# **BI-ANNUAL REPORT** 2016-18

Indian Institute of Public Health, Hyderabad and Bengaluru Campus and the South Asia Centre for Disability Inclusive Development and Research



PUBLIC HEALTH FOUNDATION OF INDIA IIPH BI-ANNUAL REPORT 2016 - 2018

## **INDIAN INSTITUTE OF PUBLIC HEALTH - HYDERABAD**

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## **A DECADE AND MORE**

he Public Health Foundation of India is little more than a decade old now. In 2006, a unique, public private initiative was launched in India to focus on sustained and holistic strengthening of the broad dimensions of Public Health from a systemic level; making preventive, promotive, and therapeutic health work for the public at large. The Public Health Foundation of India (PHFI) is an initiative to redress the limited institutional capacity in India for rigorous training, research and policy development in the area of public health.

Structured as an independent foundation, PHFI adopts a broad, integrative approach to public health, tailoring its endeavours to Indian conditions and bearing relevance to countries facing similar challenges and concerns. The organisation has evolved collaboratively, through consultation and direction, from a coming together of Indian and international academia, state and central governments, multi- & bi-lateral agencies and civil society groups.

Under the aegis of the Public Health Foundation of India, four Indian Institutes of Public Health (IIPH) have been set up at Delhi, Gandhinagar, Hyderabad, Bhubaneswar and Shillong. In addition a satellite campus has been functioning at Bengaluru with active participation of the Government of Karnataka. Centres of excellence have been set up for chronic diseases (SANCD), Disability (SACDIR), Cardio metabolic risk factors (CARRS), mental health and social determinants.

Twelve years ago, on April 7, 2007, (World Health Day), the Public Health Foundation of India laid the foundation stone for its first institute in Hyderabad, in partnership with the Government of Andhra Pradesh. The Indian Institute of Public Health-Hyderabad (IIPH-H) commenced its activities on July 1, 2008, with a mission to deliver public health education and training, pursue research and advocacy and support policy development, as aligned to the public health priorities of the state and the nation.

The aim of these institutes is to build a competent and skilled public health workforce through teaching, research, and sharing of knowledge and experiences in public health. The institutes aim to develop and deliver public health education and research activities relevant to India in content and context, while attaining international standards. They strive to make public health education multi-disciplinary, drawing upon subjects like epidemiology, biostatistics, life sciences, demography, health economics, social and behavioural sciences, environmental health and management. Our academic and training capacity building programmes attract a diverse student body from varied backgrounds including medicine, dentistry, nursing, biological sciences, nutrition, biotechnology, social sciences, economics and management to take India's health story to the next level.

This initiative is a response to the needs of India's changing public health scenario, and the aspirations of individuals who work at different levels of the system in order to improve the health of the country's population. The unmet need for greater public health expertise - both in numbers and in skill - to run the health system and services of the country; and for improved public health research, policy and practice has been repeatedly voiced as a serious gap that has resulted in significant public health challenges. As a response to these felt needs of the health system in India, PHFI and the IIPHs strive to augment the health system and spark efforts that can eventually lead the country's people towards better and healthier lives, and result in better health outcomes.





## **MESSAGE FROM THE DIRECTOR**

t gives me great pleasure to bring to you the biannual report for 2016- 2018. These two years have been great for us at the Indian Institutes of Public Health, Hyderabad and Bangalore (IIPH-Hyderabad and IIPH-Bangalore) and the South Asia Centre for Disability Inclusive Development and Research (SAC-DIR). Together, we are a regional hub for research, capacity building, advocacy and policy development for the Public Health Foundation of India. Our innovations showcase solutions to India's most challenging public health issues.

The Southern states' progress in economic, social and demographic arenas is phenomenal. The pulse of change now lies in strong public health policy and practice that aligns with our context and people. Yet, our exhaustive work goes well beyond South India. We lead transformative efforts that shape the health of populations and with implications for the world.

## **Education**

The institutes offer academic programmes and short term training courses that are bold, fresh and exciting. These courses vary by discipline, duration and principles of application oriented learning.

Our technical support to state and central governments include capacity building of medical officers and programme managers in:

- Public health management
- Biostatistics
- Data management

Our participants pursue higher studies at renowned institutes as well as careers in national and state departments. Avenues include programmes in health and development, national and international NGOs and agencies.

## **Capacity and skills-building**

Our short-term programmes offer flexible professional development for early and mid- career professionals. These programmes equip them to contribute to an improved system. In the past year, we have deepened our engagement with cross-cutting areas like:

- Epidemiology
- Biostatistics
- Behavioural sciences
- Health economics
- Health services management
- Environmental health
- Health inequities and human rights
- Gender and health,
- Health promotion and communication
- Ethics of health care

## Research

The HT Parekh Foundation Grant allowed us to train 211 health professionals from seven districts of Telangana in disability inclusive development. It allowed us to address a broad range of disabilities through innovative public health interventions and multi-sectoral approach. A DVD-based educational intervention in Hindi for management of disabilities following stroke, a web-based disability data analysis and report generating application for disability surveys and manual on disability for planning and management of disability-related programs in India have been developed through this grant.

The Diabetic Retinopathy and Retinopathy of Prematurity Programmes continue to seed innovative tools and expertise. They are models for effective care that impact individuals, families and communities.

In the past year, our focus continued to be on capacity building and providing technical inputs and evaluation for:

- The State Disease Surveillance Cell
- Universal Immunization Programme (UIP)
- Drugs and Logistic Cell
- Non-communicable disease (NCD) program;
- The State Aarogyasri Health Insurance Scheme
- Tobacco control
- HIV/AIDS
- Disability and health related projects

I would like to thank our supporters and partners: HT Parekh Foundation, London School of Hygiene and Tropical Medicine, The Queen Elizabeth Diamond Jubilee Trust, CBM, Engineering & Physical Sciences Research Council UK, Sightsavers, Indian Council for



Medical Research, John Hopkin's Bloomberg School of Public Health, National Medical & Health Research Council Australia and UNICEF.

## Technical support and policy development

The past year we brought a sharper focus to new challenges. We have pursued opportunities to develop national and regional strategy and policy research. This year, we aim to explore and innovate on best ways to reach out to communities. We will focus on services and health information for behaviour change, and develop solutions that work. Our efforts remain directed towards achieving universal health coverage. We will develop state public health cadres, supported by agencies, and forge new partnerships. IIPH-H has also provided detailed inputs for the development of district Programme Implementation Plans in Karnataka and Andhra Pradesh.

## Convergence

We continue to work with different state departments on public health. These include the department of transport's road safety initiatives; the education department's school health initiatives; the food safety department's balanced nutritional outcomes; and the rural development department's community health efforts.

GVS Murthy Vice President

South, Public Health Foundation of India &

#### Director

Indian Institute of Public Health - Hyderabad Indian Institute of Public Health - Bengaluru Campus South Asia Centre for Disability Inclusive Development and Research

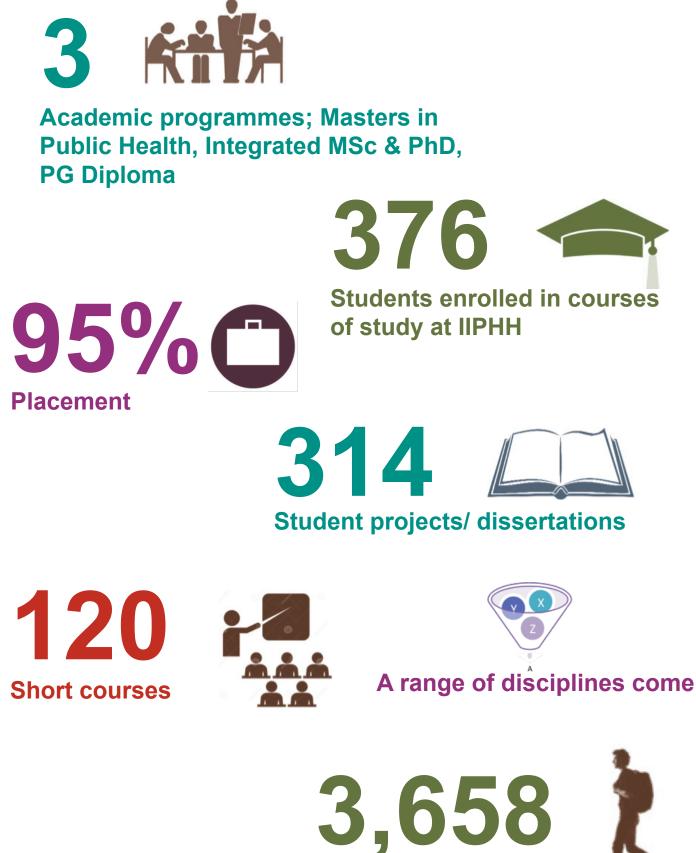
## People

We continue with our emphasis in building and strengthening technical expertise. We encourage strong field experience and game-changing perspectives among qualified and motivated faculty. Many of us are public health academics and practitioners with knowledge and analytical skills in diverse disciplines. Our work has the impetus to positively impact public health.

It is also my honour to work with a dedicated team spread over 14 states of the country. It is their dedication that has allowed us to start intensive clinical and social research, community mobilization campaigns, for capacity building, strengthening and deepening health services at every level and investing in the transformative leadership. I thank them for all they do - and our collaborators all around the world who support us in so many ways.

We will continue to work with our stakeholders to sustain and enhance this foundation to raise achievements in the coming years.

# Fast Facts (since inception)



**Participants** 

# **104** people 58 researchers, 26 faculty and 20 support staff



**100%** (2) of projects meet time, cost and quality targets

Partners around the world

**101 1 crore** revenue from research projects (2011-2018)



Ar and a second an

Numerous fellowships and awards received





Remarkable student : faculty ratio

319 articles published in journals
 25 book chapters
 73 presentations at conferences/symposiums
 37 commissioned reports
 13 Talks organized
 1 book edited volume

## YEAR IN REVIEW

2016	Activities
April	World Health Day celebrations on 7th April
August	• Commencement of MSc. Health informatics batch of 2016-18
September	<ul> <li>Public Health Planning for Hearing Impairment -2016</li> <li>Diploma Award Ceremony for Post Graduate Diploma in Public Health Management (PGDPHM) and Post Graduate Diploma in Biostatistics and Data Management (PGDBDM)</li> <li>Celebrated Teacher's Day on 8th</li> </ul>
November	<ul> <li>ATTEND Trial (Family Led Rehabilitation after Stroke in INDIA) Results and Policy Dissemination Meeting jacaranda Hall, India Habitat Centre, New Delhi</li> <li>Dissemination workshop of the results &amp; policy implications of a study on public health conse- quences of folic acid deficiency in India Jacaranda Hall, India Habitat Centre, New Delhi</li> <li>Commencement of MPH 2016-18 in partnership with KNR University.</li> </ul>
2017	
March	<ul> <li>Foundation Day Lecture by Sri. CK Mishra, IAS, foundation day celebrated at Birla Science Centre.</li> <li>Big Data and E-Health in India- Opportunities and Gaps</li> <li>A Joint Workshop sponsored by Public Health Foundation of India and Farr Institute of Health Informatics Research, University College London, 27th March, 2017</li> </ul>
June	Commencement of PGDPHM batch of 2016-17
August	• Commencement of MPH 2017-19 batch in partnership with KNR university commencement of MSc. Health informatics batch of 2017-19
November	Commencement of MPH 2016-18 in partnership with KNR University
December	Commencement of PGDPHM batch of 2017-18
2018	
February	• International Conference on Evidence in Global Disability and Health -2018 held at NIMH
April	• Celebrated World Autism Day on 2nd April - NIMH, Hyderabad
June	<ul> <li>Rapid Assessment of Disability (RAD) project- Dissemination Workshop held at hotel Jubilee Ridge on 12th June 2018, Hyderabad.</li> <li>Launch of toll free Diabetes Helpline 1800 121 2096</li> </ul>

## **ACADEMIC PROGRAMS**

apacity building is one of the most significant ambitions at IIPH-H, as it has far-reaching power to infuse change across levels. Academic and skills-building programmes run each year, that include both long and short-term courses to enhance the number and impact of public health professionals. The flagship courses of IIPH Hyderabad are the:

Post Graduate Diplo- ma in Public Health Management	This program is interdisciplinary both in its content and teaching. It utilizes a variety of teaching/ learning techniques, including seminars, journal clubs, collaborative learning, group discussions, case studies, lecture discussions, assignments, hands- on training on computers, visits to organizations of public health interest, practicum and field projects. Faculty with diverse disciplinary backgrounds, national and inter- national experience combined with a breadth and depth of public health experience would be teaching this course. Accreditation: National Health Mission Batch Started in - 2008 Students trained - 180
Masters' in Public Health	First year of the course with two semesters covers five core modules viz., Biostatis- tics, Epidemiology, Social and Behavioural Sciences, Environmental and Occupational Health, and Health Management and policy followed by a practicum opportunity in the field. In the second year i.e., the third semester, students can choose subjects according to their interests & pursue a track. Currently four tracks are being offered viz., Public Health Disability, Public Health Surveillance; Biostatistics and Data Man- agement and Epidemiology of Communicable Diseases. Besides the above modules the course curriculum includes modules on gender & ethics, public health law, disaster preparedness and management for health professionals, grant writing and research methods; <b>Accreditation:</b> Dr Kaloji Narayana Rao University of Health Sciences <b>Batch Started in</b> - 2015 <b>Students trained</b> - 63
Integrated MSc PhD Program in Health Informatics	The M Sc & PhD (Health Informatics) program is jointly conducted by PHFI and AcSIR and degrees are awarded by Academy of Scientific and Innovative Research (AcSIR) since 2013. Health Informatics has tremendous promise in improving the efficien- cy, cost-effectiveness, quality, and safety of health care service systems. General purpose information technology solutions are usually inadequate for specialized needs of the health sector. The scope of health informatics is very wide as there are a variety of emerging new technologies that need to be understood, adapted, and validated for use in health systems and then managed for continuous improvement. The program provides exposure to participants to the best in health care and tech- nology based on research and innovations on one platform for students across India and South Asia. Accreditation: The Academy of Scientific & Innovative Research (AcSIR) Batch Started in - 2015 Students trained - 9

## **SHORT-TERM COURSES**

We conduct training and skills -building programmes throughout the year on:

- Research methods
- Epidemiology
- Biostatistics & Data management
- Disease surveillance
- Disability
- Public Health for Hearing Impairment
- Change management



## **Training/Workshops**

#### Short Course On Public Health Planning For Hearing Impairment

This five-day course enabled participants to understand public health approaches to ear and hearing care. Understanding of how to develop programmes for preventionand management were discussed among 50 participants. The magnitude and causes of hearing impairment and the challenges of providing hearing health in developing countries was the key aspect of the short course. Participants included otologists, audiologists, allied health professionals in the health sciences and NGO staff. The content was focused on the developing world, bearing in mind planning principles involved in establishing public health programmes for ear and hearing health.

#### **Research Methodology - Writing a Thesis Protocol**

A tailor-made training for doctors of various disciplines nominated and sponsored by the National Board of Examinations (NBE).

## Month, Year

3rd to 7th October 2017

Wednesday, 19th October to Friday, 21st October, 2016
Wednesday, 26th October to Friday, 28st October, 2016
Wednesday, 2nd November to Friday, 4th November, 2016
Wednesday, 9th November to Friday, 11th November, 2016
Wednesday, 16th November to Friday, 18th November, 2016
Wednesday, 23rd November to 25th November, 2016.

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<b>Short course on Data Analysis using SPSS</b> The course focused on basic concepts of SPSS; sources and organization of data, modifying data values and labels, frequencies, cross tabulations and creating charts, working with SPSS syntax, merging files, introductory statistical concepts, nonparametric tests and Bi-variate analysis and regressions.	26th to 29th December 2016
<b>Data Analysis using R Programming</b> The course focused on enabling each researcher to enhance his or her quantitative scientific reasoning about problems they are working with. This course introduces statistical methods with an emphasis on data analysis and interpretations. It also intro- duces how to program in R and how to use R for effective data analysis and visualisation. This is a purely application oriented course where practical issues in scientific computing starting from reading data, programming and creating informative and publication quality graphics are covered. Topics in statistical data analysis from varying disciplines will provide working examples.	2nd to 6th January 2017
<b>Foundation Course for Health Research Methods</b> This three-day course on research methods for health professionals introduced both qualitative and quantitative research methods with an emphasis on their application in health research domain. The course focussed on formulating a research ques- tion, theoretical basis of the proposed study, selec- tion of appropriate methodology and forms of data analysis with case examples. The course, designed for health professionals specifically introduced both qualitative and quantitative research methods with an emphasis on their application in health research domain (pertaining specifically to research in pri- mary care and health systems).	5th - 9th December 2016
<b>Training in scientific writing for National Board of Examinations candidates</b> PHFI is a collaborating center for National Board of Examination (NBE) for conducting CME programs for the Diplomate of National Board (DNB) candidates. IIPH-Hyderabad conducts a series of six research methodology workshops as part of this collaboration for the DNB candidates in the south India region. In the year 2015, the institute has trained 212 first year DNB candidates, from 24 institutions and across 30 specialties, on 'Writing a Thesis Protocol.' As part of this series of workshops on 'Thesis and Academic Writing' for the final year candidates in the year 2016-17.	4th - 6th May 2016 11th - 13th May 2016 18th - 20th May 2016 19th - 21st Oct 2016 26th - 28th Oct 2016 2nd - 4th Nov 2016 9th - 11th Nov 2016 16th - 18th Nov 2016 23rd - 15th Nov 2016

Quality Improvement Programme (QIP) in Clini- cal Practice for Allied Health Professionals This was a six weeks interactive, participatory short course for allied health professionals involved in provision of therapeutic rehabilitation services to children with special needs and disabilities (Autism, Attention Deficit, Hyperactivity, Developmental dis- order, Cerebral Palsy, Learning disability etc.). The objective of this course was to develop the clinical competencies of allied health professionals for demonstrating good standards of clinical practice and contribute towards the improvement of quality in provision of therapeutic services for children with disabilities. The Course oriented therapists from countries with limited resources for rehabilitation on the critical drivers for quality improvement during clinical practice. It helped the participants learn the way in which rehabilitation services were organized in countries that are well-resourced for provision of rehabilitation services.	11th July 2016 to 31st March 2017
<b>Research Methods in Global Disability &amp; Health</b> The course introduces what is disability, the major types of impairment leading to disability, and global distribution of disability. Introduces methods to measure such conditions and understand how epi- demiological methods contribute towards filling the knowledge gaps in global disability. It addresses the issues to be considered when researching disability. It helps researchers look at impact of disability in people's lives, including in terms of access to edu- cation, employment, poverty and social inclusion. It also focuses on the context of disability, rehabilita- tion, policy and inclusive development.	13th to 17th November 2017

## DISTANCE LEARNING CERTIFICATE COURSE IN PUBLIC HEALTH SURVEILLANCE

The certificate course in public health surveillance, by Public Health Foundation of India, in collaboration with the International Society for Disease Surveillance (ISDS), aims to build capacity of human resource in health care and allied sectors in the science and practice of public health surveillance.

The course will build a pool of trained public health professionals who will have the knowledge of fundamentals and recent advances in public health surveillance and its application for more effective and sustainable actions to improve population health. The participants will be able to contribute towards health security and health equity, locally, nationally and globally.

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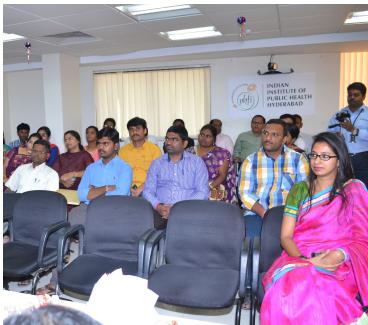














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## **RESEARCH ACTIVITIES**

R igorous research at our centres and institutes spans multiple disciplines (e.g., demography, anthropology, epidemiology, genetics, health economics, psychology, and nutrition) and includes a range of study designs, ranging from prevalence and cross-sectional surveys to genetic, epigenetic, environmental and risk factor epidemiology, cohort and multi-generational cohorts, outcomes evaluation and cost-effectiveness, qualitative methods, program evaluation, clinical trials, translation research and systematic reviews.

## **KEY THEMATIC AREAS PREVENTION AND CONTROL OF NON-COM-MUNICABLE DISEASE**

India is undergoing major social and economic changes leading to rapid increases in the prevalence of chronic diseases, notably cardiovascular disease, cancer, chronic pulmonary disease and diabetes. Chronic diseases have their roots in early life, yet very little is known about what causes them to emerge at a young age or the pathways through which societal and environmental changes linked to urbanisation affect chronic disease risk. Today, half of India's deaths are due to diabetes, stroke, heart disease, chronic obstructive pulmonary disease (COPD), cancers, mental health disorders and injuries. There is an alarming acceleration in the prevalence of these chronic. non-communicable diseases (NCDs). Notably, NCDs not only disproportionately impact people at younger ages in India compared to developed countries causing premature loss of life, but also increasingly afflict the poorer sections of society.

Our efforts have been aimed at building evidence for understanding the NCD burden, etiology and interventions, education and training of health workers and health professionals, capacity building from the district to state and national levels, health communication and advocacy to promote health-seeking behaviours, and influencing policy through rigorous analysis of evidence and engagement with stakeholders and political leadership.

## **Select Highlights** ANDHRA PRADESH CHILDREN AND PAR-ENTS STUDY (APCAPS)

A rural intergenerational cohort (N=7,000) is being studied, whose participants have been exposed to: a) a controlled trial of nutritional supplementation in pregnancy and early childhood in 1987-90; and b) rapid but uneven economic development since 2005. Capitalising on the opportunity afforded by these two experiments, our long-term follow up of this cohort is aimed at understanding the mechanisms through which a) early-life socio-economic disadvantage and b) societal and environmental determinants contribute to chronic disease risk. We are also using this knowledge to develop interventions for prevention of chronic diseases in urbanising rural communities. Risk factor data for major chronic diseases, stored blood samples and DNA are available on the cohort participants. Basic socio-demographic information has been collected on all the residents of the 29 study villages (N=85,000) and the built environment and air quality is currently being characterised.

Under this project a seminar on 'Urbanisation and Chronic Disease Research in India: Challenges and Opportunities' was organized in March, 2015. The primary focus of this meeting was to share knowledge and understanding across various disciplines involved in research on urbanisation and health, to come to a new and more multifaceted understanding of the concept of urbanisation, and its impact on health. However there has previously been limited knowledge exchange or consensus between researchers from different fields, with either the definition of urbanisation, or the methodologies used to capture it and its impact on health and disease. This meeting brought together researchers from diverse disciplines such as epidemiology, urban planning, nutrition, information technology, and policy, to present research, discuss challenges, and develop a more unified understanding of urbanization. While previously urbanisation was conceptualised as a uniform and single track process, the meeting ended with an understanding that there were several different types of urbanisation taking place simultaneously even within India, and so any research in the field would have to take that into account. The discussions fostered new research direc-



tions, which are now being translated into research programs being developed in APCAPS. Crucially, a framework is being developed for a multi-disciplinary common tool, used for data collection on urbanisation. A survey has been planned to understand how aspects of the built environment in a transitioning community influence chronic disease risk factors, as well as access and use of health systems.

## IMPACT OF GRAPHIC HEALTH WARNINGS AS A TOBACCO CONTROL MEASURE

A cross-sectional mixed methods study was conducted to assess feasibility, perceived effectiveness and the politico-legal environment around introduction of standardized packaging with graphic health warnings as a tobacco control measure.

## EVALUATION OF A PILOT YOUTH-DRIVEN, ARTS-BASED INTERVENTION TO REDUCE MENTAL HEALTH STIGMA IN INDIA

The estimated prevalence of mental health problems among 15-24 year olds in India is 22.2 per 1,000 population, grossly lower than global rates. A majority of people experiencing mental health problems hide or neglect them, and delay seeking help or treatment due to associated public stigma. Public or social stigma consists of gaps in knowledge (ignorance), attitudes (prejudice), and behaviour (discrimination) with respect to mental health problems. Negative attitudes and beliefs about mental health problems go unaddressed among college students in India.

Arts-based interventions and peer education have demonstrated effectiveness in reducing public stigma associated with mental health problems among young people. However, a majority of these interventions have been developed and evaluated in high income countries and limited evidence exists in low and middle income settings. The researcher has developed an arts-based mental health promotion intervention, based on the experience of spearheading an original intervention conducted by PHFI in 2010-11 in partnership with the Government of India. The PhD study aims to conduct a pilot study to evaluate feasibility, acceptability and impact of a youth-driven, arts-based intervention to reduce stigma associated with mental health problems among college students in Telangana. India.

This research is underway as part of doctoral studies of Shivani Mathur Gaiha from the London School of

Hygiene and Tropical Medicine, UK. It is supported by the PHFI-UKC Wellcome Trust Capacity Building Programme.

Simple clinical procedures, blood tests, consultation with doctors, clean delivery rooms and the presence of a trained midwife can bring about a far-reaching



## DISABILITY

In India, about 1.8 % - 2.1% of the population suffer from disabilities, which include visual, hearing, speech, locomotor and mental disabilities. Three-quarters of those with disabilities reside in rural areas, nearly half are literate but only a third are gainfully employed. Disabled people are more likely to be malnourished, impoverished, live in insanitary conditions and have lower social status as well as lesser access to the healthcare system. All these factors increase their risk of disease and adverse health outcomes.

## WOMAN, CHILD AND ADOLESCENT HEALTH

India accounts for a quarter of all global maternal deaths during childbirth. Each year at least 212 mothers die for every 1 lakh live births. With over 240 million children under the age of five, India contributes 25 percent of the world's child deaths. These can be prevented. reduction in pregnancy-related deaths - continue to be denied to many women across the world. Additional vulnerability to sexual and reproductive health issues, nutritional deficiencies affect the status of women, bearing implications for new born, infants, adolescents; spanning the entire life course. IIPH-H is aiming to understand how proven health interventions for reducing newborn deaths and improving maternal and child health may be applied to the local context. It is therefore working towards bridging the dearth of information on scalable community-based approaches that may ensure a rapid and sustainable impact.

## EVALUATION OF DAKSHTA PROGRAM IN ANDHRA PRADESH AND RAJASTHAN

This research evaluates the outcomes of 'Dakshata' program in two states Rajasthan and Andhra Pradesh. and assesses the scalability of 'Dakshata' program for other states. The 'Dakshata' program focuses on improving skills and practices for providing improved quality of care in labour rooms in secondary and primary public health care settings. The program mentoring support is provided by a development partner (JHEPIGO) in both the states. The learnings from the evaluation will help to enrich interventions, improve operationalisation and advise for takeover by the states.

## EVALUATION OF 104 MOBILE VAN SER-VICES IN ASSAM

The evaluation assessed the coverage and acceptance of the '104' van service, and its effect on screening, diagnosis, follow-up and management of diabetes and Accredited Social Health Care Activist (ASHA), Staff Nurse and Anganwadi Worker (AWW) spend their time on specified health services/targeted daily operations. The study is being conducted in Telangana and Andhra Pradesh and is being supported by the Department of Child Sciences-CESS and UNICEF-AP.

## **EVALUATION OF SAFE CARE SAVING LIVES**

This research evaluates the outcomes of a quality improvement intervention promoting improved adherence to evidence based practices is SNCUs and



hypertension in the communities served by the '104' van service. The evaluation also assessed the knowledge and practices of the community for lifestyle modification and screening for diabetes and hypertension, and for control of the two diseases.

## PREVENTING TOBACCO USE AMONG ADO-LESCENTS IN INDIA

The data, collected in focus groups discussions among teachers, parents and schoolchildren, has been analysed using qualitative data analysis software, and written up as a report. Manuscripts are in preparation on the findings. The research was conducted in two states in India and was supported by the BMGF.

## HEALTH SYSTEMS MANAGEMENT OF WORKLOAD AND WORK PATTERN AMONG PUBLIC HEALTH FUNC-TIONARIES

A time and motion study is being conducted to provide an evidence-based understanding of how frontline health workers - Auxiliary Nurse Midwife (ANM), NICUs, and associated labour rooms of secondary and tertiary level public and private hospitals empanelled under Aarogyasree/ NTR Vaidya Sewa scheme. The intervention encourages the practitioners to assess their own performance and find solutions to be able to improve their practices. The evaluation will provide evidence towards process implementation and effect of this intervention towards improved quality of care.

## POSTINGS AND TRANSFERS AMONG HEALTH SYSTEM PERSONNEL

This study examines the policies, practices and experiences related to postings and transfers among personnel in the public health system in India. Research methods include in-depth interviews, observation, and review of policy documents in four Indian states. The project is supported by DfID.

## **AFFORDABLE TECHNOLOGIES**

High connectivity products and devices, powered by technological innovation are capable of transforming access and affordability issues for the poor. This may be of relatively low-cost through basic diagnostics, l



inking with the health systems, as decision support and also for tracking and self-management of disease and disability. Many solutions hold the potential for mass scale-up to Government hospitals and among related allied health staff. The innovative use of technology is a key answer in the coming years, where resources are scarce.

## DAS SIMPLE- DISABILITY ASSESSMENT AND SUPPORT MADE SIMPLE

A mobile application that can guide assessment, automate calculation, provide instant analysis, certify, and then link the person to customized benefits and also continuously track the outcomes has been developed. As part of the project, the world's first real time augmented reality based goniometer for measuring Range of Movements (RoM) has also been developed. This initative is supported by Grand Challenges, Government of Canada.

## EXPLORING POTENTIAL OF TECHNOLO-GY IN PROVIDING INCLUSIVE PRIMARY HEALTH CARE

The overall goal of the project is to explore the potential of technology in providing inclusive primary health care and contribute in empowerment of the vulnerable tribal population. Strengthening the services and increasing uptake of services shall enable tribals to benefit from curative, preventive, promotive and family welfare services. Hyderabad city; Ranga Reddy district

## TRUSTED MOBILE PLATFORM FOR SELF-MANAGEMENT OF CHRONIC ILLNESS IN RURAL AREAS (TRUMP)

This initiative is exploring the potential of mobile phone technologies and the development of a platform to support chronic disease management considering the needs of rural areas of India and to do this in a manner which fully addresses various issues of trust. Two common chronic conditions - diabetes and depression - provide exemplars for the development of this m-health platform and its evaluation.

## IMPROVING FUNCTIONAL OUTCOMES FOR CHILDREN WITH IMPAIRMENTS THROUGH COMMUNITY HEALTH WORKERS IN INDIA USING MHEALTH (INFORM)

The potential impact of this idea is to transform the lives of children with Neuro-developmental Disabilities in low and middle income countries and simultaneously address the unmet need for families for evidence based home delivered interventions. The process of developing and evaluating mHealth Technology is underway. It is envisioned as a platform to enhance the quality of interventions, by disseminating animations and videos to demonstrate techniques to parents at relatively low cost and with assured quality. Additionally, video-taping may be used for discussion with a trained supervisor in appropriate settings. Pilot testing of this technology will provide valuable ideas on feasibility and next steps.

## SMARTPHONE-ENABLED, CARER-SUP-PORTED EDUCATIONAL INTERVENTION FOR MANAGEMENT OF POST- STROKE DIS-ABILITY IN INDIA

This formative research study aims to systematically develop an educational intervention to bridge the gaps in service access for rehabilitation of individuals with stroke-related disability in India. The feasibility and acceptability of delivering the intervention using Smartphones and with caregiver support is being evaluated. The research study is being conducted in Chennai, India. If successful, it will help realize the potential of using Smartphone-enabled, carer-supported educational interventions, providing valuable information for clinicians and policy makers. This research is underway as part of doctoral studies of Dr Suresh Kumar Kamalakannan from the London School of Hygiene and Tropical Medicine, UK. It is supported by the PHFI-UKC Wellcome Trust Capacity Building Programme.

## TECHNOLOGY FOR INCLUSIVE HEALTH: A PROOF OF CONCEPT ACTION RESEARCH PROJECT AMONG TRIBAL'S IN TELANGANA AND KARNATAKA

The overall goal of the project is to explore the potential of technology in providing inclusive primary health care and contribute to empowerment of the vulnerable tribal population. Strengthening the services and increasing uptake of services shall enable tribal populations to benefit from curative, preventive, promotive and family welfare services. This study is being conducted in Adilabad District, Telangana and Kodagu District, Karnataka. It is supported by the DST SERB & PHFI-Public Health Research Initiative.

## **BIOSTATISTICS** LATENT VARIABLE MODEL FOR MULTIVAR-IATE LONGITUDINAL DATA

Experiments in medical and social science research are often complex and characterized by multiple observations on several outcomes measured repeatedly over time. Special methods are required to analyse the resulting data as repeated observations on any given response are likely to be correlated over time while multiple responses measured at a given time point will also be correlated. In many clinical studies, interest is often on variables which are not directly observable and several surrogate outcomes characterizing the endpoint are observed repeatedly. Traditional multivariate mixed models are not appropriate for such data as they do not account for the fact that the outcomes are attempting to measure the same underlying construct.

This research work proposes to analyse such data by introducing multiple latent variables having a longitudinal correlation structure. In representation this is similar to a conventional factor analysis model in presence of random effects. However, conventional factor analysis models are more restrictive having a diagonal correlation structure of the factor or the latent variables. This research considers a more generalised situation where the latent variables themselves have a temporal correlation. Also the effect of time comes in as a semiparametric smooth function. The use of semiparametric framework allows the shape of the functional relationship between covariates and dependent variable to be determined by the data in contrast to parametric frame-work where the shape is determined by the model.

The research would involve computationally intensive methods such as Monte Carlo methods, the EM algorithm and its variants and data augmentation/ imputation algorithms. An aim of the research work is to develop a public domain R package to implement the above. The study is being conducted by Souvik Kumar Bandyopadhyay as part of his PhD research.



## **ROAD SAFETY** PUBLIC HEALTH IMPACTS OF CHILDREN'S TRAVEL TO SCHOOL IN HYDERABAD, INDIA

Primary data has been collected on approximately 6,000 children in 45 schools in Hyderabad in order to develop causal pathways of the impacts of choice of mode of travel to school, relationship between distance to school and mode of travel to school, distribution and determinants of mode of travel to school and to construct a model to estimate the impacts of a policy that restricts school choice, on the distribution of mode of travel to school, and health outcomes. Preliminary findings have been noted and scientific papers are under preparation, to be sent to peer-reviewed journals.

This research is underway as part of doctoral studies of Dr Shailaja Tetali from the London School of Hygiene and Tropical Medicine, UK. It is supported by the PHFI-UKC Wellcome Trust Capacity Building Programme.

# **INDIAN INSTITUTE OF PUBLIC HEALTH** BENGALURU CAMPUS

## **RESEARCH EFFORTS**

ith the aim of strengthening public health capacity and achieving improved health outcomes in the state of Karnataka, the Bengaluru campus of Indian Institute of Public Health Hyderabad was started by the Public Health Foundation of India in 2012. This effort has been in partnership with the Government of Karnataka, through a Memorandum of Understanding and the office is housed in the Leprosy Hospital compound, a spacious heritage building generously provided by the Government of Karnataka. The institute conducts academic programs, research activities, short term trainings and workshops. The activities at the campus commenced from April 2012 and academic programs started from November 2012. The campus has four faculty members, three administrative staff, 15 research staff and is being ably guided by Prof. G.V.S. Murthy, Director Vice President PHFI South.

The academic program Post Graduate Diploma in Public Health Management (PGDPHM) has been running continuously for last five years.

- The first batch (2012-13) of PGDPHM comprised 30 medical officers of the Department of Health and Family Welfare.
- The second batch (2013-14) consisted of 31 medical officers and six AYUSH doctors.
- The third batch (2014-15) had 16 medical officers, six AYUSH doctors and two staff nurses of the

Department of Health and Family Welfare.

- The fourth batch (2015-16) consisted of 22 (14 MBBS doctors, seven AYUSH doctors and one MA Sociology) students.
- The fifth batch (2016-17) had 14 (12 MBBS and two AYUSH) deputationists from Department of Health & Family Welfare. The sixth batch is currently undergoing with 13 (8 MBBS, 3 AYUSH, 1 Dentist and 1 Staff Nurse) students deputed from Dept. of H&FW.

This campus has applied for affiliation from Rajiv Gandhi University of Health Sciences for Masters in Public Health course and is hopeful of securing affiliation in the year 2018-19.

Technical support to the Government is a strong element at the IIPH- Bengaluru Campus, as it has developed action points for the National Urban Health Mission for the city of Bengaluru and in conducting a review of nutrition programmes in Karnataka to highlight key barriers, enablers and options. The campus is provides technical assistance to the government in rolling out Universal Health Coverage in the pilot districts of Raichuru and Mysuru. The faculty is active in reviewing existing national and state specific programmes, from their conceptualization, design, development and implementation.





## PREVENTION AND CONTROL OF NON COMMUNICABLE DISEASE MANUAL FOR HEALTH PROFESSIONALS

A manual for health professionals was developed in 2013-14 on Non Communicable Diseases and Standard Treatment Guidelines for the Karnataka State Health Systems Development and Reforms Project and Karnataka State Health Systems Resources Centre, Bangalore. This document was developed with support from the World Bank and is available at www. healthykarnataka.org.

## HYPERGLYCAEMIA IN PREGNANCY AND RISK OF CHRONIC DISEASES-EXTENSION OF AN EXISTING COHORT

The success of establishing the cohort through an earlier pilot study and overseeing its continuity has led to extending the recruitment of another 5,000 pregnant women into the birth cohort. Apart from screening for gestational diabetes the study will also store the blood samples in a bio repository for future analysis. The mothers and infants will be followed up for a duration of five years. The population includes those who attend public health facilities including urban slums in India. The study will be conducted in partnership with Dr.Sanjay Kinra, LSHTM; Dr.Sarah Benjamin Neelon, Johns Hopkins University, Dr Anura Kurpad, St John's Research Institute and is supported by the Wellcome Trust - DBT India Intermediate fellowship.

## EFFECT OF HYPERGLYCAEMIA IN PREG-NANCY ON ADIPOSITY IN THEIR INFANTS IN INDIA

This is a Wellcome Trust Capacity Strengthening Strategic Award to the Public Health Foundation of India and is a multicentre cohort study to evaluate the effects of glucose levels in pregnancy and on the risk of adverse infant outcomes, especially in predicting the risk of chronic diseases in infants.

## FOLLOW UP OF MOTHERS WITH DIABETES AND THEIR CHILDREN

A pilot study is being conducted to establish feasibility of a large cohort study specifically to test the logistics of the study methodology and feasibility of cordblood serum C-peptide level, glucose testing in infants and testing HbA1C levels in non-diabetic south Indian women for the larger cohort study. This shall aid in obtaining effect estimates (albeit underpowered) to determine sample size and power calculations required for robust effect estimates in the main study. It shall also shed light on recruitment issues, mobility of

pregnant women and determinants of following them up successfully, and viability of following pregnant women from diverse backgrounds. This effort is being funded by the Wellcome Trust till 2015.

Presently, 'Hyperglycemia in pregnancy and risk of chronic diseases', a large cohort study is being implemented in the hospitals of the local sub-government and Department of Health and Family Welfare.

Gestational diabetes in Uganda and India: The aim of the research is to assess whether an educational and behavioural intervention, delivered primarily through film, can improve the care of women with gestational diabetes mellitus (GDM).

Development of Standard Management Guidelines for NCDs-Karnataka: This was supported by Karnataka Health Systems Development and Reforms Project (KHSDRP). PHFI-IIPHH-Bengaluru has developed guidelines for prevention and treatment of hypertension, diabetes mellitus and carcinoma cervix. The guidelines were developed for various levels of health professionals including ASHA, ANM, staff nurses and Medical officers.

mWellcare An application to track and follow up of NCD cases and identification of defaulters in the districts of Shivamogga and Tumkuru. The apps and other paraphernalia procured for the project will be handed over to the concerned institutions of the department at the conclusion of the study which would continue the learnings from the project and help to continue tracking.

## WOMEN AND CHILD HEALTH INTRODUCTION OF THE HPV VACCINE

Cervical cancer is second most common cancers among women. Human Papilloma virus (HPV) is one of the most common sexually transmitted infection and nearly 80% of cervical cancers associated with HPV infection. Around 75-80 % of the sexually active individuals are affected with HPV in their lifetime. In India, the cervical cancer is nearly one-fourth of global burden. There are several risk factors known to contribute high incidence of cervical cancer. But the most important factor has been HPV infection. However, there is an effective HPV vaccine is available in the market against HPV type 6, 11, 16 and 18 to prevent cervical cancer. The current HPV vaccine provides protection against 75% of the HPV infection associated cervical cancers. Though there is a huge burden of cervical cancer associated with HPV infection in India, the government has suspended the demonstration of vaccine in response to pressure from several influential groups. The HPV vaccine introduction is highly contested on several issues such as ethical aspect of the HPV vaccine study to vaccine safety, efficacy, adverse events monitoring, cost effectiveness of the vaccine, profit motives of pharma companies and conflict of interest between government officials involved and pharma companies. Finally, the debates on range of concerns are not addressed and appropriate answers are not provided to relevant actors. As a result, introduction of HPV vaccine is proving to be a challenge in India. Therefore, it is necessary to understand not just the technical debates but also a social and political analysis of HPV vaccine introduction in India by answering questions on, what influences different policy actors to make decisions on policy of HPV vaccine introduction in Indian context? The study is guided by health policy triangle framework. This research will explore the socio-political nature of HPV vaccine policy problem in Indian context. The study adopts qualitative method, it involves interview of health system actors, key informants interviews and interest groups. The study will be undertaken in four cities of the India. To organize the textual data from interview transcripts, the 'framework' approach of qualitative analysis for applied policy research will be used.

This research is underway as part of doctoral studies of Dr T N Sathyanarayana from the University College of London, UK. It is supported by the PHFI-UKC Wellcome Trust Capacity Building Programme.

## INTERNATIONAL CLINICAL INTERVENTION, CO-ORDINATION AND BIOMARKER CEN-TRE (CICBC): EXHALE CENTER PROJECT

The potential adverse effects of IAP on pregnant women and children constitutes integral part of the "International Clinical Intervention, Coordination and Biomarker Center (CICBC): EXHALE Center Project". We aim to introduce improved cook stoves in these slums and compare the perinatal outcomes before and after the intervention in the birth cohort. We are also interested in following up the pregnant women among these slums and assess other health outcomes in the context of exposure to IAP. The population includes those who attend public health facilities including urban slums in India. The study is being conducted in partnership with Maastricht University and Cornell University and is supported by the National Institute of Health.

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Save Childbirth Checklist: This study was carried out over a period of three years for evaluation of WHO's Safe Childbirth Checklist (SCC) in the state of Rajasthan. The aim of the checklist is to improve the quality of facility based maternal and newborn care and result in reduction of perinatal mortality. Role of Folic acid in neural defects in infants: This is a multicentre study to understand the role of folic acid in neural defects in infants: This study has been completed at Bengaluru at PHFI's cost without any financial liability to the Govt. of Karnataka.

Systems Resources Centre (KSHSRC), Bangalore. Previously, a policy framework on Human Resoures for Health and a Documentary Film on maternal mortality were prepared for training, advocacy and sensitisation.

#### **UNIVERSAL HEALTH COVERAGE**

A document has been conceptualised and developed, distilling the vision and way forward for Universal Health Coverage in Karnataka for the Government of Karnataka. Technical support and assistance for roll



## SOCIAL DETERMINANTS OF HEALTH GENDER AND REPRODUCTIVE HEALTH

A study exploring the role of gender in explaining reproductive health-related behaviour among Hindu and Muslim women in India has been commissioned as a PHFI- Wellcome Trust Programme Research Fellowship for three years. The specific research questions pertain to why Muslim girls in India are less likely to obtain modern education as compared to Hindu girls, whether girls' education induces agency among Muslim and Hindu women in the process of marriage negotiation. As a next step, the nature of sex-preferences (child) that can be distinguished across the different sections of Muslim and Hindu population of India, what causes these differences, and what implication do they have for family size and whether religious norms explain differentials in the nutritional status of Hindu and Muslim women in India, or connection with infant and child mortality outcomes are also being investigated.

## HEALTH SYSTEMS SUPPORT URBAN HEALTH

A National Urban Health Mission Action Report has been developed to provide action points for the city of Bengaluru in aid of the Karnataka State Health out of Universal Health Coverage in the pilot districts of Mysure and Raichuru is currently being provided. The key objective of UHC Pilots in Karnataka is to expand the coverage for population that is currently left uncovered or is partially covered. The project has so far highlighted the strengths and gaps with regard to who is covered (population coverage), facilities available (public and Private), what services are provided and financing issues.

#### **NUTRITION**

Review of existing national and state specific nutrition programme guidelines is being conducted for conceptualization, designing, development of nutrition programs in Karnataka State. The review study's main focus was to identify, develop pragmatic direction and action plan, advocate for renewed commitment to nutrition, and intensify state's efforts to sustainably address malnutrition in the wake of the worsening nutrition status of vulnerable groups across the state. The study made several recommendations including establishment of Karnataka state nutrition authority, strategic direction to healthcare providers for under nutrition in young children and nutritional data surveillance. Identified barriers, enablers and options were consultatively developed for Ashoka Innovators for the Public, Bengaluru.

SOUTH ASIA CENTRE FOR DISABILITY INCLUSIVE DEVELOPMENT AND RESEARCH (SACDIR)

## **RESEARCH EFFORTS**

he World Health Organization (WHO) estimates that, globally 650 million people live with some disability (physical, mental, visual, hearing, learning, speech and intellectual) and 80% of this burden is in low/middle income countries. The Census 2011 in India estimated that 26 million people suffer from disability (2.2%). It is now understood that disability is a public health problem, but public health or health systems approaches to tackle this range of problems needs a closer look at evidence of successful service delivery initiatives in the South Asian context.

A centre of excellence was established in 2010, under the aegis of the Public Health Foundation of India (PHFI), in collaboration and with support from the London School of Hygiene and Tropical Medicine (LSHTM), and its component institution, the International Centre for Eye Health (ICEH), London, UK. The mission for the Centre is 'Inclusive Millennium: Evidence for Empowering Persons with Disabilities'.

## THE OBJECTIVES OF SACDIR ARE:

- Develop the evidence base for understanding the magnitude of disabilities within the South Asia context;
- Train and reorient health care personnel to concerns of persons with disabilities;
- Organize modules on application of the International Classification of Functioning (ICF) recommended by WHO;
- Run short course training modules on disabling conditions & inclusive development;
- Develop a Masters Course in Disability Management & Research
- Conduct high quality need-based epidemiological, operations, sociological and outcomes-based research to improve the quality of life of persons with disabilities;
- Evaluation of existing programs for persons with disabilities in India and other South Asian countries;
- Develop innovative modalities for identifying persons with disabilities and providing appropriate care;
- Advocate at appropriate congregations and forum for disability inclusive development;
- Assist and influence policy development initiatives

to foster disability inclusive development in the country and the region.

## FOUR BROAD AREAS OF FUNCTIONING

## 1. Developing research capacity in the region and provide evidence for action

Provide leadership to efforts for augmenting the evidence base for effective planning and implementation of programmes for disability in the South Asia region. Research networks will be developed with research partners in the region. A number of internationally and nationally funded research projects are currently being undertaken with support from ICMR, CBM and Sightsavers. The International Centre for Eye Health, London School for Hygiene and Tropical Medicine is collaborating closely with SACDIR.

#### 2. Augmenting skills of existing and new professionals through need-based training modules:

The first ever Short Course on Public Health Planning for Hearing Impairment in South Asia was conducted in October 2010 and is being offered annually. It is also proposed to offer a Masters level programme in Disability Management and Research.

Short courses on Research Methodology in Disability, Programme Planning for implementing public health programmes for visual impairment are being offered from 2011. Research skills of partner organisations are also being augmented through hands-on skill development workshops.

#### 3. Assist in programme development and evaluation in the South Asia Region, with a major focus on India:

In collaboration with other stakeholders, including, CBM, Lions Clubs International Foundation, National Programme for Control of Blindness, Society for Elimination of Rural Poverty (SERP), Sangath, Sightsavers and respective State Governments, evaluation of existing programmes is being undertaken. The Centre will expand the network of institutions for collaboration over the next couple of years.

## 4. Help governments, NGOs and other stake holders in policy formulation and advocacy:

SACDIR is generating evidence for policy formulation

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and advocacy with supporting organisations. It works closely with the Government of Andhra Pradesh and other State Governments to support activities for empowering people with disabilities in the region.

## Highlights AVOIDABLE BLINDNESS

Diabetic Retinopathy is the leading cause of blindness among working adults and Retinopathy of Prematurity is a leading cause of infant blindness. The need for timely and effective screening, management and referral is critical. These causes of blindness can be prevented and are in need of deeper investigation. The Queen Elizabeth Diamond Jubilee Trust in partnership with the Public Health Foundation of India and the London School of Hygiene and Tropical Medicine are supporting IIPH-H and its eye health partners to implement two multi-state projects, covering ten states for Diabetic retinopathy and eight states for Retinopathy of Prematurity. These projects address management and information systems, capacity building, policy, communication and public information, research among a range of areas at the national and state level.

A situational analysis each on Diabetic Retinopathy and Retinopathy of Prematurity to assess the general health systems capacity to tackle cases and to search for elements that may help to mould successful models for service delivery, modalities and management protocols for care and public awareness. We are in the process of submission of research articles peer-reviewed journals for wider circulation.

In July 2014, an extended National Diabetic Retinopathy Task Force meeting was convened by Deputy Commissioner, NCD, Ministry of Health and Family Welfare, Government of India. In September 2014, National Retinopathy of Prematurity Task Force was formed under the Ministry of Health and Family Welfare, Government of India and two meetings have been conducted till date.

Stake holder meetings were also convened during the year for finalizing the program components. Subsequently PHFI was invited to submit a proposal for managing the ROP Program in India. The proposal has now been accepted by the Trust and the programme implementation will start in October 2014. Training of



ophthalmologists and screening for ROP has begun in Madhya Pradesh and a partnership with Telangana has been forged.

## COMMUNITY EYE HEALTH JOURNAL (CEHJ) SOUTH ASIA EDITION

The Indian Institute of Public Health, Hyderabad has the rare privilege of publishing the South Asian edition of the Community Eye Health Journal. The Community Eye Health Journal South Asia Edition is a quarterly publication, aimed to ensure that up-todate and relevant information reaches eye care workers of all levels in the countries where the burden of eye disease and blindness is greatest. It seeks to refresh skills learnt many years previously, share good practice and motivate people to reach beyond the eye clinic and into communities - thereby improving the eye care and health outcomes of people throughout the developing world.

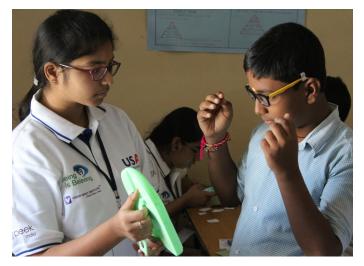
The Community Eye Health Journal is a quarterly publication sent free to over 22,000 health care providers worldwide, mainly in low and middle-income countries.

## INCIDENCE OF BLINDNESS VISUAL IMPAIRMENT

A collaborative study to determine the cumulative incidence of blindness and visual impairment is being conducted in Andhra Pradesh. This involves follow up on an original APED Study cohort. The study is being funded by LV Prasad Eye Institute and Sightsavers International and in collaboration with the International Centre for Eye Health, LSHTM, UK and LV Prasad Eye Institute, Hyderabad.

## MULTI-CENTRIC COLLABORATIVE STUDY ON IMPACT OF GLOBAL WARMING, ENVI-RONMENTAL CHANGES AND ULTRA-VIOLET RADIATION (UVR) EXPOSURE ON OCULAR HEALTH IN INDIA

The purpose of the research is to collate a case study each of the Northeast region, coastal region in South India (Prakasam district, Andhra Pradesh) in comparison to Delhi/NCR (National Capital Region) for the impact of increased UVR on prevalence of cataract, dry eye, pterygium in people >40 yrs old and allergic disorders in children between 5-15 yrs of age. The study aims to estimate the change in stratospheric ozone and suspended particles to investigate the effect of environmental factors and global warming on the prevalence and /or exacerbation of eye diseases.



For this purpose, the relevant data on ozone and UVR has been collected through satellite measurements at Guwahati and Prakasam district, Andhra Pradesh and the medical data was collected through Risk Assessment Surveys by teams from Dr. R. P. Centre, AIIMS (North India), Regional Institute of Ophthalmology Guwahati (North East) and coastal South India (SAC-DIR, Hyderabad).

The study is being undertaken using a mix of retrospective and prospective study designs. Cuddalore (TN) and Prakasam (AP) have had a series of blindness surveys undertaken over the past two decades. Data is also available from Chennai and other locations within 300 kms of Chennai. It is generally agreed that atmospheric pollution remains similar upto 300 kms. Therefore the retrospective analysis would correlate the findings on prevalence of blindness and visual impairment with the atmospheric indices. In addition, it is proposed to undertake a prospective study of a longitudinal nature to estimate the incidence of ocular conditions which are likely to be affected by climate change. Data has been collected from 3,589 individuals over 40 years of age from 34 clusters, and clinical assessment has been completed in 3,015 individuals with coverage of 84%. Preliminary analysis has shown that the prevalence of blindness is 1.9% and cataract is the leading cause of blindness. This study is funded by ICMR and was initiated in November 2010.

## MANAGING CHRONIC DIS-EASE-RELATED DISABILITY FAMILY LED REHABILITATION AFTER STROKE IN INDIA: THE ATTEND TRIAL

Stroke is the sixth leading cause of global disease burden. It has been estimated that the annual new cases of stroke in India is 135 to 145 per 100,000 population, with early case fatality rates ranging from 27% to 41%. This equates to 1.5 million people having a stroke each year, and a further 500,000 people, each year, living with stroke disability. The most important treatment for stroke is well coordinated and organized acute care.

Although inpatient care and rehabilitation may meet important clinical, physical, and psychosocial needs during the early crisis phase, the needs of patients and family in the longer term are not easily addressed in hospital. The development of an effective low-cost community rehabilitation service for an emerging major chronic disease such as stroke, in India, has the potential to make an important public health impact.

In this light, IIPH-H is conducting a multicentre, randomised, blinded outcome assessor, controlled trial to determine whether a family-led caregiver-delivered home-based rehabilitation intervention versus usual care is an effective, affordable strategy for those with disabling stroke in India. The research project will determine if early supported discharge with a trained family-led, caregiver- delivered, home based rehabilitation programme reduces death or dependency and hospital length of stay. Outcomes will be assessed by a trained staff by home visits at 3 and 6 months, whilst being kept blind to treatments allocation of the patient. Clinic or telephone follow-up will be offered if home visit appointments are not possible.

This research is being conducted in fourteen centres across India, in Delhi, Punjab, Kerala, Andhra Pradesh, Telangana, Tamil Nadu, Assam and West Bengal. So far, 1046 patients out of a targeted 1200 patients have been recruited. Preliminary results suggest that patients in the intervention arm showed improvement in dependency and death and benefited financially as well. This initiative is being conducted through a partnership between SACDIR, the National Health and Medical Research Council-Sydney, George Institute for Global Health, Sydney and Hyderabad and IIPH-Hyderabad.

## IMPROVING THE EVIDENCE BASE ON DISABILITY

People with disabilities, in most parts of the world, experience discrimination, and are widely excluded from the social, economic and political life of the community. While implementers understanding the need to include people with disabilities in development activities, there is limited reliable and comparable data about people with disabilities in low and middle income countries as well as how to include people with disabilities in programme design, implementation, and outcomes.

## **RAPID ASSESSMENT OF DISABILITY (RAD)**

In collaboration with the Nossal Institute for Global Health, University of Melbourne, a Rapid Assessment of Disability (RAD) Survey is being conducted through the community health global network (CHGN). The RAD was conducted during the months of September 2014 to January 2015 in Prakasam district of Andhra Pradesh state. The main objectives of the study are to measure the prevalence of disability within a target population and to understand the impact of disability on well-being and access to services, including barriers to access and further contribute to the evaluation of disability development project.

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Rapid assessment of disability survey showed that the prevalence of disability in Prakasam district was 10.1%. The case definition of disability in the survey was according to the UNCRPD case definition of disability. RAD survey results were disseminated at Indian Institute of Public Health-Hyderabad with the participation of the officials from the SERP and Disabled Persons Organization members of the Prakasam district. Post RAD Survey a disability inclusive development program is being implemented in the surveyed villages of the Prakasam district. As a part of this program all the members of disabled persons organizations and self help groups were combined into a single unit in order to impart the basic knowledge about preventing the various disabilities, identifying the children with disability at the early age, awareness programs at the school level and stigma alleviation programs at the village level.

Another study also seeks to provide a quantitative estimate on disability and provide data regarding different dimensions of disability in urban slums of Serilingampally in Ranga Reddy district. This study is also focused on clinical assessments of impairments related to vision, hearing and musculo-skeletal impairment. The prevalence of different types of impairments and adult wellbeing are being assessed among the people with disability in these slums. A comparative assessment of tools is also being used to measure disability in terms of their outcomes.

## **Highlights** THE NATIONAL SURVEY OF BLINDNESS, VISUAL IMPAIRMENT, OCULAR MORBIDITY AND DISABILITIES IN SRI LANKA

The main objective of this survey is to find out the prevalence of blindness and disability in Sri Lanka. This is the first ever national study on blindness and disability in Sri Lanka. IIPHH provided technical support to the survey team. The back-end data base management and data analysis is also being coordinated by IIPHH.

#### **HEARING IMPAIRMENT**

Behavioural problems in impaired children and associated caregiver strain in India - A descriptive study The goal of the study is to find the determining factors that contribute to the difference of psychosocial difficulties in hearing impaired children, compared to another group of hearing impaired children that do not develop these psychosocial difficulties. As per our understanding, this study is the part of a limited pool of first hand evidence from low and middle-income countries. Findings of this study have direct implications for current public health screening programmes



and practice. This initiative was conducted through a joint exchange and collaboration programme of PHFI and the Maastricht University, Faculty of Health, Medicine and Life Sciences, CAPHRI School for Public Health and Primary Care, The Netherlands.

## GENDER AS A DETERMINANT OF UPTAKE OF SERVICES IN PERSONS WITH DISABILI-TIES

This project aims to understand and generate evidence for disabilities and understand if gender is an important factor in the uptake of care and support services for persons with disabilities. Findings shall inform better planning and service delivery and bears relevance to care issues for self and family with relevance to health matters like antenatal care, immunization, care for chronic conditions like TB and acute care. The study is being conducted in two blocks/ mandals of Medak in Andhra Pradesh and Bidar in Karnataka, where health, nutrition and development parameters are poor.

In the first stage, key informants (KIs) were recruited from the study area and trained to identify people with disability using a specially designed and pretested flip book with pictorial depictions of the different impairments. Next, 20 KIs were trained per selected block to cover a population of 2000-3000 persons over a period of 4-6 weeks, going house to house. At the end of 6 weeks, trained field investigators reconfirmed the findings of the KI and simultaneously identified age-matched neighbourhood controls, without any disability. All identified individuals were administered a questionnaire to elicit responses regarding reproductive health care issues, in addition to recording basic demographic data. Disability status was also ascertained from the disability certificates and disability pension records available with the people with disability. All field investigators and KIs were people with disabilities.

In the second stage, a team of a medically trained physician and a therapist visited all listed individuals (people with disability and controls) at home to confirm the diagnosis, conduct a medical examination and for re-ascertaining information collected by field investigators.

## **EXPANDING EMPLOYMENT OPPORTUNI-TIES FOR PERSONS WITH DISABILITY**

There is a lack of evidence on the barriers faced by persons with disability in accessing employment

opportunities in India. Therefore the study was undertaken to ascertain the barriers to employment and employability for persons with disability in the IT and IT Enabled Services sector in Hyderabad, Andhra Pradesh India. The study was funded by CBM South Asia Regional Office (SARO). The main aim of the study was to work towards orienting Indian employers on disability inclusiveness with regard to employment of persons with disabilities. It was also an attempt to make Indian society disability inclusive by assessing both the enabling factors to employment and the barriers to employability of persons with disabilities in India.

The specific objectives of the study were to ascertain employers' barriers existing among selected work sectors to employ persons with disabilities and to identify physical access, information and communication access - employee barriers at work places for employment of persons with disabilities. The effort also enabled a documentation of enabling factors among selected industry sectors that have facilitated employment of persons with disabilities. Perspectives of the employers as well as persons with disabilities with respect to the provisions of the Indian Persons with Disability Act (1995) were also assessed.

## CARE FOR STROKE - REHABILITATION TRIAL

First ever rehabilitation trial for evaluating the effectiveness of mHealth intervention. The trial is registered with Clinical trial registry of India and the protocol is published in BMJ Open.

# The disability status of a patient and certify the patient's eligibility for public disability benefits (das-com2)

A mobile application that can guide assessment, automate calculation, provide instant analysis, certify, and then link the person to customized benefits and also continuously track the outcomes has been developed. As part of the project, the world's first real time augmented reality based goniometer for measuring Range of Movements (RoM) has also been developed. This initative is supported by Grand Challenges, Government of Canada.

## **BIRTH DEFECTS**

A three year project to understand the public health consequences of folic acid deficiency in mothers and benefits of peri-conceptional folic acid supplementa-

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tion on pregnancy outcomes with special reference to Neural tube disorders and Oro-facial clefts in India is underway. The methodology includes examining questions related to folic acid deficiency and its related consequences using a hierarchical evidence based approach from descriptive, analytical and experimental study designs. This project is funded by the UK Wellcome Trust Consortium to strengthen research capacity across PHFI institutions in an area related to maternal and child health and childhood disability.

The project in Telangana and Delhi had three phases: systematic review, prevalence and descriptive study using Key Informant method to estimate prevalence of deformities visible to the naked eye and explore factors affecting the interventions to combat folic acid deficiencies, and hospital based case control study to Identify risk factors for OFC. The project is supported by LSHTM and UCL. Research is designed in three phases: a systematic review, prevalence study in Mahbubnagar District (completed), and currently third phase of the study is being set up wherein a hospital based case control and prevalence study is in progress in New Delhi.

This study has immense public health significance as the efficacy of the interventions will provide policy recommendations for supplementation with folic acid for mothers in the reproductive age group. If the effect is strong, it can also lead to recommendations on food fortification with folic acid in the country. The study will also enable a cost-effective modality in using Key Informants for collecting evidence on birth defects at population level and bridge the evidence gap in this area in India. This will directly contribute to reduction in perinatal, neonatal and infant mortality due to folic acid deficiency.

## **BUILDING RESEARCH CAPACITY**

Regional and Area office functionaries from Sightsavers were equipped with skills and knowledge of research design, methodology and techniques as relevant to their core areas of work - eye care, social inclusion and education. This involved an orientation of Sightsavers staff to strengthen skills in designing research, conducting and monitoring the research through writing a research proposal at a one week workshop at IIPH-Hyderabad so as to provide substantive inputs to partner organizations. Following this the two teams developed their project concept notes. One faculty was supporting each team and provided constant technical inputs. After the completion of data collection in the study areas, the teams returned to IIPHH for a second round of training on data analysis and report writing. Guidance and support to participants at all stages of research, based on the topics identified was provided, along with mentorship and coaching to disseminate and publish research findings. This process continued over 1.5 years.



# STUDENT TESTIMONIALS



Dr. Anusha Puppala, BDS MPH 2015-17 Batch

The faculty and staff motivated us to start thinking scientifically about public health issues. Having a clear picture about a specific problem and implementing interventions in field is something I have learnt here. I hope to use these skills in my next stage of my career.



#### **Ms. Supriya Edla** MPH 2015-17 Batch

During this course, I learned new subjects such as Principles of Epidemiology and their application in real life through Project work. Other subjects such as Environmental Health, Research methods, Health Policy Analysis, Health Program Management concepts have been very useful. I attended several seminars where there were lively discussions, presentations with experts from all over India. The MPH course has helped me explore new areas of medicine and has been immensely helpful in improving my skills and knowledge.



Daisy A. John MPH 2015-17 Batch

The MPH course has allowed me to not only acquire a degree but also gain news skills and learn new subjects. Epidemiology, biostatistics, health policy, planning and implementation, environmental health, social and behavioural health and scientific writing are subjects part of the MPH course at IIPHH. This institute helped me study and work with highly educated and skilled faculty. The faculty has helped us in all our efforts to learn and understand public health.



Mr. Venugopal Yadav MPH 2015-17 Batch

Public health, by its very nature, is in a constant state of flux. I am grateful to Indian Institute of Public Health, Hyderabad for the education and experience I obtained through the Master of Public Health Program. This course has truly prepared me for real world challenges that a public health professional must often face. I completed the program with a solid foundation in epidemiology, surveillance and recent emerging issues in public health, which let me jump right away into outbreak investigations and reportable disease surveillance. I deployed skills on external monitor and evaluation on NSPV from the 2015 and 2016 rounds from World Health Organization and my understanding of global health and the complex factors impacting it was invaluable as a field surveillance officer. The emergency preparedness coursework has enabled me to take a more active role in preparedness planning for state-wide events.



Dr Nomaan Mohiuddin, BDS MPH 2015-17 Batch

Public health in India is at crossroads today. The fledgling public health structure in India has not been able to steer clear the population of the burden of communicable diseases yet and now there is this growing burden of non-communicable and the re-emerging disease yet to be convincingly negotiated. In this grim scenario the MPH course shimmers like a silver lining over these dark clouds of the now famous 'triple burden of diseases'. The MPH course is the need of the hour in this crisis situation that arose because of wrongly prioritizing mostly the curative part rather than focusing more on the preventive aspect of treating diseases.

The MPH course that is being offered at the Indian Institute of Public Health, Hyderabad has a distinct edge over the other similar MPH courses that are being offered at various colleges across the country. It incorporates a curriculum that is tailor made to make its students confident enough and field-ready. The course is designed by experts in public health field. They have taken care to incorporate all the relevant information, skills and competencies that are expected of a public health graduate. It is on par with an international MPH course.



**Dr M.Durga Kanthikiran, MBBS** MPH 2015-17 Batch

The MPH course has helped me gain wide knowledge on various aspects of public health. Health promotion and prevention are new to me. I learnt how policies are formed, analysed, and implemented. Programme planning and implementation, monitoring and evaluation of these programmes, economic evaluation and health economics are essential topics in public health that I learnt through this course. As IIPHH works closely with Government and International agencies we were given practical inputs on what happens in the field. Course curriculum included not only interactive lectures but also some field visits, assignments on various topics, seminars, discussions and other group activities which made us to develop critical thinking. Faculty at IIPH are from various clinical and public health fields and they provided us with practical perspectives and constant guidance.



**Dr. Tejashwini BDS** MPH 2015-17 Batch

I never regret joining MPH course in this Institute. It's such a wonderful place with positive atmosphere and well experienced faculty. I was only versed with my clinical knowledge but this course has helped me in improving other skills in the public health arena. I'm now well prepared to face the real challenges in the outside world. The best part of this course is that students are encouraged to participate and interact in classroom activities and each student is given personal attention.

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# GOVERNANCE

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#### Smt Poonam Malakondaiah

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#### Smt A Shanti Kumari, IAS

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### Sri Dinesh Kumar, IAS

**Special Chief Secretary:** Government of Andhra Pradesh

### Sri K Ramakrishna Rao, IAS

**Principal Secretary:** Government of Telangana (Finance)

#### Sri Ajay Seth, IAS

Additional Chief Secretary: Govt. of Karnataka, Health & Family Welfare Services, Government of Karnataka, Bengaluru

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Additional Chief Secretary (Health): Department of Health & Family Welfare, Government of Kerala

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#### Prof (Dr) T Ravi Raju

**Vice-Chancellor:** Kaloji Narayana Rao University of Health Science

#### **Prof G Sundar**

**Director:** BITS Pilani - Hyderabad Campus, Jawahar Nagar, Hyderabad

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**Dean:** Indian School of Business, Gachibowli, Hyderabad

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**Member:** Governing Council SMC, MediCiti Institute of Medical Sciences, Ghanpur Village, Medchal Mandal, Hyderabad

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**Director:** Indian Institute for Human Settlements (IIHS), IIHS Bangalore City Campus, Sadashivanagar, Bengaluru

#### **Ms Sangita Reddy**

**Joint Managing Director:** Apollo Hospitals Enterprise Limited, Jubilee Hills, Hyderabad

#### Dr M Prakasamma

Academy For Nursing Studies & Women's Empowerment Research Studies, Hyderabad

#### Dr P V Venugopal WHO Temporary Advisor

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#### Dr K I Varaprasad Reddy

Non-Executive Chairman: Shantha Biotechnics Ltd., Hyderabad

#### **Dr Praveen Rao**

**Vice Chancellor:** Acharya NG Ranga Agricultural University

### Dr Gullapalli N Rao

**Chair:** L V Prasad Eye Institute, Banjara Hills, Hyderabad

#### Prof Geeta K Vemuganti

**Professor:** School of Medical Sciences, University of Hyderabad

#### **Dr Ranga Reddy**

**Director:** Sanmed Healthcare Pvt Ltd, Madhapur, Hyderabad

#### Prof K Srinath Reddy President: PHFI

**Prof G V S Murthy Director:** IIPH-Hyderabad

# INSTITUTIONAL ETHICS COMMITTEE HYDERABAD AND BENGALURU CAMPUS

# **HYDERABAD CAMPUS**

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**Dr T P Das,** Vice Chair, LV Prasad Eye Institute, Hyderebad

Nanda Kishore Kannuri Associate Professor, IIPHH, Hyderabad

**Kalyani Reddy** Assistant Librarian, IIPH, Hyderabad

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**Dr K Viswanath** Director, Medical, Pushpagiri Vitreo Retina Institute, Hyderabad

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**Dr. Subbulakshmy Natarajan** Adjunct Professor in Neurology, IIPH, Hyderabad

**Dr G Bhanuprakash Reddy** Scientist-E, National Institute of Nutrition, Hyderabad

**Dr G R Chandak** Senior Principal Scientist, Centre for Cellular and Molecular Biology, Hyderabad

**Dr Usha Raman** Professor, Department of Communications, Sarojini Naidu School of Arts and Communication, University of Hyderabad

**Mr Srinivasan S. Rajan** Advocate

Lalitha Raghuram Country Director, Mohan Foundation

Melissa Glenda Lewis Senior Lecturer, IIPH, Hyderabad

# **BENGALURU CAMPUS**

Chairperson	<b>Shalini Chandrashekar</b> Professor & Head of Department, Department of Community Medi- cine, M S Ramaiah Medical College, Bengaluru
Member-Secretary	<b>Giridhara R Babu</b> Associate Professor, IIPHH-Bengaluru Campus
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	<b>Sadhana S M</b> Executive Director, Karnataka State Health System Resource Cen- tre, Govt. of Karnataka
	Reverend Jessie Ranjan
	Priest-in-Charge, CSI Christha Krupalaya Church, Bangalore
	<b>Rajeshwari Devi C</b> Advocate, High Court of Karnataka & Legal Consultant, PCPNDT Bangalore
	<b>B Gangaboraiah</b> Professor, Department of Community Medicine, Kempegowda Insti- tute of Medical Sciences, Bangalore

Natarajan Manimozhi

Head, Medical Coordination, Amici Di Raoul Follereau (AIFO India), Bangalore

#### **Ravindra Reshme**

Retired HOD (Botany), MES College, Malleshwaram, Bangalore

#### **Biswamitra Sahu**

Associate Professor, IIPHH-Bengaluru Campus

#### Suresh S Shapeti

Senior Administrative Officer & Deputy Registrar, IIPHH-Bengaluru Campus

# **PEOPLE AT IIPH** Hyderabad



# Dr Gudlavalleti Venkata Satyanarayana Murthy VP - South, PHFI

**Director** - IIPH, Hyderabad and IIPH, Bengaluru Campus **Director** - South Asia Centre for Disability Inclusive Development and Research (SACDIR)

Dr Murthy is a well-experienced public health and community eye health scientist. He established the first Department of Community Ophthalmology in India in 1992 at the All India Institute of Medical Sciences, New Delhi that is now a WHO Collaborating Centre for Prevention of Blindness. He is a Senior Lecturer at the International Centre for Eye Health at London School of Hygiene & Tropical Medicine, United Kingdom.

Dr Murthy has spearheaded many vision and community eye health research initiatives in India and around the world over the last 18 years and brings with him tremendous research, academic, policy and programmatic experience. He has been honored with more than 10 prestigious awards and fellowships in his career, and has published 20 books and more than a 100 papers in peer reviewed journals. He worked with the World Health Organization in setting up the Control of Childhood Blindness Global Programme supported by Lions Club International Foundation and UNAIDS, South Asia. He has received competitive research grants from the WHO, Department for International Development (DFID), US-India Fund, Wellcome Trust, Indian Council of Medical Research, Christian Blind Mission, Sightsavers and ORBIS International.

#### murthy.gvs@iiphh.org, gvs.murthy@lshtm.ac.uk



**Professor M. Jayaram** Academic Registrar & Senior Administrative Officer

Dr. M. Jayaram served the Government of Andhra Pradesh since January 1992 in various positions bearing a significant impact on health and community development. He has served in multiple capacities: Joint Director of Leprosy and Non-communicable diseases, Government of Andhra Pradesh, Chief Medical Officer of Health Greater Hyderabad Municipal Corporation, Medical Officer of Health (Health Officer), Municipal Corporation of Hyderabad, Secunderabad, District Leprosy Officer & Nodal Officer for HIV/AIDS in Rangareddy District, Assistant Professor of Community Medicine, Osmania Medical College, Assistant Medical Officer of Health (Health Officer) of the Vijayawada Municipal Corporation, and as Medical Officer, Government Leprosy Control Programme. His areas of interest include leprosy control, urban health, industrial health, tobacco control, non-communicable diseases and public health administration. Prior to Government service, he worked in Singareni Collieries for 10 years.

Dr. M. Jayaram completed his M.B.B.S from Guntur Medical college, Guntur and M.D, in community Medicine from Guntur Medical College, University of Health Sciences, Vijayawada and did his P.G. Diploma in Hospital Administration from the Institute of Social Sciences & Research, Vellore, Tamil Nadu.

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**Dr Uma Aysola Deputy Director,** Indian Institute of Public Health, Hyderabad

Uma has a PhD in Business Administration from Corllins University, USA. She has a long and distinguished career in health care and hospital management. She held several CXO level positions in different organizations. At IIPHH Uma is in charge of fund raising. She is an honorary member of American College of Healthcare Executives. Member of National Human Resource Development (NHRD) and Public Relations Society of India. She is also part of Indian School of Business (ISB)'s Women's Entrepreneur Program and NASSCOM's initiatives on Business Process Outsourcing. Before IIPHH, Uma was the head for health and CSR wing at Athena Ventures Private Limited.

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**Dr Raghupathy Anchala** Associate Professor, MBBS (Armed Forces Medical College, Pune); DTCD - Tuberculosis and Chest Diseases, (BJ Medical College, Pune); MPH (University of Pittsburgh, USA) and PhD (Cambridge, UK)

Dr Anchala is a Chest Physician and a Public Health and Primary Care Specialist. A PHFI future faculty fellow, he was awarded Outstanding Student Award, Masters Level in 2008 by the GSPH, University of Pittsburgh; and was a recipient of Wellcome Trust-PHFI PhD Research Fellowship and Cambridge Commonwealth Trust scholarship.

Dr Anchala has developed course content and has been teaching on basic and advanced epidemiology, research methods, operational research, drug development, nutritional epidemiology (DL), GCP and clinical trial modules for courses at IIPHH since 2009. He has focused his efforts on developing, testing and implementation of Clinical Decision Support Systems for management of NCDs; epidemiology of hypertension, asthma and COPD; systematic reviews and meta-analysis; standardization of lung function testing in primary and secondary care settings; health technology assessment; and role of health information technology in prevention and management of NCDs. The translation of clinical practice guidelines in primary healthcare settings has been an area of intervention.

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#### Dr Neena John

**Associate Professor,** PhD, All India Institute of Medical Sciences, New Delhi; Epidemiology, London School of Hygiene and Tropical Medicine (LSHTM)

Dr John has worked in the Department of Community Ophthalmology at the All India Institute of Medical Sciences, New Delhi for a decade, involved in eye health related research projects including epidemiological studies of eye problems, situational analyses of human resources and infrastructure, work capacity studies on of eye care personnel, blindness surveillance programs, and various capacity building training programs. She worked with the International Centre for Eye Health as a Research Fellow before joining IIPH-Hyderabad as an Epidemiology module organizer for the Biostatistics and Data Management Diploma Course. Her research interests are in disabilities and vision research, human resource planning for health care, and evidence based research tools.

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#### Dr Rajan Shukla Associate Professor MPH, University of Minnesota; DPH, MBBS, Goa Medical College

Dr Shukla has had more than 20 years of experience in health care sector, initially as an emergency care physician, than in programme coordination, implementation and now as an academic who believes in practice; working in health system projects, evaluation and research. He works in the area of health care quality, health care financing and health insurance with special focus on promoting primary care and health equity. He is dedicated to improving access to quality health care services. He also believes in need for a responsive health systems through addition of community based approaches for health system accountability and integrating Indian system of medicine with the bio-medical model to deliver comprehensive and holistic health care.

Rajan is currently doing his PhD on use of advance in technology to improve access to health care services in secondary care care hospitals. He is examining if through availability of newer and cheaper wide angle retinal imaging camera, is it possible to shift ROP screening task to neonatal care teams specially nurses. This has the potential to disrupt current practices and improve access to ROP screening to every newborn who needs it, specially in resource constrained setting where there are hardly any VR specialist.

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#### Nanda Kishore Kannuri Associate Professor



PhD in Medical Anthropology and Cultural Psychiatry (2010-2015), University College London,United Kingdom; M. Phil in Medical Anthropology (1998-99), University of Hyderabad; M.A. in Anthropology (1995-1997), University of Hyderabad; B.Sc. in Botany, Zoology and Chemistry (1992-1995), Kakatiya University; PG Diploma in Planning and Project Management (1999), School of Distance Education, University of Hyderabad.

Dr. Nanda Kishore Kannuri is a Medical Anthropologist by training. He was awarded a PHFI-Wellcome Trust fellowship for his PhD at University College London. Prior to joining IIPH he worked for national and international development organizations for more than a decade. His work experience includes Community-based participatory action research, Intervention and program management in HIV&AIDS, Operations research, Tuberculosis, Adivasi Health, and Disaster management. His teaching and research interests include socio-cultural determinants of Health, Mental Health, Qualitative methods, Health Policy and Systems Research, Ethnography of health and health care, Ecology and Public Health and Technology for inclusive health care. Dr. Nanda Kishore is currently working as an Associate Professor at Indian Institute of Public Health, Hyderabad. He also serves as Assistant Editor, Anthropology & Medicine journal (Taylor & Francis, UK) and as a honorary member of faculty in school of medical sciences at the University of Hyderabad.

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#### Dr Shailaja Tetali

**Associate Professor,** PhD Candidate, London School of Hygiene and Tropical Medicine; Masters (Injury Prevention), Karolinska Institute, Sweden; MPH, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum; MBBS, Sri Ramachandra Medical College and Research Institute, Chennai

Shailaja has been an Associate Prof at IIPH for the past five and half years. Her areas of interest include injury prevention and public health impacts of transportation choices. She has worked on issues in blood transfusion services, especially equitable access to safe blood, Patient Safety and Operations Research in Health. As local PI of the Global Road Safety Program in 10 countires (formerly RS 10 project) she leads a team of 16 people that are monitoring and evaluating key road safety indicators in Telangana and Andhra Pradesh. This project is in collaboration with Johns Hopkins School of Public Health, the WHO and the Global Road Safety Partnership.

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**Dr Suresh Babu Munuswamy Associate Professor,** PhD, Tokyo Medical and Dental University; MPH, Oxford Brookes University; MBBS, Stanley Medical College

Dr Suresh Munuswamy, Program Coordinator and Associate Professor- Indian Institute of Public Health- Hyderabad (IIPH-H) has been associated with setting up, coordinating and promoting India's first Integrated MSc. and PhD and DST- HI-RapiD Lab (Department of Science and Technology, Government of India - Health Informatics- Rapid Design Lab). DST- HI-RapiD Lab's research focuses on Graphic Design, Product Design, Computer Vision and Visual Analytics for Health Care.

Dr Suresh Munuswamy started off his career as a Doctor setting up and running a charity clinic for three years treating approximately 150 patients a day. He became interested in Public Health to strengthen disease prevention and address socio demographic issues. After MPH at Oxford, UK he returned to work at his charity clinic, and soon afterwards became part of a team that successfully set up India's first School of Public Health in a private university (SRMU).

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#### Dr Samiksha Singh

**Associate Professor,** PhD Candidate, London School of Hygiene and Tropical Medicine, UK; MD, Community Medicine from University College of Medical Sciences (UCMS), Delhi; MBBS, Lady Hardinge Medical College, Delhi

She has a clinical background with an MD in community medicine. She has served as a consultant for several interventions and evaluations of reproductive, maternal, newborn, child and adolescent health interventions, including operationalisation of Maternal Death Review in combined state of Andhra Pradesh and a gap analysis under RMNCH+A in states of Andhra Pradesh and Telanganaboth funded by UNICEF. She has also worked in project evaluations in field of HIV/ AIDS and worked for projects funded by NACO, USAID and CDC. She is currently enrolled as a part-time PhD student in epidemiology at LSHTM, focussing on the referral system and transport for emergency obstetric care. Her previous research is published in several peer-reviewed journal articles. Her interests are in maternal, child and adolescent health with focus on developing evidence base, innovations and health system strengthening including referrals for obstetric, perinatal and post-natal care and epidemiology including evaluation of complex interventions.

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#### **Souvik Kumar Bandyopadhyay** Associate Professor PhD Candidate, Statistics, University of Calcultta (expected submission in 2016);

MSc Statistics, University of Burdwan; BSc Statistics, University of Calcutta

Mr. Souvik Bandyopadhyay received his post-graduation degree in statistics with a specialization in operations research and reliability, and is currently in his final stage of submission of PhD in Statistics from Calcutta University. He is passionate about statistics and his interests include teaching statistics and data analysis using R. His interest areas lie in multivariate longitudinal, epidemiological and environmental data analysis and statistical modelling; monitoring, evaluation and analysis of interventions and analysis of social surveys; statistical computing using R, latent variables or variables which are not measured directly but from some surrogate measures and categorical and Likert scale data.

Mr Bandyopadhyay was Assistant Professor in Statistics at Memari College, Burdwan (recruited by College service Commission), and a Guest Lecturer at The University of Burdwan. He was a recipient of the CSIR NET Fellowship and had been a junior research fellow at the department of Statistics, University of Calcutta. He has publications in peer reviewed journals in various disciplines including biostatistics, applied statistics, medicine, epidemiology, ophthalmology, botany and management.

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Mr. Hira Ballabh Pant Lecturer, MA Economics, Gardhwal University (Uttrakhand); Post Graduate Diploma in Biostatistics and Data Management, IIPH Hyderabad

Mr. Hira Ballabh Pant is working as a Lecturer at the Indian Institute of Public Health Hyderabad, Prior to IIPHH, he has worked as statistical assistant and field supervisor in Dr. RP Center and Department of Community Medicine,AIIMS. He is currently teaching Data Management and analysis using different tools and he is involved in various research projects and extends support for data management and analysis. His research interests include data usage for effective and inclusive health care programme design, Visual Analytics for health care, disability related research. He was awarded an exchange programme as a short-term visiting scholar for three months at the Department of Epidemiology, University of Michigan, USA.

#### hira@iiphh.org



#### **Suresh Kumar Kamalakannan** Associate Professor, India Alliance (Wellcome-DBT) Early Career Fellow in Clinical and Public Health research; Assistant Professor - PHFI, IIPH Hyderabad.

Suresh Kumar has a versatile professional experience as an academician, researcher and a clinician in the field of rehabilitation medicine and Public Health. His Public health competencies include health systems strengthening, Policy analysis and development. His clinical expertise is Neuro psychiatric rehabilitation.

He is an active systematic reviewer for Cochrane collaboration contributing in the field of evidence based rehabilitation and public health. He has won consecutive international awards for his innovative strategies to address health needs of people with disabilities. He had worked in diverse emergency contexts in coastal borders of South India and Nepal respectively. He had been a part of the early supported discharge program, organizing community services for stroke survivors around north London, working within the private financing initiatives of NHS in the U.K. He had been mentoring and supervising graduate medical and allied health students from India and various parts of the world in C.M.C Vellore.

#### suresh.kumar@iiphh.org



#### Mekala Jayanthi Sagar Research Associate

Ph.D. student in Social Work, Bharathiar University; MPhil Sociology, Maduraih Kamaraj University; MA Social Work, St. Francis College For Women, Hyderabad; BA Social Work, Roda Mistry College of Social Work, Hyderabad

Ms Sagar is independently capable of managing multiple projects, including planning, designing and implementation stages. She is an effective communicator with strong relationship management skills. Ms Sagar has hands-on experience of collaborating with grassroots NGOs, Government and international agencies, with a keen interest in disability and diabetes related health management services. She has expertise in developing budgets and financial monitoring systems for different projects, facilitating field logistical activities, including community and clinical surveys, coordination with national and international funding agencies and teaching and training in field study areas and community health as well as documentation and publication support.

At present, she is engaged in a study on disability prevalence in urban slums of Ranga Reddy district. She has worked at various levels, successfully managing ground level and mid-level management with a focus on delivering qualitative and quantitative research and community health activities, within targeted time frames. Ms Sagar has superior abilities in planning, budgeting, and forecasting of various projects.

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#### Melissa Glenda Lewis Senior Lecturer - Biostatistics MSc in biostatistics, Manipal University, Manipal; B Sc Mathematics, Statistics and Computer Science, Mangalore University.

Ms Lewis teaches biostatistics to students of the Post Graduate Diploma in Public Health Management, Health Informatics and Post Graduate Diploma in Biostatistics and Data Management. She also conducts workshops on topics related to Biostatistics. She has knowledge in STATA, RevMan, WinBugs, SPSS and basic SAS. She is currently supporting data analysis for the Diabetic Retinopathy and Retinopathy of Prematurity projects at IIPH, Hyderabad. She has also used her core areas of interest in statistical inference and epidemiology by mentoring students in their projects and helping them in data analysis. She is also working on her PhD on application of Bayesian methods in Public health evidence synthesis from Manipal University

Melissa has received several awards for her research in biostatistics. She was awarded Prof. KR Sundaram young research scholar award for excellence in medical statistics in 2015; She was awarded Girijakant Shukla - IBS (IR) Young Biometrician award during International Biometric Society (Indian Region) and Public health Evidence South Asia (PHESA) - a joint conference held in 2016; She has been a beneficiary of Cochrane Anne Anderson Award in 2014 and; She was awarded developing countries stipend to attend the 23rd Cochrane Colloquium Vienna, Austria in 2015.

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# **PEOPLE AT IIPH** Bangalore



**Dr Suresh S Shapeti** Senior Administrative Officer and Deputy Registrar MBBS, MS (ENT)

Dr Shapeti has served in the Health and Family Welfare Department in various positions, heading seven state level positions. He joined the state health services in Karnataka in 1979 and retired as Joint Director Planning from the Directorate in October 2012 after 33 years of service. He is a medical doctor with post-graduation in ENT, who started his profession under an apprenticeship with Padmashree Dr R.B. Patil at Hubli. He also has experience of private practice. He has four publications. He is a member of Karnataka State Technical Committee for UHC, member secretary of Karnataka State Committee for monitoring carrier oriented multi-skilled training programme.

#### sureshshapeti@iiphh.org



Dr Giridhara R Babu Additional Professor PhD, University of California Los Angeles (UCLA), MBBS, MBA, MPH

Giridhara's focus of research is on life course epidemiology by identifying and modification of early markers. He received wellcome trust strategic award for setting up a birth cohort in 2012 at Bengaluru for studying the effect of hyperglycemia in pregnancy on the adiposity in infants. In the year 2014, he is awarded the prestigious intermediate fellowship of Wellcome Trust-DBT India Alliance to extend this cohort. The key objective of his current research is in exploring the role of parenteral milieu on infants and subsequent development of NCDs. The focus of his future research include applications to NIH funding include to extending the birth cohort, thereby contributing towards prevention and management of Non Communicable Diseases (NCDs). He was the lead editor in developing the guidelines for prevention and management of CVDs for Government of Karnataka. With experience over six years with the World Health Organization and relates to context specific public health work in slums of Bangalore. He has also worked in developing the action plan for implementation of National Urban Health Mission (NUHM) and Universal Health Coverage (UHC) in the state of Karnataka. Both these programs aim at reducing inequities in health access for disadvantaged people living in the slums of Bangalore. He has successfully blended research, academics, and advocacy efforts in steadfast public health career over 16 years.

#### giridhar@iiphh.org



Dr T N Sathyanarayana Assistant Professor MBBS, MPH, MBA, DHM, PhD Scholar

Dr Sathyanarayana has 14 years of experience in public health and served six years in World Health Organization as surveillance Medical Officer for polio eradication program. Prior to this he served as district leprosy medical officer for two years. As surveillance medical officer, he made special innovative efforts to strengthen routine immunization in Karnataka state and actively participated to begin measles surveillance program in Karnataka. Currently he is teaching the health policy-planning module at IIPHH-Bengaluru campus. His research interests are in national-global level vaccine policy decision processes, its political, socio-cultural nature of interpretation of evidence sources; Application of political, institutional and social analysis for vaccine policies; Health policy transfer between national and international jurisdictions, especially in relation to local, regional and global Vaccines/Universal Health Coverage policy initiatives and ultimate objective is to promote health care policies to create sustainable, integrated, patient focused health care system.

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Dr Biswamitra Sahu Assistant Professor

PhD, Demography, University of Groningen, the Netherlands; MPhil, Population Studies, International Institute of Population Sciences, Mumbai; MA in Sociology, University of Hyderabad

Dr Sahu's research is primarily located in the domain of social determinants of health, specifically, intersectionality of health outcomes on the health status of women and minorities. In her doctoral research, she explored the reproductive behaviour of Muslims and Hindus in India and Bangladesh. She has also developed a short course in qualitative research methods. She has published a book and a couple of research articles in internationally acclaimed demography and human geography journals. Currently, she holds a PHFI-Wellcome Trust research fellowship (2013-2015). In the past, she has been recipient of The Netherlands Organization for Scientific Research grant (NWO-Wotro: 2006-2009), HERA fellowship (Ministry of Foreign Affairs, the Netherlands: 2004-2005) and Government of India fellowship (MOHFW: 2002-2003).

#### biswamitra.sahu@iiphh.org



#### **Dr Anita Nath** Associate Professor

M.B.B.S., M.D. (Community Medicine); J.N. Medical College, Belgaum Fellowship in Reproductive Epidemiology (Population Council, New York)

Dr. Anita has over 15 years of experience in the field of public health. After completing M.D., she did her senior residency at Maulana Azad Medical College, New Delhi wherein she was actively involved in teaching, training, public health practice, research and implementation of national health programmes. She was awarded Tietze Fellowship in Reproductive Epidemiology by the Population Council, New York in 2009. She has worked has a consultant for various organizations such as UN-FPA and Jansankhya Sthritha Kosh; New Delhi, Population Council; New York and St Johns Research Institute, Karnataka Health Promotion Trust; Bengaluru- mainly in the areas of maternal and child health, HIV/AIDS and formulation and implementation of district National Rural Health Mission Plans. She has 38 publications in peer-reviewed journals of which 16 are in international journals and has co-authored a chapter each in two books.

#### anitanath@iiphh.org



#### Dr Vivek U Padvetnaya Associate Professor

DPhil in Public Health (Final Year), Green Templeton College, Oxford University; MSc-Health Policy Planning and Financing, London School of Economics, and London School of Hygiene and Tropical Medicine, University of London; PGDBM, ICFAI College, ICFAI University; MBBS, Mysore Medical College, Mysore University

Vivek is a trained physician, development professional and a political economist. Presently he is a doctoral student in department of Public Health, University of Oxford. His doctoral thesis examines political economy of public services in the rural Indian context. Before taking up doctoral studies, he worked as researcher, and as coordinator of International Long-term care Policy Network (ILPN), at London School of Economics. He also has more than 14 years of experience in development sector in senior management and consultant positions, and has co-founded and strategically guided: hospitals, schools and educational institutions. His key research interest involve understanding what determines delivery and access to public health services.

#### vivek.padvetnaya@phfi.org

# **ADJUNCT FACULTY**

Dr. Sunanda Reddy Kolli	CARENIDHI
Dr. Sanjay Kinra	LSHTM
Dr. B.R. Shamanna	University of Hyderabad
Dr. Sanjeev Upadhyay	UNICEF
Prof. Dharmapuri Vidyasagar	Emeritus Paediatrics, Division of Neonatology, University of Illinois at Chicago
Dr. Vijay Yeldandi	University of Illinois at Chicago

# **RESEARCH TEAM**

Dr. Dinesh Raj	Research Associate	Folic Acid
Ms. Pavani Nuti	Research Associate	UHC Project
Ms. Chitra Sharma	Research Associate	APCAPS
Dr. Anuradha	Research Associate	ATTEND Trial
Dr. Deepak Kumar	Research Administrator	ATTEND Trial
Mr. Amarendar Reddy	Research Assistant	Technology for inclusive health
Ms. Pavithra Madhira	Research Associate	Health Communication & Advocacy Division
Ms. Ch Amamji	Research Associate	DR & RoP Projects
Ms. Purnima	Research Assistant	DR & RoP Projects
Ms. Asha Pant	Data Entry Officer	DR & RoP Projects
Mr. Venkat Rao	Research Assistant	DR & RoP Projects
Dr. Bhakti Lathker	Research Assistant	DR & RoP Projects
Dr. Snigdha Das	Research Assistant	DR & RoP Projects
Dr. Tripura Batchu	Programme Coordinator	DR & RoP Projects
Anu Susan Baby	Jr. Nurse	DR & RoP Projects
Khopendra Patle	Jr. Nurse	DR & RoP Projects
Dr. Abhilash Gurrala	Research Assistant	DR & RoP Projects
Rajesh Jaitwar	Jr. Nurse	DR & RoP Projects
Mr Aditya Singh	Staff Nurse	DR & RoP Projects

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Mr. Girish Gavandi	Project Executive	DR & RoP Projects
Mr. Sandesh Gawas	DEO-Goa	DR & RoP Projects
Ms. Chandrika Shetty	Sr. Research Assistant	UNICEF Chhattisgarh Health Systems Strengthening Project
Dr. Narendra Sinha	Programme Coordinator	UNICEF Chhattisgarh Health Systems Strengthening Project
Dr. Neha Singh	Programme Manager	UNICEF Chhattisgarh Health Systems Strengthening Project
Ms. Shrini Shukla	Programe Officer	UNICEF Chhattisgarh Health Systems Strengthening Project
Dr. Shashwat Tripathi	Programme Coordinator	UNICEF Chhattisgarh Health Systems Strengthening Project
Dr Susmitha Rallabandi	Programme Officer	CEHJSA, DR & ROP
Ms. Akanksha Nigam	Programme Officer	CEHJSA, DR & ROP
Ms. Sridivya Mukpalkar	Program Officer	CEHJSA, DR & ROP
Pavani Divi	Research Assistant	SCSL Project
Sandhya Karra	Research Assistant	SCSL Project
Ms. Mukta Tyagi	Sr. Research Assistant	SCSL Project
Ms. Swecha	Sr. Research Assistant	SCSL Project
Mr. SK Ejas	Project Administrator	SSPHERE (PEEK) Project)
Ms. Lalitha Swathi Vadrevu	Research Associate	Dakshata Project
Ms. Aparajitha Mishra	Sr. Research Assistant	Dakshata Project
Mr. Anjaneyulu Bobba	Field Investigator	RAD Project
Mr. Sanyasi Naidu	Research Assistant	RAD Project
Mr. Naveen Chittaluri	Data Assistant	APCAPS & CHAI Projects
Ms. Santhi Bhogadi	Project Co-ordinator	APCAPS & CHAI Projects
Dr. Srivalli	Medical Officer	APCAPS & CHAI Projects

# **IIPH BANGALORE**

Ms. Deepa R	Senior Research Assistant	MAASTHI
Mr. Kiran Kumar H N	Research Assistant	MAASTHI
Ms. Yamuna A	Research Assistant	MAASTHI
Ms. Caroline A	Senior Research Fellow	Systematic Review-ICMR
Ms. Prafulla	Research Assistant	MAASTHI
Ms. Maithili Karthik	Research Assistant	MAASTHI
Ms. Keerti B Deshpande	Research Assistant	MAASTHI
Ms. Neeru Singh	Research Assistant	MAASTHI
Shubhashree V.	Research Assistant	CASCADE
Vindhya J.	Research Assistant	CASCADE
Dr. Pavan B C	Research Assistant	TILC
Priya Chinchwadkar	Programme Coordinator	TILC
Kanakana Gouda	Programme Coordinator	TILC
Ms. Shivani Gupta	Software Developer	IT platform
Mr. Siddalingappa K.	Software Developer	IT platform
Dr. Shalini Singh	Co PI	HSB & OOP

# **ADMINISTRATIVE STAFF**

Mr. Srinivas Yadav	Sr. Engineer
Mr. Someshwera Rao	Asst. Manager Finance
Mr. Siva Nageswara Rao	Sr. Administrative & Legal Officer
Ms. Nagalakshmi	Programme Officer
Ms. Vijaya Lakshmi	Sr. Executive Assistant to Director
Ms. Madhavi	Sr. Officer Administration
Ms. Lakshmi Chaitanya	Sr. Officer Administration
Mr. Chaitanya Kumar	Sr. ICT Officer
Ms. Kalyani	Asst. Librarian
Mr. Ravi Kumar	Finance Executive
Mr. Sanjeeva	Finance Executive
Mr. Balaiah	Driver
Mr. Srinivas	Driver
Mr. Nageshwera Rao	Office Attendant
Mr. Suresh	Office Attendant
Mr. Venkateswara Rao	Office Attendant
Mr. Ganesh	Office Attendant
Mr. Sanjeeva	Finance Executive
Mr. T S Ramesh	Admin Cum Accounts Officer
Mr. M. Srinivas Prasad	Administrative Assistant



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Dr Nanda Kishore Kannuri	Public Health Research Initiative Fel- lowship (3 years)	Department of Science and Technolo- gy-Science and Engineering Research Board & PHFI
	Doctoral Studies (3 years)	PHFI-UKC Wellcome Trust Capacity Building Programme
Dr Giridhar Babu	Post-doctoral Wellcome Trust Fellowship (5 years)	Wellcome Trust DBT India Alliance
Dr T N Sathyanarayana	Wellcome Trust Fellowship on Traditional Complementary Alternative Medicine (3 years)	Wellcome Trust DBT India Alliance
Dr Biswamitra Sahu	Wellcome Trust Fellowship Gender, Re- ligion and Reproductive Health among Muslims and Hindus in India (3 years)	Wellcome Trust DBT India Alliance
Dr Shailaja Tetali	Doctoral Studies (3 years)	PHFI-UKC Wellcome Trust Capacity Building Programme
Dr Samiksha Singh	Doctoral Studies (3 years)	PHFI-UKC Wellcome Trust Capacity Building Programme
Suresh Kumar Kamalakannan	Doctoral Studies (3 years)	<ol> <li>PHFI- Wellcome Trust DBT India Alliance Early Career Fellow in Clinical and Public Health Research.</li> <li>Australia Awards Fellow on leadership in Global Disability and evidence based practice.</li> <li>World Heart Federation - Emerging Leader.</li> </ol>
Dr Rajan Shukla	Doctoral Studies (3 years)	Commonwealth Eye Health Consortium, International Centre for Eye Health, LSHTM
Dr Raghupathy Anchala	Post-doctoral Studies (3 years)	Commonwealth Eye Health Consortium, International Centre for Eye Health, LSHTM
Hira Ballabh Pant	International Scholar Exchange Programme (3 months)	University of Michigan, USA and PHFI
Shivani Mathur Gaiha	Doctoral Studies (3 years)	PHFI-UKC Wellcome Trust Capacity Building Programme
	Queens Young Leader Runner-Up Award, 2015-16	Queens Young Leaders Programme
	Emerald Literati Award for Out- standing Paper - Journal of Public Mental Health, 2015	Emerald Publishing

# PUBLICATIONS AND PRESENTATIONS 2016-2018

# 2018

## Articles in peer reviewed journals

- 1. Generating Toxic Landscapes: Cotton farmers' well-being in Andhra Pradesh, India. Nanda Kishore Kannuri, Sushrut Jadhav. Anthropology & Medicine. Accepted 05 Feb 2017, Published online: 28 Jun 2018. https://doi.org/ 10.1080/13648470.2017.1317398
- 2. Chandola T, Mikkilineni S, Chandran A, Bandyopadhyay S, Zhang N, Bassenesi S.Is socioeconomic segregation of the poor associated with higher premature mortality under the age of 60? A cross-sectional analysis of survey data in major Indian cities. BMJ Open 2018;8:e018885. doi:10.1136/bmjopen-2017-018885
- 3. Smythe T, Mactaggart I, Kuper H, Murthy GV et al. Prevalence and causes of musculoskeletal impairment in Mahbubnagar district, Telangana State, India: results of a population-based survey. Trans R Soc Trop Med Hyg 2018; Feb 7 [epub ahead of print]
- 4. Babu GR, Murthy GV et al. Association of obesity with hypertension and type 2 diabetes mellitus in India: a meta-analysis of observational studies. World J Diabetes 2018; 9: 40-52
- 5. Sureshkumar K, Murthy GVS, Kuper H. Protocol for a randomised controlled trial to evaluate the effectiveness of the 'Care for Stroke' intervention in India: a smartphone-enabled, carer-supported, educational intervention for management of disabilities following stroke. BMJ Open 2018; 8:e020098. doi: 10.1136/bmjopen-2017-020098
- 6. Megha Thakur, Paulien A W Nuyts, Esther A Boudewijns, Javier Flores Kim, Timor Faber, Giridhara R Babu, Onno C P van Schayck, Jasper V Been. Impact of improved cookstoves on women's and child health in low and middle income countries: a systematic review and meta-analysis. Thorax Published Online First: 20 June 2018. doi: 10.1136/thoraxjnl-2017-210952
- 7. Giridhara R Babu, GVS Murthy, Yamuna, Prital Patel, Deepa R, Sara E Benjamin Neelon, Sanjay Kinra, K Srinath Reddy. Association of Obesity with hypertension and Type-2 Diabetes Mellitus in India, A meta-analysis of observational studies. World J Diabetes. 2018 Jan 15; 9(1): 40-52.
- 8. Babu GR, Murthy G, Singh N, Nath AA, Rathnaiah M, Saldanha N, et al. Socio-Demographic and Medical risk factors associated with Antepartum Depression. Frontiers in Public Health. 2018;6:127.
- 9. Generating Toxic Landscapes: Cotton farmers' well-being in Andhra Pradesh, India. Nanda Kishore Kannuri, Sushrut Jadhav. Anthropology & Medicine. Accepted 05 Feb 2017, Published online: 28 Jun 2018. https://doi.org/ 10.1080/13648470.2017.1317398

## **Books and chapters**

1. Giridhara R Babu, Jeemon P. 'Evaluating published studies' in Dr Tandon's Textbook of Cardiology. Eds: Prof. D. Prabhakaran, Prof. K. S. Reddy, Prof. U. Kaul and Prof. R. Krishna Kumar. 2018

## Presentations at Conferences/Symposiums/Abstracts/Posters

- 1. Suresh Kumar: Evaluating the effectiveness of the Care for stroke trial: A smart-phone-enabled, Carer-supported, educational intervention for managing physical disabilities following stroke in India. 2018. New Delhi India.
- 2. Suresh Kumar: Technology Driven Intervention for management of Disabilities following Stroke. International conference on evidence in global disability and health. 2018. Hyderabad India.
- 3. Nandakishore K: Seminar Lecture on: Cultivating Distress: Farmers Suicides and Local Mental Health, on 16th January 2018, Edinburgh Center for Medical Anthropology, University of Edinburgh.
- 4. Jayanthi Sagar: Evidence in Global Disability and Health: Oral presentation on Health seeking behaviour of individuals with Post-Polio syndrome in Sangareddy district of Telangana state, India. 2018

## **Talks organized**

- 1. Protocol Development in "Science & Ethics of Research Methodology & Art of Writing Research" webinar for AIOTA 2018. Mumbai. India
- 2. Epidemiology and Health Promotion, State Institute of Health and Family Welfare, Magadi Road, Bangalore 11th April 2018
- 3. Ethics in Public Health Practice. Wipro Learning Centre, Sarjapur Road, Bangalore 8th February, 2018

# 2017

## **Articles in peer reviewed journals**

- 1. Pant HB, Bandyopadhyay S, John N, Chandran A, Gudlavalleti MV.Differential cataract blindness by sex in India: Evidence from two large national surveys. Indian J Ophthalmol 2017; 65: 160-4.
- mHealth and the management of chronic conditions in rural areas: a note of caution from southern India, Papreen Nahar, Sitamma Mikkilineni, Nanda Kishore Kannuri, G.V.S. Murthy, Peter Phillimore, Anthropology & Medicine, vol. 24, issue 1 (2017) pp. 1-16
- 3. At the margins of biomedicine: The ambiguous position of 'Registered Medical Practitioners' in rural Indian healthcare, Papreen Nahar, Nanda Kishore Kannuri, Sitamma Mikkilineni, G.V.S. Murthy, Peter Phillimore, So-ciology of Health and Illness, vol. 39, issue 4 (2017) pp. 614-628
- 4. Kamalakannan Sureshkumar, Gudlavalleti Aashrai S. V., Gudlavalleti Venkata S. Murthy, Goenka Shifalika, Kuper Hannah. Incidence & prevalence of stroke in India: A systematic review. 2017; 146 (2): 175-185
- 5. Kumar KS, Samuelkamaleshkumar S, Viswanathan A, Macaden AS. Cognitive rehabilitation for adults with traumatic brain injury to improve occupational outcomes. Cochrane Database of Systematic Reviews 2017, Issue 6. Art. No.: CD007935. DOI: 10.1002/14651858.CD007935.pub2.
- 6. Nath A, Murthy GVS, Babu GR, Renzo GC. Effect of prenat al exposure to maternal cortisol and psychological distress on infant development in Bengaluru, southern India: a prospective cohort study. BMC Psychiatry. 2017;17(1):255
- 7. Thakur, M., Boudewijns, E.A., Babu, GR., Winkens, B., de Witte, L.P., Gruiskens, J., Sushama, P., Ghergu, C.T. and van Schayck, O.C., 2017. Low-smoke chulha in Indian slums: study protocol for a randomised controlled trial. BMC Public Health, 17(1), p.454.
- 8. Hu J, Gu X, Tao X, Qian Y, Babu GR, Wang G, Liao M, Han L, Kang D, Tang W: Prevalence and Trends of HIV, Syphilis, and HCV in Migrant and Resident Men Who Have Sex with Men in Shandong, China: Results from a Serial Cross-Sectional Study. PLOS ONE 2017, 12(1):e0170443.
- 9. Billot L, Lindley RI, Harvey LA, Maulik PK, Hackett ML, Murthy GV et al. Statistical analysis plan for the family-led rehabilitation after stroke in India (ATTEND) trial: A multicentre randomized controlled trial of a new model of stroke rehabilitation compared to usual care. Int J Stroke 2017; 12: 208-210.
- 10. Bhan N, Madhira P, Muralidharan A, Kulkarni B, Murthy GV, Basu S, Kinra S. Health needs, access to healthcare, and perceptions of ageing in an urbanizing community in India: a qualitative study. BMC Geriatrics 2017; 17:176
- Nath A, Murthy GV, Babu GR, Renzo GCD. Effect of prenatal exposure to maternal cortisol and psychological distress on infant development in Bengaluru, southern India: a prospective cohort study. BMC Psychiatry 2017; 17: 255
- Bernhardt, J., & Hayward, K. (2017). Faculty of 1000 evaluation for Family-led rehabilitation after stroke in India (ATTEND): A randomised controlled trial. F1000 - Post-publication Peer Review of the Biomedical Literature doi: 10.34 10/f.727764738.793536228
- 13. Murthy GV. Magnitude and temporal trends in avoidable blindness in children (ABC) in India. Indian J Pediatr 2017; June 23 [epub ahead of print].
- 14. Singh S, Doyle P, Campbell OM, Oakley L, Rao GR, Murthy GV. Inter facility transfer of pregnant women using publicly-funded emergency call centre-based ambulance services: a cross-sectional analysis of service logs from five States in India. BMJ Open 2017; 7; e015077.
- 15. Nahar P, Kanuri NK, Mikkilineni S, Murthy GV, Phillimore P. mHealth and the management of chronic conditions in rural areas: a note of caution from southern India. AnthropIo Med 2017; 24: 1-18
- 16. Pant HB, Bandyapadhyay S, John N, Chandran A, Murthy GV. Differential cataract blindness by sex in India: Evidence from two large national surveys. Indian J Ophthalmol 2017; 65: 160-164
- 17. Morjaria P, BAstawrous A, Murthy GV, Evans J, Gilbert CE. Effectiveness of a novel mobile health education intervention (Peek) on spectacle wear among children in India: study protocol for a randomized controlled trial. Trials 2017; 18:168
- 18. Pilot E, Rao R, Jena B, Kauhl B, Krafft T, Murthy GV. Towards sustainable public health surveillance in India: Using routinely collected electronic emergency medical service data for early warning of infectious diseases. Sustainability 2017; 9:604
- 19. Howley IW, Gupta S, Tetali S, Josyula LK, Wadhwaniya S, Gururaj G, Rao M, Hyder AA. Epidemiology of road traffic injury patients presenting to a tertiary hospital in Hyderabad, India. Surgery. 2017 May 6. pii: S0039-6060(17)30098-3. doi: 10.1016/j.surg.2017.01.029. [Epub ahead of print]

- 20. Wadhwaniya, S, S Gupta, S Mitra, S Tetali, LK Josyula, G Gururaj, A A Hyder. A comparison of observed and self-reported helmet use and associated factors among motorcyclists in Hyderabad city, India Public Health (144) March 2017, Volume 144, S62 S69
- 21. Kamalakannan S, Gudlavalleti ASV, Murthy GV et al. Incidence and prevalence of stroke in India: A systematic review. Indian J Med Res 2017; 146: 175-185
- 22. Mactaggart I, Polack S, Murthy GV et al. A population-based survey of visual impairments and its correlates in Mahabubnagar district, Telangana State, India. Ophthalmic Epidemiol 2017; Dec 27: 1-8
- 23. K. Chaudhari, A. Gudlavalleti S. Kamalakannan Critical Appraisal Of The National Program For Prevention And Control Of Cancer, Diabetes, Cardiovascular Diseases And Stroke (NPCDCS) For Stroke In India. International Journal of stroke. Vol - 11 Issue 3; page: 260.
- 24. K Suresh Kumar, P. Dineshraj. Is managerial convergence sufficient for implementing stroke services within the NPCDCS program in India? A critical appraisal. International Journal of stroke. Vol 11 Issue 3; Page: 262.
- 25. K. Suresh Kumar, GVS Murthy, Hannah Kuper. Strategies for improving access to stroke rehabilitation services in low and middle-income countries: evidence from systematic reviews. International Journal of stroke. Vol 11 Issue 3; Page: 262.
- 26. Ranjan A, Giridhara R Babu, Tarun Bhatnagar, Roger Detels. Sexual behavior, HIV prevalence and awareness among wives of Migrant Workers: Results from cross-sectional survey in rural north India. Indian Journal of Community Medicine. 2017
- 27. Ranjan A, Giridhara R Babu, Tarun Bhatnagar, Roger Detels. Perception of married women of rural community related to marital and sexual relationship in Muzaffarpur district, Bihar. Indian Journal of Sexually Transmitted Diseases and AIDS. 2017
- 28. mHealth and the management of chronic conditions in rural areas: a note of caution from southern India, Papreen Nahar, Sitamma Mikkilineni, Nanda Kishore Kannuri, G.V.S. Murthy, Peter Phillimore, Anthropology & Medicine, vol. 24, issue 1 (2017) pp. 1-16
- 29. At the margins of biomedicine: The ambiguous position of 'Registered Medical Practitioners' in rural Indian healthcare, Papreen Nahar, Nanda Kishore Kannuri, Sitamma Mikkilineni, G.V.S. Murthy, Peter Phillimore, So-ciology of Health and Illness, vol. 39, issue 4 (2017) pp. 614-628

## **Books and book chapters**

1. State of the Environment Telangana- Environment and Health. Murthy GVS, Shailaja T, K J Lakshmi

## Presentations at Conferences/Symposiums/Abstracts/Posters

- 1. Speaker at International symposium- UHC 2017, NITTE University, Mangalore, India, 8th April 2017.
- 2. Speaker at World NCD Congress, Chandigarh, India, 4th Nov, 2017. Panelist for the session on "Household Air Pollution and NCDs"
- 3. National Conference on Health, Safety & Well Being of the workers in Unorganized sector/informal economy, Central University of Tamilnadu, 23rd March 2017.
- 4. Nandu. k: Lecture on: Locating Human in wildlife research. on 14th September 2017 at Department of PG studies research in wildlife management, Kuvempu University, Shivamogga, Karnataka.
- 5. Nandu. k: Workshop presentation on Health on the Margins: How does Social Exclusion impact Health? at Difficult Dialogues, Goa, during 10-12 February 2017.
- 6. PENALISED SPLINE REGRESSION FOR MULTIPLE FUNCTIONAL MEASUREMENTS APPLICATION TO GAIT DATA FOR RUNNERS SUFFERING FROM ILIOTIBIAL BAND SYNDROME (ITBS). International Indian Statistical Association (IISA) INTERNATIONAL CONFERENCE ON STATISTICS held on 27th to 30th December, 2017. Hyderabad.
- 7. DELTAS Africa Grantees Annual Meeting in Accra Ghana 1st to 8th July 2017.

### **Reports**

1. Suresh Kumar: Telangana Vision 2024 Document Disability Chapter for the Government of Telangana 2017.

## **Talks organized**

1. Public health aspects of Disaster Management, Bangalore University. 9th March 2017.

- 2. Hygiene Matters, Multi-specialty National Conference, NIMHANS, Bangalore, 25 & 26 March 2017
- 3. Big Data and E-Health in India- Opportunities and Gaps A Joint Workshop sponsored by Public Health Foundation of India and Farr Institute of Health Informatics Research, University College London. Indian Institute of Public Health, Hyderabad 27th March, 2017

# 2016

## **Articles in peer reviewed journals**

- 1. Shukla R, Gudlavalleti MV, Bandyopadhyay S, Anchala R, Gudlavalleti AS, Jotheeswaran AT, et al.Perception of care and barriers to treatment in individuals with diabetic retinopathy in India: 11-city 9-state study.Indian J Endocr Metab 2016; 20:33-41.
- 2. Strengthening Diabetes retinopathy services in India: Qualitative insights into Providers Perspectives: The India 11 City 9 States Study, Nanda Kishore Kannuri, Raghupathy Anchala, Gudlavalleti V. S. Murthy, Clare E. Gilbert, Indian Journal of Endocrinology and Metabolism, 20:59-66; 2016.
- 3. Kamalakannan, Suresh Kumar et al. Rehabilitation needs of Stroke Survivors after Discharge from Hospital in India. Archives of Physical Medicine and Rehabilitation; 2016. Volume 97, Issue 9, 1526 1532.e9.
- 4. Valentina Iemmi, Karl Blanchet, Lorna J. Gibson, K. Suresh Kumar, Santosh Rath, Sally Hartley, Gudlavalleti V. S. Murthy, Vikram Patel, Joerg Weber & Hannah Kuper (2016) Community-based rehabilitation for people with physical and mental disabilities in low- and middle-income countries: a systematic review and meta-analysis, Journal of Development Effectiveness, DOI: 10.1080/19439342.2016.1157623
- 5. Checkley, William, Suzanne L. Pollard, Trishul Siddharthan, Giridhara R. Babu, Megha Thakur, Catherine H. Miele, and Onno CP Van Schayck. 'Managing threats to respiratory health in urban slums.' The Lancet Respiratory Medicine 4, no. 11 (2016): 852-854.department, Karnataka, South India. RGUHS National Journal of Public Health.
- 6. Babu GR, Murthy G, Deepa R, Yamuna, Prafulla, Kumar HK, Karthik M, Deshpande K, Benjamin Neelon SE, Prabhakaran D, Anura Kurpad, Sanjay Kinra. Maternal antecedents of adiposity and studying the transgenerational role of hyperglycemia and insulin (MAASTHI): a prospective cohort study. BMC Pregnancy and Childbirth 2016, 16(1):311.
- 7. Giridhara R Babu , Sudhir PM, Mahapatra T, Das A, Rathnaiah M, Anand I, Detels R. Association of quality of life and job stress in occupational workforce of India: Findings from a cross-sectional study on software professionals. Indian J Occup Environ Med 2016; 20:109-13.
- 8. Gudlavalleti MVS, Anchala R, Gudlavalleti ASV, Ramachandra SS, Shukla R, Jotheeswaran A, Babu GR, Singh V, Allagh K, Sagar J: Perceptions and practices related to diabetes reported by persons with diabetes attending diabetic care clinics: The India 11-city 9-state study. Indian J Endocr Metab 2016, 20(Suppl S1):26-32.
- Clare E G, Babu GR, Aashrai Sai VG, Raghupathy A, Rajan S, Pant HB, Praveen V, Srikrishna S R, Komal A, Jayanti S: Eye care infrastructure and human resources for managing diabetic retinopathy in India: The India 11-city 9-state study. Indian J Endocr Metab 2016, 20(Suppl S1):3-10.
- 10. Chen G, Cao Y, Yao Y, Li M, Tang W, Li J, Babu GR, Jia Y, Huan X, Xu G: Syphilis incidence among men who have sex with men in China: results from a meta-analysis. International journal of STD & AIDS 2016:0956462416638224.
- 11. Anchala R, Gudlavalleti ASV, Gudlavalleti MVS, Singh V, Shukla R, Jotheeswaran A, Babu GR, Ramachandra SS, Sagar J, Bandyopadhyay S: Human resources, patient load, and infrastructure at institutions providing diabetic care in India: The India 11-city 9-state study. Indian J Endocr Metab 2016; 2016, 20(Suppl S1):11-18.
- 12. Murthy GV, Das T. Diabetic care initiatives to prevent blindness from diabetic retinopathy in India. Indian J Ophthalmol 2016; 64: 50-4.
- 13. Murthy GV, Anchala R, Gudlavalleti ASV et al. Perceptions and practices related to diabetes reported by persons with diabetes attending diabetic care clinics: The India 11-city 9-Stae study. Indian J Endocrinol Metab 2016; 20; Supplement 1: S26-S32
- 14. Alim M, Lindley R, Felix C, Gandhi DB, Verma SJ, Tugnawat DK, Syrigapu A, Anderson CS, Ramamurthy RK, Langhorne P, Murthy GV et al. Family led rehabilitation after stroke in India: the ATTEND trial- study protocol for a randomized controlled trial. Trials 2016; 17(1): 13
- 15. Suresh Kumar K, Murthy GV, Natarajan S, Naveen C, Goenka S, Kuper H. Evaluation of the **feasibili**ty and acceptability of the 'Care for Stroke' intervention in India, a smartphone- enabled, carer-supported, educational intervention for management of disability following stroke. BMJ Open 2016; 6:e009243
- 16. Sureshkumar K, Murthy GV, Prost A et al. Rehabilitation needs of stroke survivors after discharge from hospital in India. Arch Phys Med Rehabil 2016; Mar. pii: S0003-9993(16)00138-6 [epub ahead of print].
- 17. Murthy GV, Gilbert CE, Shukla R, Vashist P, Shamanna BR. Situational analysis of services for diabetes and diabetic retinopathy and evaluation of programs for the detection and treatment of diabetic retinopathy in India:

Methods for the India 11-city 9-state study. Indian J Endocrinol Metab 2016; 20; Supplement 1: S19-S25.

- 18. Anchala R, Gudlavalleti ASV, Murthy GV, Singh V et al. Human resources, patient load and infrastructure at institutions providing diabetic care in India: The India 11-city 9-state study. . Indian J Endocrinol Metab 2016; 20; Supplement 1: S11-S18.
- 19. Kyari F, Abdull MM, Wormald R, Evans JE, Nolan W, Murthy GV, Gilbert C: Risk factors for open angle glaucoma in Nigeria: results from the Nigeria National Blindness and Visual Impairment Survey. BMC Ophthalmology 2016; 16:78
- 20. Ramachandra, S. S., Allagh, K. P., Kumar, H., Grills, N., Marella M., Pant H., Mahesh D, Soji F, Mani S, Murthy GV(2016). Prevalence of disability among adults using Rapid Assessment of Disability tool in a rural district of South India. Disability and Health Journal, 9(4), 624-631.
- 21. Murthy GV, Kolli SR, Neogi SB, Singh S, Allagh KP, John N, Ramani S, Shamanna BR, Doyle P, Kinra S, Ness A, Pallepogula DR, Pant HB, Babbar S, Reddy R, Singh R. A mixed-method study to determine the benefits of periconceptional folic acid supplementation and effects of folic acid deficiency in mothers on birth outcomes. JMIR Res Protoc 2016; 51: e1291
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## **Books and book chapters**

- 1. S.X. Lee, G. McLachlan, S. Pyne. Application of Mixture Models to Large Datasets. In 'Big Data Analytics: Methods and Applications.' S. Pyne, B.L.S. Prakasa Rao, S.B. Rao. (Eds.) Springer, 2016.
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- 3. Shalini Singh, Giridhara R Babu, Vivek Padavetnaya. Changing Patterns of Morbidity, Healthcare seeking and Cost of Treatment in Karnataka. Analysis and interpretation from NSS 60th and 71stRound. Journal of Fiscal Policy Institute, Bangalore. 2016

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## **Books and edited volumes**

1. 2016 S. Pyne, B.L.S. Prakasa Rao, S.B. Rao. (Eds.) Big Data Analytics: Methods and Applications. Springer, 2016. DOI 10.1007/978-81-322-3628-3

## Presentations at Conferences/Symposiums/Abstracts/Posters

- 1. Suresh kumar: 'Care for Stroke' Protocol for the intervention PHFI Annual Research Symposium. 2016
- 2. Suresh kumar: Critical Appraisal of the National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) For Stroke in India. Presentations at the World Stroke Congress in Hyderabad held on October 2016.
- 3. Suresh kumar: Is managerial convergence sufficient for implementing stroke services within the NPCDCS program in India? - A critical appraisal. Presentations at the World Stroke Congress in Hyderabad held on October 2016.
- 4. Suresh kumar: Implementation research in care & rehabilitation of Stroke patients. University of Hyderabad 2016.
- 5. Suresh kumar: Protocol for the development of a Smartphone-enabled, Carer-supported Educational intervention for management of disabilities following stroke. PHFI Research Symposium Delhi. 2016. India
- 6. Nandu. k: Lecture presentation on : Cultivating Distress: Farmer Suicides and Public Policy Failure in India in seminar series at Department of Liberal Sciences at IIT Hyderabad on 16th March 2016
- 7. Nandu. k: Presented a lecture on: Understanding reasons for the emerging public health problem of Farmers Suicides in India. in a seminar on Implementation research in Health Sciences, organised by School of Medical Sciences, University of Hyderabad, during 11 and 12th November, 2016
- 8. Road traffic injuries to children during the school commute in Hyderabad, India. 6th International Conference on Traffic and Transport Psychology (ICTTP2016), Brisbane, Australia, August 2-5, 2016
- 9. Perception of Traffic Safety during Children's School Journeys in Urban India. 21st International Council on Alcohol, Drugs and Traffic Safety Conference, Gramado, Brazil, Oct 16-19, 2016
- 10. How physically active are the urban school children in India? 6th International congress on physical activity and public health, Bangkok 16-19 Nov, 2016.
- 11. Injuries on children's trips to school. Poster presentation. PHFI research symposium, New Delhi, 16-18 March, 2016 (Received Best Poster Award)
- 12. Salmon Maelle. Harmonization of Analysis of Real-Time Monitoring Data from RTI MicroPEM<sup>™</sup> Through Open-Source Software.(Abstract presentation - 2016)
- 13. Margaux Sanchez, Albert Ambros, Ma<sup>o</sup>lle Salmon, Santhi Bhogadi, Julian D. Marshall, Cathryn Tonne ,Editors. Implications of daily mobility around residence for air pollution assessment in peri-urban South India. 28th Annual Conference of the International Society for Environmental Epidemiology; 2016 1st-4th September; Rome, Italy.
- 14. Ma<sup>o</sup>lle Salmon, S. Bhogadi, S. Addanki, P. Madhira, N. Muddepaka, A. Mora, M. Sanchez, J.D. Marshall, C. Tonne, Editors. Using Wearable Cameras to Identify Microenvironments Relevant to Particulate Exposure in India. Annual Conference of the International Society of Exposure Science (ISES); 2016 9th -13th October, Utrecht, Netherlands.
- 15. M.Kishore kumar,V.Sreekanth, Julian D Marshall and Cathryn Tonne. Spatio-Temporal heterogeneity in ambient PM2.5 concentrations in rural telangana, India., Julian D Marshall and Cathryn Tonne.(Abstract accepted at IASTA Conference 2016,Ahmedabad)
- 16. S. Pyne. CSI Special Interest Group on Big Data Analytics: Chronicling the onset of a journey. Computer Society of India Communications, 40(8):31, Nov. 2016.
- 17. Nandakishore K Invited lectures on 'Anthropological Approaches and Methods' & 'Anthropological exploration of Farmers suicides' in WTP short course on Medical Anthropology in Public Health, organised by IIPH Delhi during 4 & 5th May, 2016
- 18. Nandakishore K Lecture on 'Farmers' suicide as a public health issue: strengths and limits of SDH approach' in symposium on Social Determinants of Health (SDH) between 4th and 6th November, 2015, organised by IIPH Gandhinagar.

### **Reports**

1. National Workshop on Reprioritization of list of diseases/disease groups under Integrated Disease Surveillance Programme (IDSP), Hotel Lalit, New Delhi, 6th - 7th December 2016.

## **Talks organized**

- 1. Writing a Good Manuscript for Publication An Editor's Perspective, Medical Communication Workshop, Indian Society for Clinical Research (ISCR) in collaboration with the International Society for Medical Publication Professionals (ISMPP), 13 November, 2016
- 2. Epidemiology and Public Health in India, Bangalore University, 14th July, 2016
- 3. Maternal Antecedents of Adiposity and Studying the Transgenerational role of Hyperglycemia and Insulin. Health in Slums Symposium by Zuyd University of Applied Sciences, Maastricht University, Bangalore, Baptist Hospital, and Manipal University. 30th April, 2016
- 4. Training and research opportunities in Diabetes at Beat diabetes, stay super; world health CME by Department of Community Medicine and Endocrinology, M.S. Ramaiah Medical College.16th April 2016.
- 5. Talk in EPTRI- As part of the two weeks training programme on Municipal Solid Waste Management, for officials from Sri Lanka, Afghanistan and Bhutan. Topic: Environmental Impact Assessment on July 28- 2016
- 6. Talk in University Of Hyderabad- Implementation research Nov 12,2016
- 7. Talk in EPTRI- As part of the two weeks training program on Bio-Medical Waste Management under TCS Colombo Plan for Bhutan, from 21st November to 3rd December, 2016

# **ON THE ANVIL**



here is a particular need today for a new solidarity around the concept of public health. Action to tackle the causes for death, disability and to protect people and communities most at risk is overdue. The IIPH-H, SACDIR and IIPH-Bengaluru Campus are strive to address the need of the hour, so that future generations are completely armed, know where problems lie and can intensify efforts for the broader community.

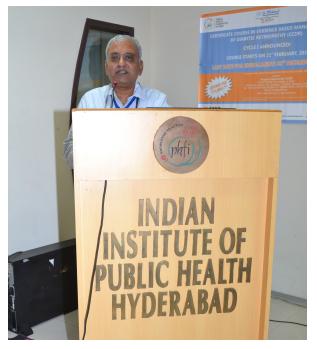
We have been charged with the mandate of investing in people to strengthen public health capacity, collaborating in the transformational agenda for health systems strengthening, advancing the research frontier, enabling sound communication and advocacy and improving the field of public health practice with a specific focus on communities. Our projects in the realm of tackling two of the world's emerging causes of avoidable blindness shall strengthen our resolve to support those who need us the most.

We hope to continually develop capacity building programmes of benefit to multiple stakeholders on varied thematic areas of public health in India and the region. In the near future, we envision that we will grow the breadth of distance learning courses in public health surveillance, essentials of health information, planning, implementation and evaluation of NCD programmes and other tailor-made programmes. These courses shall help to widen the reach of knowledge and equip practitioners in skills relevant to their area of work.

We have the power to establish a stronger community of actors from across the global society to contribute to local solutions. It is our belief that such an endeavour should not only enable us to better combat emerging and long-standing health concerns and social determinants, but also to reap benefits that will ring true for wide-ranging humanitarian challenges of today and tomorrow.







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