Head Neck Surg [Internet]. 2022; Available from: <https://doi.org/10.1007/s12070-022-03085-2>
2. Yadav M, Pundir S, ....., Salve HR, Malhotra S, Kant S, ....., Mohapatra S. Virulence gene mutations as a differentiator of clinical phenotypes: insights from community-acquired uropathogenic *Escherichia coli*. Microbiology (Reading). 2022 Apr;168(4).
3. Gupta S, Ramadass S, Ballabgarh Teaching and Research Group, Kumar R, Salve HR, et al. Use of web-based health information portals in primary health care: Experience from a rural Primary Health Centre in Haryana. J Family Med Prim Care. 2021;10:3144–50.
4. Gupta S, Kumar R, Kalaivani M, Nongkynrih B, Kant S, Gupta SK. Underweight, overweight, and anemia among elderly persons in a rural area of Ballabgarh, Haryana, India. Indian J Community Med. 2021;46:511–4.
5. Nongkynrih B, Salve H, Krishnan A. Training needs assessment of national non-communicable disease program managers in India. Journal of Public Health and Emergency. 2021;5:1–5.
6. Chowdhury D, Bansal L, Duggal A, Datta D, Mundra A, Krishnan A, et al. TOP-PRO study: A randomized double-blind controlled trial of topiramate versus propranolol for prevention of chronic migraine Cephalalgia. 2021.
7. Kumar R, Kant S, Chandra A, Krishnan A. Tobacco use and nicotine dependence among patients with diabetes and hypertension in Ballabgarh India. Monaldi Arch Chest Dis. 2021;
8. Chhibber-Goel J, Malhotra S, Krishnan NMA, Sharma A. The profiles of first and second SARS CoV-2 waves in the top ten COVID-19 affected countries. Journal of Global Health Reports. 2021;5:e2021082.
9. Kant S. The Covid-19 Pandemic: Impact on primary and secondary healthcare in India. Natl Med J India. 2020 Jul 4;

10. Bhattacharya S, Saleem SM, Juyal R, Kaur R, Singh A. Texting neck or “iNeck pain syndrome – An emerging public health threat in the era of New Normal. *J Prim Care Spec*. 2021;2:1–3.
11. Bhatia R and Haldar P, Puri I, Srivastava P et al. Study protocol: IMPETUS: Implementing a uniform stroke care pathway in medical colleges of India: IMPETUS Stroke. *Annals of Indian Academy of Neurology*. 2022;10 4103 1033 21.
12. Prusty RK, Bairwa M, Anwar F, Mishra VK, Patel KK, Mangal DK. Socio-biomedical predictors of child nutrition in India: an ecological analysis from a nationally representative Demographic and Health Survey, 2015-2016. *J Health Popul Nutr*. 2022 Jan;3;41(1):1.
13. Mousa A, Winskill P, Watson OJ, Ratmann O, Monod M, Ajelli M, et al. Social contact patterns and implications for infectious disease transmission- a systematic review and meta- analysis of contact surveys. *eLife*. 2021;10 70294.
14. Gautam J, Nagappa M, Haldar P, Khanna M, Seshagiri Dv, Shivaram S, et al. Sleep quality and its correlation with clinical severity in carpal tunnel syndrome. *Journal of the Neurological Sciences*. 2021;429 118422.
15. Kaur R, Kant S, Haldar P, Ahamed F, Singh A, Dwarakanathan V, et al. Single Dose of Intravenous Ferric Carboxymaltose Prevents Anemia for 6 Months among Moderately or Severely Anemic Postpartum Women: A Case Study from India. *Curr Dev Nutr*. 2021 Jul 5;
16. Sharma KA, Singh N, Hillman S, Mathur P, Yadav K, Garg A, et al. Seroprevalence of SARS-CoV-2 antibodies among first-trimester pregnant women during the second wave of the pandemic in India. *International Journal of Gynecology & Obstetrics*. 2022 Apr 16;
17. Misra P, Kant S, Guleria R, Rai SK, WHO Unity Seroprevalence study team of AIIMS. Serological prevalence of SARS-CoV-2 antibody among children and young age (between age 2-17 years) group in India: An interim result from a large multi-centric population-based seroepidemiological study [Internet]. Shashi Kant: Puneet Misra; Available from: <https://doi.org/10.1101/2021.06.15.21258880>
18. Malhotra S, Mani K, Lodha R, Bakhshi S, Mathur VP, Gupta P, et al. SARS-CoV-2 Reinfection Rate and Estimated Effectiveness of the Inactivated Whole Virion Vaccine BBV152 Against Reinfection Among Health Care Workers in New Delhi, India. *JAMA Netw Open*. 2022 Jan 4;5(1):e2142210. doi: 10.1001/jamanetworkopen.2021.42210. PMID: 34994793; PMCID: PMC8742193..

19. Bhatnagar T, Chaudhuri S, Ponnaiah M, Yadav PD, Sabarinathan R, Sahay RR, et al. Effectiveness of BBV152/Covaxin and AZD1222/Covishield Vaccines Against Severe COVID-19 and B16172/Delta Variant in India [Internet]. 2021. Available from: <https://ssrn.com/abstract=3955739>
20. Wang X, Li Y, Deloria-Knoll M, Madhi SA, Cohen C, Aruelles VL. Respiratory Virus Global Epidemiology Network et al. Global burden of acute lower respiratory infection associated with human parainfluenza virus in children younger than 5 years for 2018: a systematic review and meta-analysis. *Lancet Glob Health*. 2021 Jun;21;doi:10.1016/2214-10921.00218-7.
21. Gautam J, Nagappa M, Haldar P, Khanna M, Seshagiri Dv, Shivaram S, et al. Quality of life in patients with carpal tunnel syndrome. *Journal of the Neurological Sciences* in October. 2021;429:118420.
22. Kaur R, Kant S, Bairwa M, Kumar A, Mandal S, Gupta S, et al. Prophylactic Use of Hydroxychloroquine and Subsequent SARS-CoV-2 Infection among Healthcare Workers - A Matched Case-control Study. *Epidem Int*. 2022;7(1):1–6.
23. Scott S, Lahiri A, Sethi V, Wagt A, Menon P, Yadav K, et al. Prevalence, burden and factors associated with anemia in Indian girls and boys 10 to 19 years of age.
24. Gupta S, Haldar P, Singh A, Malhotra S, Kant S. Prevalence of serum cobalamin and folate deficiency among children aged 6–59 months: A hospital-based cross-sectional study from Northern India. *J Family Med Prim Care*. 2022;11:1063–9.
25. Murhekar MV, Bhatnagar T, Selvaraju S, Rade K, Saravanakumar V, JW VT. Prevalence of SARS-CoV-2 infection in India: Findings from the national serosurvey, May-June 2020. *Indian J Med Res*. 2020;152(1 & 2):48–60.
26. Malhotra S, Vashist P, Kalaivani M, Rath RS, Gupta N, Gupta SK, et al. Prevalence of presbyopia, spectacles coverage and barriers for unmet need among adult population of rural Jhajjar. Haryana;
27. Kamble B, Rath RS, Misra P, Rai SK, Kant S. Prevalence of depression and health related quality of life among patients with diabetes mellitus and hypertension attending a secondary care hospital in district Faridabad, Haryana. *Indian Journal of Community Health*. 2022 Jan 1;

28. Jha S, Salve HR, Goswami K, Sagar R, Kant S. Prevalence of common mental disorders among pregnant women - evidence from population-based study in rural Haryana, India. *J Family Med Prim Care*. 2021;10(2319–24):34322431.
29. Daniel RA, Aggarwal P, Kalaivani P, Gupta SK. Prevalence of chronic pulmonary obstructive disease in India: A systematic review and meta-analysis. *Lung India*. 2021;38:506–13.
30. Subramanian M, Malhotra S, Kant S, Goswami K, Perumal V, Kaloiya G. Prevalence of Anemia Among Adolescent Girls Residing in Rural Haryana: A Community-Based Cross-Sectional Study. *Cureus*. 2022 Jan;10;14(1):e21091.
31. Mohapatra S, Panigrahy R, Tak V, Shwetha JV, Sneha KC, Chaudhuri S, et al. Prevalence and resistance pattern of uropathogens from community settings of different regions: an experience from India. *Access Microbiol*. 2022 Feb 9;
32. Daniel RA, Haldar P, Kant S, Krishnan A, Gupta SK, Kumar R. Prevalence and factors associated with hypertension among community dwelling adolescents in a rural area of Haryana, India - using AAP 2017 and NHBPEP criteria. *The Indian Journal of Pediatrics* Mar. 2022;
33. Krishnan A, Mathur P, Kulothungan V, Salve HR, Leburu S, Amarchand R et al. Preparedness of primary and secondary health facilities in India to address major noncommunicable diseases: results of a National Noncommunicable Disease Monitoring Survey (NNMS). *BMC Health Serv Res*. 2021;21:757.
34. NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. *Lancet*. 2021;11(398).
35. Mathur P, Kulothungan V, Leburu S, Krishnan A, Chaturvedi HK, Salve HR, et al. National non-communicable disease monitoring survey (NNMS) in India: Estimating risk factor prevalence in adult population. *PLoS ONE* [Internet]. 2021;16(3). Available from: <https://doi.org/10.1371/journal.pone.0246712>.
36. Aparna P, Salve HR, Krishnan A, Lakshmy R, Gupta SK, Nongkynrih B. Methods of dietary sodium estimation. *Indian J Med Spec*. 2021;12:183–7.

37. Ahmad A, Salve HR, Nongkynrih B, Sagar R, Krishnan A. Mental health literacy among adolescents: Evidence from a community-based study in Delhi. *International Journal of Social Psychiatry*. 2021 Apr;
38. Varghese C, Nongkynrih B, Mikkelsen B. Learning by doing: accelerate towards the NCD target in SDG through primary healthcare: Comment on “Universal health coverage for non-communicable diseases and health equity: lessons from Australian primary healthcare. *Int J Health Policy Manag*. 2022;11(5):708–10.
39. Shah AK, Daniel RA, Kusuma YS. Knowledge and willingness to accept vaccine against SARS-CoV-2 among undergraduate medical students in Delhi, India. *Current Health Sciences Journal*. 2021;47(4):479–84.
40. Chaturvedi R, Malhotra S, Sharma A. Incidence, treatments and outcomes of SARS CoV-2 and HIV Co-infections. *Journal of Global Health Reports*. 2021;2021;5:e2021099.
41. Kumar R, Dar L, Amarchand R, Saha S, Lafond KE, DR P. Incidence, risk factors, and viral etiology of community-acquired acute lower respiratory tract infection among older adults in rural north India. *J Glob Health*. 11(04027).
42. Gupta AK, Meena JP, Haldar P, Tanwar P, Seth R. Impact of G-CSF administration post-allogeneic hematopoietic stem-cell transplantation on outcomes: a systematic review and meta-analysis. *Am J Blood Res*. 2021 Oct 15;
43. Miller V, Reedy J, Cudhea F, Zhang J, Shi P, Erndt-Marino J, et al. Global, regional, and national consumption of animal-source foods between 1990 and 2018: findings from the Global Dietary Database. *Lancet Planet Health*. 2022;Mar;6(3):e243-e256.
44. Tewari N, Sultan F, Mathur VP, ...Haldar P, et al. Global status of knowledge for prevention and emergency management of traumatic dental injuries in dental professionals: Systematic review and meta-analysis. *Dent Traumatol*. 2021 Apr;37(2):161–76.
45. Rath RS, Kumar R, Amarchand R, Gopal GP, Purakayastha DR, Chhokar R. Frailty, Disability, and Mortality in a Rural Community-Dwelling Elderly Cohort from Northern India. *Indian J Community Med*. 2021;46:442–5.

46. Malhotra S, Kant S, Rath R, Ahamed F, Sathiyamoorthy R, Gupta SK. Excess screen time and its associated factors among young men in a rural community of north India. Accepted in Indian Journal of Public Health.
47. Malhotra S, Rahi M, Das P, Chaturvedi R, Chhibber-Goel J, Anvikar A, et al. Epidemiological profiles and associated risk factors of SARS-CoV-2 positive patients based on a high-throughput testing facility in India. *Open Biol.* 2021 Jun 2;2021Jun;11(6):200288.
48. Gothwal S, Singh N, Sitaraman S, Choudhary R, Meena KK, Bairwa GS, et al. Efficacy of transcutaneous bilirubinometry as compared to serum bilirubin in preterm newborn during phototherapy. *Eur J Pediatr.* 2021;Aug;180(8):2629-2636.
49. Krishnan A, Dar L, Saha S, Narayan VV, Kumar R. Efficacy of live attenuated and inactivated influenza vaccines among children in rural India: A 2-year, randomized, triple-blind, placebo-controlled trial. *PLoS Med.* 2021 Apr;18(4):1003609.
50. Chowdhury D, Mundra A, Datta D, Duggal A, Krishnan A, Koul A. Efficacy and tolerability of combination treatment of topiramate and greater occipital nerve block versus topiramate monotherapy for the preventive treatment of chronic migraine: A randomized controlled trial. *Cephalalgia.* 2022 Mar;8(3331024221082077).
51. Mohapatra D, Gupta AK, Haldar P, Meena JP, Tanwar P, Seth R. Efficacy and Safety of Vemurafenib in Langerhans Cell Histiocytosis (LCH): A Systematic Review and Meta-Analysis. *Pediatric Hematology and Oncology.* (Accepted)
52. Lohiya A, Daniel R, Varghese C, Rath R, Suliankatchi R, Nongkynrih B. Effectiveness of Visual Inspection with Acetic Acid (VIA) Screening on Cervical Cancer Mortality and Incidence - A Systematic Review and Meta-Analysis (2022). *Asian Pacific Journal of Cancer Prevention.* 23.
53. Kaur R, Kant S, Subramanian M, Kamble BD, Malhotra S, Haldar P. Effectiveness of Intravenous Iron Sucrose Therapy in Routine Antenatal Care for the Treatment of Moderate to Severe Anemia Among Pregnant Women Attending a Secondary Care Hospital in North India: A Retrospective Analysis. *Cureus.* 2022 Mar 29;
54. Kant S, Kaur R, Ahamed F, Singh A, Malhotra S, Kumar R. Effectiveness of intravenous ferric carboxymaltose in improving hemoglobin level among postpartum women with moderate-to-severe anemia at a secondary care hospital in Faridabad, Haryana - An interventional study. *Indian J Public Health.* 2020;64(2):168–72.



55. Kajal S, Reddy CS, Kumar A, Sharda R, Desai D, Ahmed A, et al. Effectiveness of an institutional COVID-19 central sampling team during pandemic at a tertiary care centre. *J Family Med Prim Care*. 2021;10:2993–7.
56. Mandal S, Misra P, Sharma G. Effect of Structured Yoga Program on Stress and Professional Quality of Life Among Nursing Staff in a Tertiary Care Hospital of Delhi—A Small Scale Phase-II Trial. *Journal of Evidence-Based Integrative Medicine*. 2021 Jan;
57. Sharma S, Khandelwal R, Yadav K, Ramaswamy G, Vohra K. Effect of cooking food in iron-containing cookware on increase in blood hemoglobin level and iron content of the food: A systematic review. *Nepal Journal of Epidemiology*. 2021 Jun 11;
58. Misra P, Sharma G, Tandon N, Kant S, Sangral M, Rai SK, et al. Effect of Community-Based Structured Yoga Program on Hba1c Level among Type 2 Diabetes Mellitus Patients: An Interventional Study. *Int J Yoga*. 2021;Sep-Dec;14(3):222-228.
59. Tewari N, Mathur V, Goel S, Morankar R, ..., Haldar P, Ritwik P. Does dental trauma have impact on the oral health related quality of life of children and adolescents?" MSS-2022-003R. Accepted. *Evidence-Based Dentistry*
60. Kumar P, Sahu D, Rajan S, Mendu VVR, Das C, Kumar A, et al. District-level HIV estimates using the spectrum model in five states of India, 2017. *Medicine (Baltimore)*. 2021 Jul 16;100(28):e26578. doi: 10.1097/MD.00000000000026578. PMID: 34260537; PMCID: PMC8284765.;
61. Krishnan A, Chowdhury D, Burden. Disability and Public Health Importance of Headache Disorders in India *Neurology India*. 2021;69,7,4.
62. Bhattacharya S, Bera OP, Saleem SM, Hossain MM, Varshney DS, Kaur R. Dietary salt consumption pattern as an antecedent risk factor for hypertension: Status, vision, and future recommendations. *Clin Nutr ESPEN*. 2022 Feb;
63. Chandra A, Kumar R, Kant S, Krishnan A. Diagnostic Pathways and Delays in Initiation of Treatment among Newly Diagnosed Tuberculosis Patients in Ballabgarh, India. *The American Journal of Tropical Medicine and Hygiene*. 2021;
64. G.B.D. Diabetes Mortality Collaborators. Diabetes mortality and trends before 25 years of age: an analysis of the Global Burden of Disease Study 2019. *Lancet Diabetes Endocrinol*. 2019;Mar;10(3):177-192.

65. Kankaria A, Narang R, Saxena A, Ramakrishnan S, Desai A, Thangjam RS, et al. Determinants of Waist-to-Height Ratio and Its Relation to Hypertension among School Children in India: A Multicenter Study. *Indian J Pediatr.* 2021 Aug 18;
66. Mohta A, Malhotra S, Gupta SK, Mani K, Patra BN, Nongkynrih B. Depression among adolescents in a rural area of Haryana, India: A community-based study using Patient Health Questionnaire – 9. *Cureus.* 13(9):18388.
67. Kusuma YS, Goswami AK, Babu BV. Dengue awareness, preventive behaviours and Aedes breeding opportunities among slums and slum-like pockets in Delhi: a formative assessment. *Transactions of the Royal Society for Tropical Medicine and Hygiene.* 2021;115(6):653–63.
68. Joe W, Vishwakarma R, Patel N, Alambusha R, Kulkarni B, Yadav K, et al. Coverage of Iron and Folic Acid Supplementation in India: Progress Under the Anemia Mukht Bharat Strategy 2017-2020. *Health Policy and Planning.* 2022 Mar 8;
69. Chandra A, Kumar R, Kant S, Krishnan A. Costs of TB care incurred by adult patients with newly diagnosed drug-sensitive TB in Ballabgarh block in northern India. *Trans R Soc Trop Med Hyg.* 2021 Apr 9;
70. Deori TJ, Ramaswamy G, Jaiswal A, Loganathan V, Kumar R, V M. Compliance with iron folic acid (IFA) tablets and associated factors among pregnant women attending antenatal care clinic at Sub District Hospital. *Ballabgarh J Family Med Prim Care.* 2021;10:2006–11.
71. Prasad K, Dwivedi SN, Kant S, Vibha D, Pandit AK, G K. Cohort profile: The LoCARPoN-a population-based prospective cohort study in middle-aged and older adults in India. *Int J Epidemiol.* 2021 Jun 10;
72. Krishnan A, Dar L, Amarchand R, Prabhakaran AO, Kumar R, Rajkumar P. Cohort profile: Indian Network of Population-Based Surveillance Platforms for Influenza and Other Respiratory Viruses among the Elderly (INSPIRE). *BMJ Open.* 2021;11:e052473.
73. Puntambekar V, Sharma AK, Yadav K, Kumar R. Checklist to aid young physicians managing obstetric emergencies in rural India: a quality improvement initiative. *BMJ Open Quality.* 2021;10:001435.

74. Satpathy P, Singh AK, Agarwal N, Majumdar A, Goel AD, Yadav K. Can proactive roles played by Community Medicine professionals in times of COVID-19 Pandemic bring the leadership of public health in India in the right hands? *Journal of Family Medicine and Primary Care*. 2022 Jan 11;
75. Kaur R, Kalaivani M, Goel AD, Goswami AK, Nongkynrih B, Gupta SK. Burden of falls among elderly persons in India: a systematic review and meta-analysis. *The National Med J India*. 2020;33(4):195–200.
76. Mathur P, Kulothungan V, Leburu S, Krishnan A, Chaturvedi HK, **Salve HR et al**. Baseline risk factor prevalence among adolescents aged 15–17 years old: findings from National Non-communicable Disease Monitoring Survey (NNMS) of India. *BMJ Open*. 2021;11:e044066:2020-04406.
77. Vignesh D, Gupta N, Kalaivani M, Goswami AK, Nongkynrih B, Gupta K, et al. Barriers to treatment-seeking for impairment of vision among elderly persons in a resettlement colony of Delhi: A population-based cross-sectional study. *The Indian Journal of Medical Research*. 2021 Apr;154(4):623–30.
78. Misra P, Malhotra S, Sharma N, Misra MC, Vij A, Pandav CS. Awareness about brain death and attitude towards organ donation in a rural area of Haryana, India. *J Family Med Prim Care*. 2021;Aug;10(8):3084-3088.
79. Nethan ST, Lakshmi K, Ralhan RMD, R.Priyanka BS, S. K. Assessment of the prevalence and relationship of tobacco use and associated oral lesions in an urban population of New Delhi: a cross - sectional study. *Indian J Surg* [Internet]. 2021; Available from: <https://doi.org/10.1007/s12262-021-03055-y>
80. Kinyoki D, Osgood-Zimmerman AE, Bhattacharjee NV, Disease Anaemia Collaborators LB, Kassebaum NJ, Hay SI. Anemia prevalence in women of reproductive age in low- and middle-income countries between 2000 and 2018. *Nat Med*. 2021;Oct;27(10):1761-1782.
81. Chowdhury D, Krishnan A, Duggal A. An Internet-based study on the impact of COVID-19 pandemic-related lockdown on migraine in India. *Acta Neurol Scand*. 2021;144:706–16.
82. Tewari N, Goel S, Haldar P, Mathur VP, Srivastav S. An effective method to summarise the outcomes of questionnaire-based studies in systematic reviews. *Acta Odontol Scand*. 2022 Mar 19;35311426.

83. Krishnan A. Addressing hypertension among tribal people of India. *Indian J Med Res.* 2021 Sept ; 154(3):413-415,
84. Dadhwal V, Sagar R, Choudhary V, Kant S, Perumal V, Misra P, et al. A Single-Arm Pilot Study of Multicomponent Psychoeducational Intervention for Postpartum Depression and Anxiety in a Rural Community. *Indian Journal of Psychological Medicine* [Internet]. 2022; Available from: <https://doi.org/10.1177/02537176211072690>
85. Kaur R, Kant S, Goel AD, Bhatia H, Murry L. A quality improvement intervention to improve early initiation of breastfeeding among newborns delivered at a secondary level hospital in northern India. *Med J Armed Forces India* Apr. 2021;77(2):230–6.
86. Misra P, Malhotra S, Sharma N, Misra M C, Vij A, Pandav C S. A qualitative approach to understand the knowledge, beliefs, and barriers toward organ donation in a rural community of Haryana - A community based cross-sectional study. *Indian J Transplant* 2021;15:19-23.
87. Chaturvedi R, Chhibber-Goel J, Malhotra S, Sharma A. A perspective on SARS CoV-2 and community transmission in the top COVID-19 affected nations. *Journal of Global Health Reports*2021;5:e2021083.
88. Misra P, Kant S, Misra A, Jha S, Kardam P, Thakur N, et al. A Community Based Randomized Controlled Trial to See the Effect of Vitamin D Supplementation on Development of Diabetes Among Women with Prediabetes Residing in A Rural Community of Northern India. *J Family Med Prim Care.* 2021;Aug;10(8):3122-3129.
89. Asadullah M, Shivashankar R, Shalimar, Kandasamy D, ...Krishnan A, et al. (2022) Rural-Urban differentials in prevalence, spectrum and determinants of Non-alcoholic Fatty Liver Disease in North Indian population. *PLoS ONE* 17(2): e0263768. <https://doi.org/10.1371/journal.pone.0263768>.
90. Tewari DN, Jonna DI, Mathur DVP, ..., Haldar P, et al. Global status of knowledge for the prevention and emergency management of traumatic dental injuries among non-dental healthcare professionals: a systematic review and meta-analysis. *Injury* [Internet]. 2021 Jun 16 [cited 2021 Jun 21]
91. Ella R, Vadrevu KM, Jogdand H, Prasad S, Reddy S, Sarangi V, et al. Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: a double-blind, randomised, phase 1 trial. *Lancet Infect Dis.* 2021 May 1;21(5):637–46.

92. Ella R, Reddy S, Jogdand H, Sarangi V, Ganneru B, Prasad S, et al. Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: interim results from a double-blind, randomised, multicentre, phase 2 trial, and 3-month follow-up of a double-blind, randomised phase 1 trial. *Lancet Infect Dis*. 2021 Jul 1;21(7):950–61.
93. Rai SK, Jha S, Misra P. Empowering public health leadership in India. *Indian J Public Health*. 2020 Jul-Sep;64(3):207-208. doi: 10.4103/ijph.IJPH\_1108\_20. PubMed PMID: 32985418.
94. Joshi P, Ghosh S, Dey S, Dixit K, Choudhary RK, Salve HR et al. Impact of acute exposure to ambient PM<sub>2.5</sub> on non-trauma all- cause mortality in the megacity Delhi Atmospheric Environment 2021, 259,118548
95. Mohapatra S, Chaudhary S, Kumari R, Sharma P, Pundir S, Sood S et al. Comparison of virulence genes and resistance determinants of Uropathogenic Escherichia coli isolated from pregnant women with symptomatic and asymptomatic bacteriuria using whole genome sequencing. *Indian Journal of Medical Microbiology*. 2021 Sep 1;39:S17.
96. Zhou B, Carrillo-Larco RM, Danaei G, Riley LM, Ezzati M, Kusuma YS, et al. (NCD Risk Factor Collaboration (NCD-RisC)). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. *Lancet*. 2021 Sep 11;398(10304):957-980. doi: 10.1016/S0140-6736(21)01330-1. Epub 2021 Aug 24. PMID: 34450083; PMCID: PMC8446938.

### **Abstracts published in journals**

None

### Chapters in books

S. No.	Author(s) of chapter	Name of the book	Edition	City of publication	Publisher	Year of publication	First-Last page
1	Anand Krishnan Health Management Information Systems	Management of Healthcare Systems	1	New Delhi	Oxford University Press	2022	316-336
2	Puneet Misra	Post-COVID Clinical Issues And Management		New Delhi	CBS PUBLISHERS AND DISTRIBUTORS PVT LTD	2022	202-215
3	Babu BV, Sharma Y, Kusuma YS Primary healthcare for labour migrants: The need for an inclusive policy	India Migration Report, 2021- Migrants and Health	1	Abingdon, Oxfordshire	Routledge	2022	77 - 91
4	Kusuma YS, Babu BV Internal migrants' health in India: The need for inclusive policies and implementation	India Migration Report, 2021- Migrants and Health	1	Abingdon, Oxfordshire	Routledge	2022	9 – 26
5	Ravneet Kaur -Quality Improvement in Healthcare	Management of Healthcare Systems.	First	New Delhi	Oxford University Press	2022	533 - 549
6	J.L. Meena, S. Saha, Ravneet Kaur -Quality Assurance and Accreditation in Health Care	Management of Healthcare Systems.	First	New Delhi	Oxford University Press	2022	506 - 532

7	Ravneet Kaur, Nitika Sharma -Environmental Health Hazards	Textbook of Child Health Nursing.	First	New Delhi	Indian Journal of Pediatrics	2022	481 - 492
8	Aditi Gupta, Ravneet Kaur, Amarjeet Singh - Understanding the National Policy for People with Disabilities in Chandigarh: An insider's perspective.	Health and Human Development - Disability, Health and Slum Issues.	First	New York	Nova Publishers	2021	981-989
9	Partha Haldar, Ritika Khandelwal, Vignesh Dwarkanathan, Gomathi Ramaswamy, Kashish Vohra, Tripti Rai, Kapil Yadav	Community Pediatrics and Health Programs in Textbook of Child Health Nursing	First	New Delhi	Indian Journal of Pediatrics	2022	462-480
10	Sheila C. Vir, Kapil Yadav, Gomathi Ramaswamy, Kashish Vohra	Sheila Chandra Vir- Iron deficiency and iron-deficiency anemia in young 997 children  Iron deficiency and iron- deficiency anemia in Adolescent girl  National iodine deficiency disorders control programme, India in Public Health Nutrition in Developing Countries	Second	New Delhi	Woodhead Publishing	2021	
11	Kapil Yadav, Shashi Kant	Achieving Anemia Free India	First	New Delhi	National Centre of Excellence and	2021	

					Advanced Research on Anemia Control (NCEAR-A)		
1 2	Harshal Ramesh Salve	M A Kadri- Mental Health in IAPSM Textbook of Community Medicine	Second	Gujarat	Jaypee Publisher	2021	



## Patient Care

Under the title: Patient care/supportive activities: please include information regarding: (a) facilities available in the department (including special clinics and/or special laboratory facilities (b) community services/camps etc. Please also provide data wherever appropriate.

### **A) CRHSP report**

#### **FACULTY Members**

**Professor In-Charge:** Dr. Puneet Misra

**Additional Professors:** Dr. Kapil Yadav, Dr. Harshal Ramesh Salve

**Associate Professor:** Dr. Rakesh Kumar

Comprehensive Rural Health Services Project (CRHSP), Ballabgarh is the rural program of the Centre for Community Medicine of the All India Institute of Medical Sciences, New Delhi. It comprises a sub district hospital (SDH), and two Primary Health Centres (PHCs) at Dayalpur, and at Chhainsa. The Intensive Field Practice area of CRHSP, as of 31<sup>st</sup> March 2022 consisted of a total population of **1,05,362**. The public health care infrastructure at the Intensive Field Practice area of CRHSP is set up through a network of 12 sub-centres associated with the two aforementioned PHCs. The Mission of CRHSP Ballabgarh is to achieve excellence in public health by undertaking teaching, research and patient care in rural-setting.

CRHSP Ballabgarh is involved in patient care, teaching, training and research activities. MBBS 7<sup>th</sup> semester students, Interns, postgraduate students and Senior Residents of various disciplines, and Nursing students, are posted at CRHSP Ballabgarh for their training through exposure to health care provision at a sub-district facility, and at PHC level. The students are also sensitized to the social determinants of health, through their residential teachings at these PHCs, wherein they interact with the community members.

Healthcare provision statistics at CRHSP Ballabgarh (1<sup>st</sup> April 2021 to 31<sup>st</sup> March 2022)

- OPD services – **2,43,823** patients,
- In-patient services - **9,381** patients,
- Emergency services – **58,221**patients
- A total of **2,829** deliveries were conducted for pregnant women
- Total number of surgeries – **1,930**(only at the SDH Ballabgarh)

Following note provides a detailed description of the activities at the CRHSP Ballabgarh, which includes the two PHCs for the financial year 1<sup>st</sup> April 2021 to 31<sup>st</sup> march 2022:

1. Teaching
2. Patient Care
3. Newer Initiatives

### **Patient Care**

Patient care at the CRHSP Ballabgarh is described under following two categories

- A.** Patient care services provided at the Sub-district Hospital, Ballabgarh
- B.** Patient care services provided at the Primary Health Centres

**Outpatient Departments:**

<b>Daily</b>	<b>Once weekly</b>
· General Medicine	· Non Communicable Disease Clinic
· General Surgery	· Physical Medicine and Rehabilitation (PMR)
· Paediatric	· Paediatric Surgery
· Obstetrics and Gynaecology	· Nutrition OPD
· Ophthalmology	
· Psychiatry	<b>Thrice weekly</b>
· Dental	· Ante-natal clinic
· AYUSH(Homeopathy)	
· AYUSH(Ayurveda)	<b>Twice weekly</b>

· Orthopaedics	· Dermatology
	· Ear, Nose and Throat

**A. Patient care services provided at SDH Ballabgarh: (2021-22)**

**Total Outdoor Patients**

· Out Patient Department (OPD) Total (New +Old)	2,43,823
o New OPD patients (%)	1,31,761 (54.0%)
· Medicine (New + Old)	78,106
· Paediatrics (New + Old)	43,818
· Obstetrics and Gynaecology (New + Old)	19,660
· Antenatal care Clinic registrations, Total visits, (New+Old)	19,498

· Ophthalmology (New + Old)	14,930
· Surgery (New + Old)	11,217
· ENT (New + Old)	4,717
· Dental	7,451
· Physical Medicine & Rehabilitation (New + Old)	2,471
· Non-Communicable Ds clinic, Total (New + Old)	2,493
· Dermatology (New + Old)	5,920
· AYUSH (Homeopathy + Ayurveda)	9,667
· Orthopaedic (New + Old)	15,307
· Psychiatry	7,115
· Nutrition OPD	205

· Plastic Surgery	0
· Neurology	0
· Pediatric surgery	1,248

## 2.In-patient services

- **Total no. of beds : 50**

<b>a. Total Admissions(including births)</b>	<b>9381</b>
· Admission through casualty	3,974
· Admission through OPD	2,595
· Admission of New Born (births)	2,812
<b>b. Disaggregation of admissions, by specialty (N=9,381)</b>	

· Obstetrics and Gynaecology	5,041
· Paediatrics	258
· Ophthalmology	661
· Surgery	482
· Medicine	28
· ENT	98
· Physical Medicine and Rehabilitation (PMR)	1
· New Born	2812
c. Average Bed Occupancy Rate (%)	94.48%
d. Average duration of stay for all patients (in days)	1.85
e. Total Deliveries Conducted (including IUD)	2,829

<b>Casualty Services: No of beds – 10</b>	
· Patients registered	58,211
· Medico-legal cases	4,600
· Emergency admissions	2,126

<b>Total Surgical Procedures at SDH Ballabgarh</b>	
1. Ophthalmology	592
2. Obstetrics and Gynaecology	782
3. General Surgery	403
4. Pediatrics Surgery	76



5. ENT	77
6. PMR	0
<b>Total</b>	<b>1,930</b>

<b>Laboratory and Diagnostic Services</b>	
a. Laboratory investigations (biochemical and hematological)	2,17,531
b. X Ray	18,561
c. USG	7,512
d. Malaria Slides	2,468
· P.vivax	NIL
· P. falciparum	NIL

e. Counseling and testing services provided for HIV	10138 & 10124
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**National Tuberculosis Elimination Programme:**

SDH Ballabgarh is a Tuberculosis Unit (TU) under National Tuberculosis Elimination Programme. Three Designated Microscopy Centres (DMCs) are attached to this unit. Total tuberculosis cases treated at Ballabgarh Hospital from 1<sup>st</sup> April 2021 to 31<sup>st</sup> March 2022

were as follows:

<b>Total cases started on treatment</b>	
a. New Case	994
b. Previously treated case	29

### **Community Health Services**

CRHSP, Ballabgarh provides community health services in Intensive Field Practice Area (IFPA) of 28 villages through a network of two Primary Health Centres (Dayalpur and Chhainsa), and 12 sub centres. Domiciliary, outpatient, inpatient, and referral services are provided in the IFPA. Important demographic indicators for the IFPA for year (2021-22) were as follows:

<b>Indicator</b>	<b>Value</b>
Population	105,362
Birth Rate per 1,000 population	18.8
Death Rate per 1,000 population	8.4
Sex ratio at Birth (females per 1,000 males)	883
Infant mortality rate per 1,000 live births	31.2
Under 5 mortality rate per 1,000 live births	38.3

**OPD Services in Intensive Field Practice Area:** This includes health care services provided at OPD of the PHC, as well as the OPD of the Extended Health Clinics, that are conducted at each of the villages of IPHA

PHC	New Cases	Repeat Visits	Total
Dayalpur	18655	18957	37612
Chhainsa	16597	11363	22960
<b>Total</b>	35252	30320	60572

Total No. of AYUSH OPD Patients registered at PHC Dayalpur: **6,242**

(There is no AYUSH OPD at PHC Chhainsa)

**2. Inpatient Services provided at the PHCs:**

PHC	Total
Dayalpur	327
Chhainsa	333

<b>Total</b>	<b>660</b>
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### 3. Emergency Services at PHCs:

<b>PHC</b>	<b>Total</b>
Dayalpur	8,342
Chhainsa	3,564
<b>Total</b>	<b>11,906</b>

### 4. Family Welfare and Maternal Child Health

The following services are provided as per the guidelines of National Health Mission

<b>Indicator</b>	<b>Value</b>
Total antenatal registration	2,169
Complete TT coverage of registered cases (%)	90.7

<b>Percentage of Institutional delivery in IFPA</b>	
PHC Chhainsa (%)	99.3%
PHC Dayalpur (%)	97.5%
<b>Total deliveries in delivery huts at the PHCs</b>	
PHC Chhainsa	333
PHC Dayalpur	327

## 5. Other National Health Programmes

**National Vector Borne Disease Control Programme:** Collection of blood slides are done as a part of passive surveillance in OPD and as active surveillance during domiciliary visits in the IFPA.

Indicator	PHC Chhainsa	PHC Dayalpur
Total number of malaria slides tested	3019	2864

Total number of positive cases	0	0
Annual Parasite Incidence (per 1,000 population)	0	0
Annual Blood Examination rate (%)	5.89%	5.32
Slide Positivity Rate (%)	0	0

**National Tuberculosis Elimination Programme:** The National Tuberculosis Elimination Programme is carried out in the IFPA according to national guidelines. Dayalpur PHC has been designated as a Microscopy Centre and caters to all villages under the IFPA. Tuberculosis patients treated in the IFPA (category wise) is as follows:

Indicator (2021-2022)	PHC Chhainsa	PHC Dayalpur
Total number of patients started on treatment	99	77
New Cases	88	68
Previously treated cases	11	9

**6. Special services:** Outreach Speciality OPD (ORSO) is a special activity conducted at each PHC where Senior Residents posted at SDH Ballabgarh attend the patients at PHCs on a weekly basis. The services were started in June 2013. For the period, 1<sup>st</sup> April 2021 to 31<sup>st</sup> March 2022, the cases attended to at each PHC were as follows:

Services	PHC Chhainsa	PHC Dayalpur
Gynaecology	78	84
Paediatrics	61	53
Ophthalmology	106	96
Psychiatry	45	44
<b>Out Reach Speciality OPD (ORSO)* (Total)</b>	<b>290</b>	<b>277</b>

**7. Animal Bite Management Clinic**

Both PHC Chhainsa and Dayalpur has Animal Bite Management Clinic. A total of 767 doses of Anti-rabies vaccination was provided in PHC Chhainsa and **2368** doses in PHC Dayalpur.



Special services to pregnant woment	PHC Chhainsa	PHC Dayalpur
Pregnancy received IVIS	72	121
PPIUCD	26	23
High Risk Pregnancy	375	347

## 8. IEC Activities

### Group Health Talks:

#### Group health talk was delivered on following topics:

A total of 28 and 55 health talks were conducted in PHC Chhainsa and Dayalpur respectively. Neonatal care and kangaroo mother care, Breast feeding and weaning, Antenatal care, high risk pregnancy, anaemia in pregnancy, importance of institutional delivery, Immunization, Malaria and Dengue, Tuberculosis, anaemia in children, malnutrition in children, Vitamin-A deficiency, Diabetes, Hypertension, HIV/AIDS, accidents in children, personal hygiene, family planning methods, postnatal care and diet, care of newborn, swine flu, geriatric care, Mental health programme, etc.

## 9. Short film shows:

Films were screened in Child welfare centre, Ballabgarh, PHC Dayalpur, and PHC Chhainsa on important topics i.e. breast feeding, antenatal care, child care, female feticide, eye care, Vitamin A deficiency, malnutrition, and diarrhoea during OPD timings.

#### **10. Special activities during financial year 2021-2022 at PHCs**

1. **Kayakalp related activities:** Both PHCs participated in activities related to Kayakalp.
2. **Intensive Mission Indradhanush:** Both the PHCs participated in Intensive Mission Indradhanush where almost 60 pregnant women and 275 kids were immunized against seven vaccine preventable diseases.
3. **Assessment for National Quality Assurance Standards (NQAS):** Both the PHCs have been working very hard with a mission of providing quality comprehensive care to the beneficiaries.
4. **COVID testing and vaccination drive:** As per state government guidelines both PHCs successfully carried out community based COVID testing and COVID vaccination.
5. **Haryana Villagers General Health Checkup Scheme:** The activity was conducted in PHC . Asha workers and health workers were trained for identifying persons with COVID-19 like illnesses. Health workers were trained to perform Rapid antigen testing. Quality was checked by agreement with medical officer posted in PHC. All the individuals residing in IFPA were screened by Health workers and ASHA workers. Those who had symptoms of COVID-19 and contacts of COVID-19 were tested using rapid antigen and immediately isolated.
6. **Plantation drive:** Plantation drive was carried out on occasion of World Environment Day at both the PHCs and sub-district hospital Ballabgarh.
7. **Cataract screening camp** was conducted in village Bukharpur in April 2021. A total of 43 elderly persons were screened, out of which 15 were positive for cataract. Ten of those persons were operated in CRHSP Ballabgarh for cataract. Due to the second wave of COVID-19 in April and May of 2021, similar screening camps in other villages were cancelled.

## **11. Awards and accolades**

1. **Kayakalp award at primary Health Center:** Among all the Primary Health Centers in the District Faridabad, CRHSP's PHC Chhainsa was recognized as the best, for Kayakalp Award, while CRHSP's second Primary Health Center, i.e. PHC Dayalpur the commendation award, for Kayakalp Award for the Kayakalp programme in 2021-22.
2. **Certification of NQAS for PHC Dayalpur:** In national assessment of PHC Dayalpur, it was awarded NQAS quality certified with conditionality in November 2021

## **12. COVID response in CRHSP Ballabgarh and PHC Dayalpur and Chhainsa.**

Following the resumption of services, COVID-19 response in IFPA focused on prevention, early detection and appropriate treatment and isolation of COVID-19 cases.

SOPs for maintaining COVID Appropriate Behaviour (CAB) were laid down and implemented in CRHSP Ballabgarh. Markings were made inside OPD at 6 feet distance. Chairs were also marked with cross for maintaining social distancing while sitting.

IEC material pertaining to COVID-19 precautions/symptoms/help-line number were put throughout the CRHSP Ballabgarh campus. Patients coming to OPD was provided with triple layer surgical mask and advised to follow cough etiquettes. Alcohol based hand sanitizers were placed at accessible places for patients. Training of all staff in Hospital Infection Control guidelines of AIIMS was carried out.

Testing of patients with Rapid Antigen Testing in emergencies and rt-PCR for routine cases was done, and adequate containment measures were taken which include contact tracing, treatment and advising home isolation.

## **Primary Health Center Chhainsa**

All routine services continued in PHC during year 2021-2022. None of the services were stopped for any part of the year. Along with routine services, COVID 19 specific activities included screening, vaccination, contact tracing, home isolation and follow up of COVID-19 positive patients.

Initially, screening of symptoms was done by ASHA workers and health workers and patients who had symptoms were referred to PHC Chhainsa for testing. Haryana Villagers General Health Checkup Scheme (HVGHCS) was rolled out on 15 May 2021. Asha workers and health workers were trained for identifying persons with COVID-19 like illnesses. Health workers were trained to perform Rapid antigen testing at sub-centre and logistics were taken care of. Quality was checked by agreement with medical officer posted in PHC. All the individuals residing in IFPA were screened by Health workers and ASHA workers. Those who had symptoms of COVID-19 and contacts of COVID-19 were tested using rapid antigen and immediately isolated.

Medical treatment, home isolation , contact tracing and follow-up of all COVID-19 positive patients was done during this year.

Vaccination drive for COVID-19 was started from 21<sup>st</sup> January 2021 for health care workers, from 8<sup>th</sup> March 2021 for elderly. Beginning from April 1<sup>st</sup> 2021, people aged 45-59 years with comorbidities were eligible. It later encompassed every person above 18 years of age starting from May 1<sup>st</sup> 2021. House to house visits were done by ASHA and ANM to screen for eligible individuals in IFPA and these individuals were vaccinated in the sub-centres as per schedule of vaccination drive. COVID-19 vaccination was rolled out for children between 15-18 years of age from January 3 2022. For vaccination of children, a school-based vaccination strategy was adopted first. Afterwards, vaccination of eligible children was done at sub-centre and PHC along with school. During the year 2021-2022, routine immunization took place along with COVID-19 vaccination and special efforts were made to continue COVID-19 vaccination drive without hampering routine immunization services.

From April 2021 to march 2022, in total, 36,082 doses of vaccines were given, including 3,263 doses among children less than 18 years in school

## **Indicators for COVID response from 1 April 2021 to 31 March 2022**

S.No.	Indicator	Total numbers
1)	No. of RT-PCR tests done in 2021-22	1426
2)	No. of RAT tests done in 2021-22	469
3)	No. of positive cases by RT-PCR in 2021-22	352
4)	No. of positive cases by RAT in 2021-22	45
5)	Total no. of positive cases in PHC area in 2021-22	397

***Primary Health Center Dayalpur***

All routine services continued in PHC during the year 2021-2022. None of the services were stopped for any part of the year. Along with routine services, COVID 19 specific activities included screening, vaccination, contact tracing, home isolation and follow up of COVID-19 positive patients.

Initially, screening of symptoms was done by ASHA workers and health workers and patients who had symptoms were referred to PHC Dayalpur for testing. Haryana Villagers General Health Checkup Scheme (HVGHCS) was rolled out on 15 May 2021. Asha workers and health workers were trained for identifying persons with COVID-19 like illnesses. Health workers were trained to perform Rapid antigen testing at sub-centre and logistics were taken care of. Quality was checked by agreement with a medical officer posted in PHC. All the individuals residing in IFPA were screened by Health workers and ASHA workers. Those who had symptoms of COVID-19 and contacts of COVID-19 were tested using rapid antigen and immediately isolated.

Medical treatment, home isolation , contact tracing and follow-up of all COVID-19 positive patients was done during this year.

Vaccination drive for COVID-19 was started from 21<sup>st</sup> January 2021 for health care workers, from 8<sup>th</sup> March 2021 for elderly. Beginning from April 1<sup>st</sup> 2021, people aged 45-59 years with comorbidities were eligible. It later encompassed every person above 18 years of age starting from May 1<sup>st</sup> 2021. House to house visits were done by ASHA and ANM to screen for eligible individuals in IFPA and these individuals were vaccinated in the sub-centres as per schedule of vaccination drive. COVID-19 vaccination was rolled out for children between 15-18 years of age from January 3 2022. For vaccination of children, a school-based vaccination strategy was adopted first. Afterwards, vaccination of eligible children was done at sub-centre and PHC along with school. During the year 2021-2022, routine immunization took place along with COVID-19 vaccination and special efforts were made to continue COVID-19 vaccination drive without hampering routine immunization services.

From April 2021 to march 2022, in total, 31,536 doses of vaccines were given, including 3,211 doses among children less than 18 years in school.

***Indicators for COVID response from 1 April 2021 to 31 March 2022***

S.no	Indicator	Total numbers
1	No. of RAT tests done in 2021-22	453
2	No. of RT-PCR tests done in 2021-22	1318
3	Total number of positive cases in PHC Dayalpur area in 2021-22	532

### **Urban Health Programme**

The field practice area of the Urban Health Programme, Centre for Community Medicine is located at Dakshinpuri Extension, DrAmbedkar Nagar in South Delhi, consisting of Blocks 1-7,14,15,19, Subhash camp, Dakshinpuri catering to a population of around 35,834. Patient care services are provided at the Urban Health Centre.

#### **4.3.1. Clinical Services**

	<b>Activities</b>	<b>Number</b>
OPD	Total no of patients seen (including immunization)	12240
Laboratory services	Total Lab Tests	3213
	No. of Hb. Test Conducted	985
	Of which numbers having Hb.<7 gm%	37
	Of which numbers having Hb.<11 gm%	337
	Blood Sugar-FBS,RBS,PPS	2196
	Urine albumin and sugar tested	52

	UPT	7
	RDT for Malaria	1
	Blood group	60

#### 4.3.2. Child Health services

##### Number of immunization sessions held – 79 days

BCG		46
DPT 1= 1	/pentavalent 1	214
DPT 2= 2	/pentavalent1 2	191
DPT 3 = 0	/pentavalent 3	165
OPV 0 dose(birth dose)		10
OPV1		215
OPV2		192
OPV3		165



Hepatitis-B 1	1
Hepatitis-B 2	0
Hepatitis-B 3	0
Injectable IPV Fractional 1	214
Injectable IPV Fractional 2	165
Rotavirus 1	214
Rotavirus 2	191
Rotavirus 3	165
PCV 1	169
PCV 2	114
PCV Booster	5
MR 1 <sup>st</sup> dose	158

MR 2 <sup>nd</sup> dose	186
MMR	0
DPT / OPV Booster 1	162
DPT / OPV Booster 2	267
Typhoid Vaccine	300
Td-10 years	469
Td- 16 years	153
Vitamin A Administered between 9 months and 5 yrs	767
Albendazole under 5 children	143
Number of severely underweight provided health checkup (0-5 yr)	80

#### 4.3.3 Maternal Health Services

Antenatal Care	Total number of times pregnant women seen in the Urban Health Centre (new cases = 147 )	485
	Number of pregnant women given Td1	80
	Number of pregnant women given Td- 2. 72 + Td Booster 8=80	72+8=80
	Total number of pregnant women given 180 IFA tablets	80
Family Planning	No of Condoms distributed	205
	No of Oral contraceptive pill cycles distributed	NA
	New RTI/ STI Cases Identified	59

### **AWARDS, HONORS**

- Dr. Kiran Goswami delivered a presentation online on Breastfeeding as one of the Top 10 Presenter in a National Level PPT Competition for Faculty in Community Medicine, World Health Day 2021
- Dr. Kiran Goswami received second prize in 'Mai' movie key message competition, a public awareness initiative by Academia IAPSM eConnect and IMA Berhampur on the occasion of World Alzheimer's Day & International Day of Older Persons in September-October 2021
- Dr. Sumit Malhotra received Indian Association of Preventive and Social Medicine (IAPSM) Presidential Appreciation Award for the year 2022 during 49<sup>th</sup> National Conference of Indian Association of Preventive and Social Medicine (IAPSM), Nagpur.

### **SIGNIFICANT EVENTS**

#### ***Professor Shashi Kant***

Dr. Shashi Kant as a member provided his inputs to the National Task Force on COVID-19. As a member of the Governing Body of AIIMS, Nagpur, he provided guidance in strategic decision making. He is a member of Scientific Advisory Committee of the National Institute of Cholera and Enteric Diseases, Kolkata. Dr. Shashi Kant is a member of the Technical Resource Group on surveillance and epidemiology under National AIDS Control Program, Government of India.

#### **Professor Sanjeev Kumar Gupta**

Reviewer of many journals, e.g., Frontiers in Psychiatry, The National Medical Journal of India, Indian Journal of Public Health, Indian Journal of Medical Research. Life member of Jansankhya Sthirata Kosh of the Ministry of Health and Family Welfare, Government of India. Member of the Data Safety Management Board (DSMB) for the project entitled "Determination of efficacy of 9 months, 12 months and 18 months of anti-tubercular treatment (ATT) for tuberculous meningitis (TBM): a randomized controlled, non-inferiority trial." (PI: Dr. Deepti Vibha, Associate Professor of Neurology, Neurosciences Centre, AIIMS.) and a member of the Main Negotiation Committee (DO) of the AIIMS.

***Professor Kiran Goswami***

Dr. Kiran Goswami, Member -Curriculum Committee AIIMS for development of UG curriculum for CBME; National Institute and Central Region Institute HIV Sentinel Surveillance, Technical Advisory group SEED ,DST [Program Advisory committee ,SCSP](#); Internal Complaints Committee for Prevention of Sexual Harassment at workplace, IIMR; Expert group Faculty Development Programme for PG teachers,MCI; NTA expert group for UGC NET. Reviewer-IJPH, IJABMR,IJMR, DST Projects, Examiner- ,MPH- AIIMS Rishikesh, MD, NIHFWS, MBBS- BFUHS, Delhi University. Subject Expert- Faculty selection interview- AIIMS Kalyani, Thesis Evaluation: MD: BFUHS Faridkot, MPH: AIIMS, Rishikesh

***Professor Anand Krishnan***

Head, WHO Collaborating Centre on Research and Capacity Building on Community-based NCD Prevention and Control, AIIMS, technical Support Unit for SRS-VA and the MINErVA Network. Chair, Scientific Advisory Committee of ICMR-NIREH Bhopal, Scientific Advisory Committee of ICMR-NIOH, Ahmedabad, Non-communicable Diseases and Environment Chapter in Indian Academy of Public Health. Regional Councilor, SE Asia, World NCD Federation. Chairperson Scientific Committee for Environmental Determinants of Infectious Diseases in India (Focus COVID-19), IIMR, New Delhi Date: 7th to 10th December 2020. Undertook research prioritization for COVID-19 for WHO/SEARO; Conducted health research capacity assessment in Maldives and Timor Leste; Prepared the report of Assessment of Implementation of Ayushman Bharat-Health and Wellness Centres in 18 states for MoHFW. Member, UNDESA/WHO Technical Advisory Group (TAG) on COVID-19 Mortality Assessment, WHO Working Group in Influenza Burden of Disease. Member, Project Appraisal Committee, Health Technology Assessment India, Department of Health Research, Centre for Excellence, Climate and Health for Cardio-pulmonary Disorders at AIIMS New Delhi, Expert Committee on Technology Preparedness for dealing with National Disruptions: Medical and Health related disasters, Committee to Review the Disaster Management Act, 2005, School Board, School of Health Sciences, IGNOU, Centre Committee for Centre for Social Medicine and Community Health,

JNU, NCD Policy Group for the Comprehensive National Nutrition Survey (CNNS) constituted by MOHFW, Governing Body of National Health System Resource Centre, MoHFW, Member, PG expert Committee of Medical Council of India, Member, Selection Committee for Community Medicine, SCTIMST, JIPMER, Member, National Tobacco Regulators Forum for India”.

***Professor Baridalyne Nongkynrih***

Published twelve papers in indexed medical journals. Reviewer for the Indian Journal of Community Medicine, Global Health Action, Indian Journal of Maternal & Child Health and Journal of Health, Population and Nutrition, ICDDR Bangladesh, International Journal of Medicine and Public Health, International Journal of Advanced Medical Research, WHO South-East Asia Journal of Public Health, Cancer Biology & Medicine. National trainer for state and district program officers of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) programme in managerial skills and primary health care, 2018. Member of core team and National trainer for MINerVA Network for SRS by RGI – AIIMS New Delhi. National trainer for state and district program officers of NPCDCS programme in managerial skills and primary health care. Development of assessment tools for review of National Programme for Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS).

***Professor Puneet Misra***

Reviewer of PLOS one, IJCM, BMJ, Lancet Public Health, Indian Journal of Public Health, Indian Journal of Pediatrics, NMJI, BMC, International Journal of Diabetes in Developing Countries, Addictive Behaviors, International Journal of Adolescent Medicine and Health, BMC Public Health, BMC Women's Health, BMC Infectious disease, Biomedical and Environmental Sciences, Family Medicine and Community Health, NMJI, Proposals for DST, SATYAM DST, ICMR, DBT, Fulbright scholarship and many others. Program Advisory committee DST, Gov of India, SYST, AWSAR. Expert committee and paper reviewer, SEED Division, DST, Gov of India. Member Data Safety Monitoring Board (DSMB) for our upcoming Vi- DT typhoid conjugate Vaccine, Nepal. ICMR Expert Committee member, ICMR task force PCOS, Research section AIIMS, selection committee. TEC member ICMR on Diabetes, Metabolic Disorders, Kidney and Liver Disorders, Cardiovascular diseases. Project Reviewer for ICMR, DST, DBT and other agencies. More than 50 programs on TV for different media channels including DD news, LS TV, RS TV, ABP news, Zee

TV, CNN, Aaj Tak, India TV etc. • Chaired session Young Scientist Conclave, IISF 2020 and also Chaired Session at North East students for IISF 2020. Ph D Thesis evaluator and examiner for KGMU and DU, PhD examiner for DU, MD Examiner and AIIMS Rishikesh and MD Thesis for AIIMS Rishikesh.

***Professor Sanjay K Rai***

Nominated by Ministry of Health and Family Welfare, GOI as a non-official member of Empowered Programme Committee (EPC) which is an Executive Committee under National Health Mission (NHM). Delivered more than 40 online lectures on different topics for different, Institutions professional and non-government organizations organization e.g., IPHA, IMA, IAPS, Brain Behavior Research Foundation of India (BBRFI), KIT Bhubaneswar, e RAJ APICON 2021 etc. Felicitated by ABP Network, News 24 Network, and Ayushman Bharat Nyas for extraordinary contribution during in COVID-19 pandemic management. As a subject expert, supported the Standing Selection Committee of All India Institute of Medical Sciences, Patna, ABVIMS, Dr. RML Hospital, New Delhi for the selection of various faculty positions on 9th May 2021, and 14th October 2021 respectively. Nominated by AIIMS Bhubaneswar, and KGMU Lucknow, as a member of the Board of Examiners for MD Community Medicine. As an external examiner conducted MD Community Medicine examination from 28-29 April, 2021 and 1-2 Nov 2021 at AIIMS Bhubaneswar and from 25-26 June 2021 at KGMU Lucknow. Nominated by National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India as a “focal person” of NACO designated National Institute for HSS at AIIMS New Delhi to provide technical assistance for HIV Sentinel Surveillance (HSS) of en tire country. Made numerous visits to several districts of Uttar Pradesh, Bihar, Jharkhand, Andaman and Nicobar to support the ongoing HSS-2021in these states. Elected “President” of Indian Public Health Association for the year 2019-2022.Participated as Guest Faculty for the Faculty Development Programme of School of Public Health, KIIT Deemed to be University, Bhubaneswar, India on June 23, 2021. Contributed as a committee member of committee to evaluate current infrastructure and suggest Changes to improve in AIIMS New Delhi. The committee was constituted by Honorable Minister of Health and Family Welfare, Government of India. As a member of AIIMS Engineering Advisory Committee (EAC) participated in several engineering advisory committee meetings to streamline the working of engineering services. Member of the Technical Resource Group (TRG) of NACO, MoHFW, Gol on HIV Estimations in India and participated in several TRG meetings during 2021-2022. Elected “President” of Indian Public Health Association for the year 2019-2022. He is editor of the WHO South-East Asia Journal of Public Health.

***Dr. Kapil Yadav***

Dr Kapil Yadav continued as Focal Point for "National Centre of Excellence and Advanced Research on Anemia Control (NCEAR-A)", Ministry of Health and Family Welfare, Government of India. Taking forward the agenda of Anemia Mukht Bharat (AMB), NCEAR-A convened all key stakeholders from academia including 6 new AIIMS and organised Training of Trainers (ToT). He also actively participated as a lead resource person in State launches of Anemia Mukht Bharat Program. He continued his work on Iodine and other micronutrients and authored chapters for textbook of Public Health Nutrition on above topics.

***Dr. Sumit Malhotra***

Member of working committee of Clinical Research Unit (CRU) under Research Section, AIIMS, New Delhi; member of affiliate centre of Cochrane India Network at AIIMS; member of ICMR advanced centre for clinical trials; teaching member of fellowship programme for AIIMS faculty on clinical research methodology and evidence based medicine, focal point for "Innovation and learning Centre" for supporting implementation of comprehensive primary health care in aspirational district, Nuh, Haryana; national and master trainer for community health officers and other health cadres for rolling out newer packages related to geriatric and palliative care, mental and neurological diseases [training packages developed by National Health Systems Resource Centre, Ministry of Health and Family Welfare (MoHFW), Government of India (GOI) including care related to COVID-19], emergency and trauma care as part of comprehensive primary health care and running tele-mentoring programmes for community health officers. Contributed to training manuals on "eye care" for medical officers, community health officers, multipurpose workers, staff nurses, and ASHA workers as part of Ayushman Bharat, Health and Wellness Centres under Ministry of Health and Family Welfare, Government of India. Continued to be faculty for postgraduate teaching programme on research methodology under research section, AIIMS, Delhi. Member of AIIMS technical support Unit for SRS-VA and the MINErVA Network and National Centre of Excellence and Advanced Research on Anemia Control (NCEAR-A). Reviewed MPH thesis for PGIMER Chandigarh. Mentored operational research teams for secondary data analysis and manuscript writing related to hypertension and cardiovascular health in association with PGIMER Chandigarh. Was



an internal examiner for MD Examination (Community Medicine) June 2021, at AIIMS, Delhi. Moderated the MCQ based question paper for senior residents selection. Was a member of the selection committee for AIIMS, Delhi BSc Nursing (Post Basic) course for August 2021. Moderated the MCQ based question paper for PhD entrance exam for community medicine at AIIMS, Delhi. Judged scientific essays as part of competition organized by IPHA (AIIMS Delhi branch) and NMO (Delhi branch) on theme “ Do we need to vaccinate every child against COVID-19?” . Chaired the e-oral presentation sessions on “Maternal and Child health” and “ Non Communicable Diseases” during 65th Annual National Conference of IPHA (2021) held at JIPMER, Puducherry. Reviewer for research projects related to vector borne diseases by ICMR, New Delhi and reviewer of many national and international indexed journals. Coordinator for the Operational and Health Systems Research module of IAPSM (Indian Association of Preventive and Social Medicine) research methodology course. Preparing modules on primary health care and implementation research for postgraduates and programme managers as part of India Primary Health Care Initiative.

***Dr. Anil Goswami***

Patron of a National Body “All India Association of Medical Social Work Professionals” Chandigarh. 2016-22. Designated Nodal Officer of “Disease Prevention Outbreak Response Cell” (DPORC) AIIMS since 2008 till date. All Monitoring and Evaluation activities were taken at AIIMS Campuses for the Prevention and Control of Vector Borne Diseases. Designated Nodal Officer of “saMsqaana kl rajaBaaYaa kayaa-nvayana saimait” AIIMS since 2012 till date. Use of Hindi language was promoted at Centre for Community Medicine in daily use and specially by developing health education material on various public health topics. Was a member of sub-committee for Hygiene Promotion” (KRA-7 of Clean and Green AIIMS) under KAYA KALP (Clean Hospital Campaign). Was a member of sub-committee for “Public Feedback” (KRA-8 of Clean and Green AIIMS) under KAYA KALP (Clean Hospital Campaign). Delivered a keynote address in the “8th Annual National Conference of All India Association of Medical Social Work Professionals”, held at AIIMS New Delhi on 07th August 2021.

***Dr. Partha Haldar***

Dr. Partha Haldar provided COVID19 care services from April 8<sup>th</sup> 2021 to June 15<sup>th</sup> 2021 during the severe second wave of the COVID19 pandemic. Conducted the Pre-professional MBBS Examination in November 2021. He is a member of the Clinical Epidemiology Unit of the AIIMS New Delhi. He has been, and continues to be a member of the Technical Resource Group (TRG) *for Viral Hepatitis Surveillance in India*, constituted by the National Center for Disease Control (NCDC), Ministry of Health and Family Welfare, Government of India. Dr. Partha Haldar conducted the Health Economics and Epidemiology module for MD students of Centre for Community Medicine. Dr. Partha Haldar is also a Member of Technical Resource Group (TRG) for HIV Self Testing in India, constituted by the National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India. He is also a member of the Technical Expert Group (TEG) constituted by the National Centre for Disease Control, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, for National Programme for Climate Change and Human Health (NPCCHH), for providing guidance and technical support in conducting vulnerability needs assessment. Dr. Partha Haldar was an external examiner for the Master of Applied Epidemiology Conducted by National Institute of Epidemiology, ICMR, Chennai. He continues to be a member of NACO designated National Institute for HSS at AIIMS New Delhi (NI-HSS), and the National Centre of Excellence and Advanced Research on Anemia Control (NCEAR-A). Dr. Partha Haldar is a reviewer of many National and International journals including: Scientific Reports, BMJ Open, PLOS One, BMC Pregnancy and Childbirth, International Journal of Hypertension, Journal of Clinical Pathology, Journal of Neurology, Neurosurgery and Psychiatry, National Medical Journal of India, Indian Journal of Public Health, Indian Journal of Medical Research. Dr. Partha Haldar was selected as a Member of the Advisory Board of Data Centre and Analytics Lab of Indian Institute of Management, Bengaluru (IIM-B). Dr. Partha Haldar was selected as a Member of the ICMR-DHR Committee Constituted to provide advice on ICMR-DHR Data Sharing and Access Policy. Dr. Partha Haldar provides technical assistance to Government of India, by being a member of the Technical Resource Group, constituted by India's National AIDS Control Organization, MoHFW, Government of India, *for Transgender's Health*. Dr. Partha Haldar provides technical assistance to Government of India, by being a member as an epidemiologist in the Technical Resource Group, constituted by India's National Centre for Disease Control, MoHFW, Government of India, for *Laboratory Components of national viral hepatitis control programme* in India. For the various technical resource groups, Dr. Partha Haldar attended all the meetings physically / virtually as they were conducted.



***Dr. Ravneet Kaur***

Member of Project Review Committee of ICMR for Extramural Ad-hoc Research Program and SRF/RA program for the year 2021-22. Member of the Institute Ethics sub-committee on Severe Adverse Events in Clinical Trials. Faculty for SET (Skill, e-learning and Telemedicine) facility, AIIMS and prepared skill modules for undergraduate teaching. Master trainer for TOT for Developing Skill modules for participants of various institutes in the country. National trainer for training of the State Master Trainers for Adolescent Friendly Health Services under the Rashtriya Kishor Swasthya Karyakram. Conducted training for seven batches of State Master Trainers from October, 2021 – March, 2022. Member of the national working group of MOHFW (Maternal Health Division) for development of operational guidelines for management of high-risk pregnancies. Member of the Menstrual Health and Hygiene Management (MHM) Committee of IAPSM, and contributed in developing IAPSM Advisory on Menstrual Health and Hygiene Management. Member of the National working group of IAPSM (Indian Association of Preventive and Social Medicine) on MIYCN (Maternal, Infant & Young Child Nutrition). Contribution in various national programs (Anemia Mukh Bharat, Poshan Abhiyan, Rashtriya Kishor Swasthya Karyakram and SRS based verbal autopsy in India). Reviewer of journals (Global Health Research and Policy, BMJ Open, Indian Journal of Public Health, Indian Journal of Medical Research, National Medical Journal of India, Journal of Post graduate Medicine).

***Dr. Harshal Ramesh Salve***

Established Collaboration with IIT Delhi for community based research in Air Pollution and Health Effects Research in India. Received Grant from Health Effects Institute, Boston USA for establishing Collaborative on Air Pollution and Health Effects Research (CAPHER) India – A joint collaboration of AIIMS and IIT Delhi. Organized First CAPHER workshop (Virtual) on “Air Pollution and Health Effects Research in India” with national and international participants. Started CAPHER – India Webinar Series for capacity building of early career researchers in the country. Topics covered so far Making Health case for clean household energy: The framing and conduct of Multi-country household Air Pollution Intervention (HAPIN) trial (February 2022). Statistical Approaches on Air Pollution and Health Outcomes – Effect estimation in Environmental Epidemiology for researchers and public health professional (March 2022). Chaired a session in 9th Annual National Conference of Consortium Against Rabies (CARCON 2021) Organised by AIIMS, Gorakhpur. Technical Expert Group (TEG) Meeting (Virtual) on 'Air Pollution and Human Health' under NPCCHH programme (January 2022). Technical Expert Group (TEG) Meeting (Virtual) on Climate Change and Cardio- pulmonary

and Human Health' under NPCCHH programme (January 2022). Received Award from SET Facility AIIMS for contribution as resource Faculty member at SET Facility activities. Master trainer for National TOT for Development of Skill Modules. Member of Inter-Ministerial Central Team by Ministry of Home Affairs, GoI for assessment of COVID response and preparedness in Nagpur, Maharashtra. Faculty Member of AIIMS – Technical Support Unit of MINErVA supported by RGI, Ministry of Home Affairs, GoI. Faculty Member of WHO Collaborating Centre on for Capacity Development and Research in Community based NCDC. Member of Centre of Excellence of Cardio-pulmonary diseases under NPCCHH by NCDC, GoI. Module Lead and Course Faculty of 7th International Course on Public Health Approaches to Non Communicable Diseases - 2022 by AIIMS – PGIMER and World NCD Federation. Re-elected as General Secretary - Faculty Association of AIIMS (2022-24). Public awareness generation regarding COVID 19 through print and TV Media.

***Dr. Rakesh Kumar***

Dr. Rakesh Kumar was part of the Expert Advisory Committee of project entitled “Strengthening Mechanisms for Tuberculosis Death Reporting under the Revised National Tuberculosis Control Program (RNTCP) and the Registrar General of India” and was chairperson of the Project Review Committee of Indian Council of Medical Research for extramural adhoc research in Urology. He is reviewer for American Journal of Tropical medicine and Hygiene, Transactions of the Royal Society of Tropical Medicine and Health, Tropical Medicine and International Health, Indian Journal of Public Health, and The Journal of Obstetrics and Gynaecology of India.

***Dr. Mohan Lal Bairwa***

Chaired e-Poster presentation session on “Mental Health” at IPHACON 2021, 23-26 April 2021 to 23 September 2021 in Puducherry

**VISITING SCIENTIST**

Provide the name, institutional affiliation, city and country of person visiting.