



**INDIAN  
INSTITUTE  
of PUBLIC  
HEALTH**  
ESTABLISHED BY PHFI

HYDERABAD

# Master of Public Health (MPH)

**Indian Institute of Public Health-Hyderabad,  
Sy No.374,376,377,384,388,389,390,Premavathipet,  
Rajendranagar,Hyderabad – 500030, Telangana, India**

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## 1. Scope Of the Document

This document serves as official guidelines on academics' aspects of the Master of Public Health Program for students pursuing MPH course (2023 Batch) at Indian Institute of Public Health (IIPH) Hyderabad

The Indian Institute of Public Health (IIPH) Hyderabad commenced its activities on July 1, 2008, with a mission to deliver public health education, pursue research and advocacy, and support policy development. It lays strong emphasis on pursuing public health policy, practice, training, and research, positioning its programmes according to the public health priorities of the state and the nation. The institute has brought together a highly qualified and diverse faculty of nationally and internationally trained and extremely motivated public health academics and practitioners. It aims to create an environment that supports excellence in teaching, research and practice.

## 2. Course Structure

The course is designed as a 2-year full-time on-campus program, spanning 4 academic semesters of total 80 credits, including internship and dissertation. While the students work for their course during the semester, the inter-semester vacations will be utilized for internships. One semester will usually last for 16-18 weeks and one credit is equivalent to 1 hour of lecture OR 2 hours of practical/laboratory/fieldwork per week for the semester.

### 2.1 MPH Course Annual Timetable

Semester I (06 <sup>th</sup> November 2023 – 07 <sup>th</sup> March 2024)			
I Semester examinations (Theory & Practical): 18 <sup>th</sup> March– 29 <sup>th</sup> March 2024			
Semester Break- 1 <sup>st</sup> May-31 <sup>st</sup> May			
No.	Course Title	Credits	Teaching & Activity Hours
01	Introduction to Public Health	3	48
02	Social and Behavioural Sciences in Health	3	48
03	Epidemiology I	3	48
04	Biostatistics & Data Management – I	3	48
05	Demography	1	16
06	Environmental & Occupational Health--I	3	48
07	Health Policy & Health Systems	3	48
08	Field visits	1	16
	<b>Semester wise total</b>	<b>20</b>	<b>320</b>
Semester II ( 1 <sup>st</sup> Apr'24 to 30 <sup>th</sup> Nov'24)			
Internship during (Aug- Sep'24)			
First year University examinations* (Theory & Practical): (Nov'24)			
*Subject to KNRUHS schedule			
No.	Course Title	Credits	Teaching & Activity Hours
09	Health policy & management – II (Health management with an introduction to health economics)	3	48
10	Environmental & occupational health - II	3	48
11	Social & Behavioral sciences - II	3	48
12	Epidemiology -- II	3	48
13	Journal club	3	32

14	Biostatistics & data management -- II	3	48
15	Research methods	3	48
16	Leadership, communication & training skills (one week workshop)	2	32
17	Field visits	1	16
	<b>Semester wise total</b>	<b>23</b>	<b>368</b>
<b>Semester III (Dec'24 to July'25)</b> <b>Semester III internal examinations (Theory &amp; Practical) – (Apr'25)</b>			
<b>No.</b>	<b>Course Title</b>	<b>Credits</b>	<b>Teaching &amp; Activity Hours</b>
18	Monitoring & evaluation	3	48
19	Disaster preparedness & management	2	36
20	SELECT A TRACK - Student has to opt any one of the following track:- 1. Biostatistics & Data Management 2. Non-communicable Disease Epidemiology 3. Public Health Disability 4. Public Health Surveillance	12	192
21	Field visits	1	16
	<b>Semester wise total</b>	<b>18</b>	<b>292</b>
<b>Semester IV (Jul'25 to Oct'25)</b> <b>Final year University examinations* (Theory &amp; Practical): (Nov'25),</b> <b>*Subject to KNRUHS schedule)</b>			
<b>No.</b>	<b>Course Title</b>	<b>Credits</b>	<b>Teaching &amp; Activity Hours</b>
22	Dissertation	10	160
23	Seminars on Gender, vulnerable population	2	32
24	Seminars on National health & nutrition programmes	2	32
25	Seminars on recent and emerging issues	1	16
26	Ethics & public health laws	2	32
27	Grant writing	2	32
	<b>Semester wise total</b>	<b>19</b>	<b>272</b>
	<b>Total credits and teaching &amp; activity hours for all semesters</b>	<b>80*</b>	<b>1284</b>
	*Subject to change based on university guidelines		

## 2.2 Tracks

Students will be offered a range of Tracks in the 3rd semester. Students are required to choose one elective of their interest. The following are the tracks offered (subject to the availability of the teaching faculty and the number of students choosing the optional):

1. Biostatistics and Data management
2. Non-communicable Disease Epidemiology
3. Public Health Disability
4. Public Health Surveillance

It is compulsory for each student to choose electives for a total of 12 credits. A course listed as a track will be offered provided a minimum of 6 students opt for it. Students have to declare their choice of tracks by 15<sup>th</sup> November 2024

## 3. Teaching Calendar

MPH is a full time on campus program. The official academic timing is between 10.00 am to 5.30 pm. A detailed semester wise timetable will be shared with students at the beginning of each semester.

However, depending on time-table and field visit requirements, individual teachers teaching in a semester may alter the timing of the lectures time to time with prior information to the students. Such information will be communicated through notices in students' notice boards, e-mails, and or orally communicating in class or with the class representatives. It is the responsibility of every student to be aware of class timetable and any changes that are informed through aforesaid channels.

## 4. Teaching Methods

The program is an interdisciplinary course, both in its content and teaching. Faculty with diverse disciplinary backgrounds, national and international experience combined with a breadth and depth of public health experience would be teaching this program.

The program will utilize a variety of teaching/learning techniques, including seminars, journal clubs, collaborative learning, group discussions, assignments, hands on training on computers, visit to organizations of public health interests, film review, poster making, debates, internship, field projects etc. A substantial amount of contribution from students in terms of self-study and initiative to learn is expected.

## 5. Field Visits

Field visits will be part of a teaching, both within the semesters as well as during internship and dissertation work. The field training/project work would be designed as problem-based learning modules, which could include visits to the government health facilities, non-governmental organizations, water and sanitation facilities, urban and rural communities, industries, and other developmental organization.

## 6. Computer Laboratory

During lab hours students are expected to do skill-based exercises in individual or in groups. These will be fully or partly supervised activities

## 7. Mentors

Early in Semester II you will be allocated to a faculty who will be your mentor. The role of the mentor is to help guide your learning, so assisting you to gain maximum benefit from the course. The mentor can either help you with problems you are having during the course or, if they cannot help you themselves, will suggest people who can help you. The mentor is the main person with particular interest in your progress, so do make use of her/him. These are some suggestions as to how your mentor might assist you.

When preparing a presentation such as a seminar, discuss what you intend to say with your mentor, who can help you with the style of presentation, and will also be able to guide you towards those who could advise you on its content.

Begin to plan your dissertation during the latter part of the second semester, in consultation with your mentor, who can help you with choosing what you plan to do it on, set a timetable for each stage of the process, and guide you towards resources (E.g., other staff members who could give you technical advice).

- If you have specific problems with a piece of work your mentor can advise you on the best person from whom to seek assistance.
- If you have personal problems, no matter how trivial, you may wish to discuss these with your Mentor. If he/she is unable to help you, they will be able to advise you on where to go for help.

The mentor is not expected to be able to answer technical questions on the content of all aspects of your course. Where they have the technical expertise themselves, they will share it with you; where they do not, they will advise you where to look for it.

It is your responsibility to arrange to see your mentor, so please try to arrange a mutually suitable time - do not expect your mentor to come looking for you or that they will be available to see you at short notice. Early on, establish the best way for arranging these meetings with your mentor. During Semester

II you should see your mentor about once a fortnight and during Semester III and IV at least once in a week.

## 8. Internship

At the end of the second semester, students are required to do 2 months of supervised internship (One month in government sector and one month in NGO/CSR foundations) related to public health or related fields. Your respective mentor will facilitate this activity, but it is the responsibility of students to identify their internships. There will be a faculty mentor/mentor at the institute for each student to coordinate, monitor and guide the progress of the student during the period of the internship. The students will also be supervised by a supervisor from the respective internship agency. Students are expected to learn public health and managerial skills during the internship and apply learning from theoretical courses in a practical situation. An area of work would be developed by the student with support from faculty mentors and supervisor from the internship agency. The internship will be evaluated based on assessments made by the supervisor at the internship agency and faculty mentor and assessing the internship report submitted by respective students. A presentation by students may also form a part of the evaluation.

## 9. Dissertation

A research project and dissertation are compulsory for MPH students. This is intended to provide the students an opportunity to plan and design a study, prepare research tools, collect data in the field, analyze the data and write up the research under the guidance of a faculty as soon as the completion of core courses in the second semester. The tentative timeline of the student presentations on their dissertations is given below.

Each participant, working under close guidance of a faculty advisor, will develop a major project as part of the course work. The dissertation research will be carried out over a period of 3 months, including writing dissertation in the 4th semester. The participant will be supervised by a faculty advisor. The experience has three primary components: a protocol, a written project report / dissertation, and a viva voce / oral presentation. The participant will also be evaluated concurrently on the study protocol, while the study is in progress and terminally on the report. The protocol will be framed between the student and the faculty advisor. The protocol will be formally designed, and the draft will be submitted for technical and ethical reviews. The last date for finalization of the protocol is (End of Jan'25) .

The review will be conducted by a formally designated committee for this process and will perform technical and ethical reviews of the proposal. Necessary changes if any will be conveyed to the participant who can be requested to resubmit to a repeat review till the approval is obtained.

The study plan after approval will be executed by the participant during the allotted three months of project work. Any difficulties that arise during the project will be reported and suggestions sought from the faculty advisor.

### 9.1 Evaluation of Dissertation

The dissertation will be evaluated by the guide assigned by the institute and by one internal and two external examiners. A separate guideline for the evaluation of dissertation will be shared with the students at the end of the second semester.

## 10. Attendance

Teachers will mark attendance of students for each lecture hour, and this will be submitted to administration for calculation of monthly cumulative attendance of each student. A teacher may refuse to mark a student as present if she/he comes late to the class or leaves a class before the end of the lecture. Students are required to maintain a minimum of 80% aggregate attendance in each semester. Students with less than required aggregate attendance will not be allowed to sit in the semester examinations and will have to repeat the semester in the following year.

Where observation visits/study tours are arranged as a part of field work, student participation is compulsory. Regular attendance at special lectures, seminars, journal club and other academic programmes of the institute is essential.

Condoning poor attendance due to medical reasons as certified by competent authorities or for any other significant reason will be done on case-by-case basis, based on recommendation by the respective course teacher(s) and or as judged by the Director of the Institute or any other authority the Director delegates this responsibility. Condoning poor attendance due to medical reasons will not be allowed below a level as decided by the University from time to time.

Students who lose their attendance for reasons such as representing the Institute/University in academic, cultural or sports events outside or within the Institute/University will be given 'deemed attendance' equal to

the number of lectures they missed provided prior permission from respective course teacher(s) has been obtained and certificate of participation from organizers of such events / activities are produced. Permission for securing deemed attendance for more than 10% of total credit hours in a course in a semester must be approved by the Director of the Institute or any other authority the Director delegates this responsibility. The list of activities which are eligible for deemed attendance will be decided by the Registrar of University from time to time.

It is the responsibility of the student to furnish proof of approval of 'deemed attendance' to the Administration immediately after the respective activity for which deemed attendance is claimed is over and certainly before cumulative attendance is declared for the respective semester. A student who is an employee of a Central or State Government or an employee of any government agency must follow their respective service rules in addition to norms laid by IIPH Hyderabad and KNR University of Health Sciences as far as their leave eligibility is concerned. For these students, a statement of days of attendance may be sent to their headquarters on a monthly basis.

## 10.1 Leave

Each student may be permitted to avail 30 days leave. No student is allowed to go on leave for more than 8 days at a stretch. In case the absence of the candidate availing medical/maternity or any other leave or unauthorized absence beyond 30 days in a year, the study period of the candidate will be extended to the extent of such period. No other leave is permitted.

Leave letters to be forwarded to ID: [Leaves.mph2023@iiphh.org](mailto:Leaves.mph2023@iiphh.org)

## 10.2 Break of Study and Readmission

If a student absents continuously for a period of 91 days or more and seeks permission to attend the course, his/her application is prescribed format by paying requisite fee in favour of registrar, KNR University of health sciences payable at Warangal shall be forwarded to the registrar, KNR University of health sciences with the recommendation of the principal. Regulations for readmission after break of study along with application format and fee payable is available in the university website. The candidates are advised to refer the regulations before submitting the application and paying the fee. If they fulfilled the regulatory conditions, they may submit applications through the Principal of the college by paying the fee.

## 11. Semester Breaks

Semester break will be at the end of semester examination as intimated by the institute. Students may use this opportunity to complete their internships.

## 12. Award of Degrees

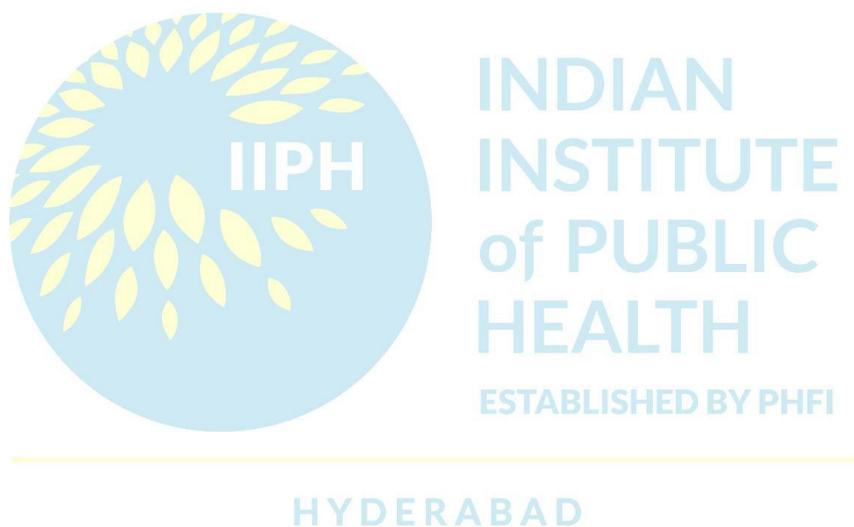
At the end of the course the qualifying candidates & who submitted **"No dues Certificate"** from the Indian Institute of Public Health, Hyderabad will be awarded degrees by the authorities of KNR University of Health Sciences

### 13. Fee Structure & Mode of Payment

Category of Seats	University Fee	Tuition Fee
Competent authority seats	INR 17,700/-	INR 2,25,000/- Per two years per student
Management Seats	INR 22,700/-	INR 2,55,000/- Per two years per student
Foreign Graduates	INR 27,700/-	US \$ 6000 Per two years per student

The University fee must be paid by way of Demand draft drawn in favour of Registrar, KNR University of Health Sciences, payable at Warangal.

The tuition fee must be paid by way of Demand draft drawn in favour of Institute Of Public Health Sciences Hyderabad or the payment can be made online.



## 14. Administrative arrangements, policies and facilities

### 14.1 Key Contacts



**Dean Academics**

**Dr. Raghupathy Anchala**  
Professor  
Email: raghupathy.a@iiphh.org  
Ph.: +91- 9618010188



**MPH Coordinator**

**Dr. Josyula K. Lakshmi**  
Professor  
Email: jklakshmi@iiphh.org  
Ph: +91- 9618261526



**Examiner In-Charge**

**Dr. Varun Agiwal**  
Senior Lecturer  
Email: :  
varun.agiwal@iiphh.org  
Ph.: +91- 8619356695



**Deputy Registrar & OSD**

**Mr. Rohit Tiwari**  
Email: rohit.tiwari@iiphh.org  
Ph.: +91-9581380442



**MPH Course Administrator**

**Mr. T V Siva Nageswara Rao**  
Email: siva.nrao@iiphh.org  
Ph.: +91-8331969333



**Librarian**

**Ms. Kalyani Reddy** Email:  
kalyani.m@iiphh.org  
Ph.:+91-9494350600



**IT-in-Charge**

**Mr. P Chaitanya Kumar**  
Email: chaitanya.p@iiphh.org  
Ph.:+91-9010060681



**Finance Head**

**Mr. Someshwar Rao**  
Email: someshwer.r@iiphh.org  
Ph.: +91-9849377494

## 14.2 Course administrative arrangements

### Notice Boards

All the official communication, attendance will be displayed in the Noticeboards.

### Class Representatives

Two students are nominated by the class as representatives (usually two, one male and one female). Additionally, they are also a point of contact for the students and the faculty.

### Course Evaluation

Courses are regularly evaluated, and we depend upon feedback from students to help us to continually improve them. Feedback from the students is periodically collected on all modules. This type of evaluation gives us feedback on the various parts of the course and is by questionnaires completed for each module. There are open-ended as well as closed questions to allow full expression of your opinions.

## 14.3 Guidance on institute policies

### Cell Phones

Cell phones must be switched off when students are in

- Any teaching session
- Computing teaching rooms (whether a class is being held or not)
- The Library

### Identity Cards Access

The institute has identity card access security system. Students are required to always wear their institute identification card whilst in Institute buildings and will not be permitted to enter buildings without production of this card. There is no charge for cards unless they are lost; a charge of INR 500 will be made for the second and subsequent cards issued.

### Academic Building Opening Hours

The normal building opening hours for students are:

- Working days: Monday - Friday: 9.30 am to 6.00 pm
- On Saturday: 9.30 am to 2.00 pm (with prior permission)
- Sundays: No access to students

### Student support and discipline

#### Student Support

If you have problem, please contact the Course Administrator/Assistant Course Coordinators or Course Coordinators.

#### Discipline among students:

All powers relating to discipline and disciplinary action in relation to the students of the institute are vested in the Director. He may delegate all or any of his powers as he deems proper to any of the faculty of the institute specified by him.

#### Ban on ragging on the campus:

Ragging, use of drugs, drug trafficking and eve teasing, which are criminal offences, are strictly forbidden in the University and persons found indulging in such activities will be subjected to strict disciplinary and other action in keeping with the law of the land. Indulging in any criminal activity within or outside the institute and any physical violence against fellow students will not be tolerated and will attract stern disciplinary action including rustication.

**Consumption of alcohol and other narcotic drugs in the Institute premises is strictly prohibited**

The institute has constituted the following committees for Student's welfare:

- Student Welfare committee: Faculty Nominated Dr.JK Lakshmi
- Sexual harassment Committee: Chair:Dr.JK Lakshmi
- Grievance redressal Committee: Chair:Dr.Rajan Shukla

## Annexure-I: Master's in Public Health Course at the Indian Institute of Public Health, Hyderabad

The following Syllabus and Examination pattern is approved by KNR University of Health Sciences, Warangal.

S.No.	Subject	Credits
<b>Semester I – 20 credits</b>		
01	Introduction to Public Health	3
02	Social & Behavioural Sciences - I	3
03	Epidemiology – I	3
04	Biostatistics, Data Management – I	3
05	Demography	1
06	Environmental & Occupational Health – I	3
07	Health Policy & Health Systems	3
08	Field Visit	1
<b>Semester II – 23 credits</b>		
09	Health Policy & Management-II (Health Management with Introduction to Health Economics)	3
10	Environmental & Occupational Health-II, Leadership Communication and training Skills	3
11	Social & Behavioural Sciences-II	3
12	Epidemiology-II	3
13	Journal Club	2
14	Biostatistics & Data Management – II	3
15	Research Methods	3
16	Leadership, communication and training skills (1 week workshop)	2
17	Field visit	1
<b>Semester III – 18 credits</b>		
18	Monitoring & Evaluation	3
19	Disaster Preparedness & Management	2
20	Selected Track: Student has to opt any one of the following tracks: <ul style="list-style-type: none"> <li>• Biostatistics &amp; Data Management</li> <li>• Non communicable disease epidemiology</li> <li>• Public Health Disability</li> <li>• Public Health Surveillance</li> </ul>	12
21	Field Visit	1
<b>Semester IV – 19 credits</b>		
22	Dissertation (including internship)	10
23	Gender, vulnerable population, (including seminars)	2
24	National health and nutrition programs (including seminars)	2
25	Recent / emerging issues (including seminars)	1
26	Ethics & Public Health Laws	2
27	Grant Writing	2

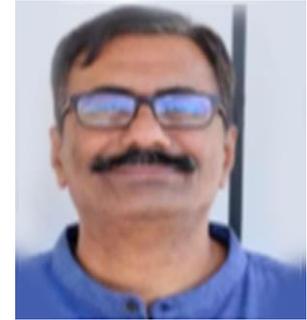
## Annexure-II: Module Coordinators



**Dr. Sirshendu Chaudhuri**



**Dr. Gowri Iyer**



**Dr. Raghupathy Anchala**



**Dr. Varun Agiwal**



**Dr. Shailaja Tetali**



**Dr. Rajan Shukla**



**Dr. Nirupama. A. Y**



**Dr. Josyula K. Lakshmi**



**Subhashini Sivasankaran**



## Annexure-III: Module Syllabus

### Semester I

#### 1. Introduction to Public Health module:

Discussions about Public health aspects and experiences of students

Lectures on Epidemic of HIV/AIDS and Public health responses; Elimination of Polio in India, Public health definition and Key terms, and A public health approach, Core functions and essential services of Public Health, Stakeholder roles in Public Health and Determining and influencing the Public's health, History of Public Health, Demographics and Health indicators in India, Surveillance in India, Universal Health coverage in India

Health care systems across the world brief, International Health Regulations, Global Health Policy, MDGs / SDGs, Intersectoral coordination for health, ICDS scheme, Eradication of Smallpox in India, Public health innovations in India; Social determinants of Health: Visit to Families in a resettlement colony and visit to Primary Health Center (PHC)

#### Student presentations on

Health priorities in India, Evolution of public health in India, Health care system in India, Health regulations and Acts in India, Human resource in Public health in India- Issues, Health system determinants of Health, Health status and determinants in a resettlement colony

#### 2. Social & Behavioural Sciences in Health – I

Introduction to and scope of social & behavioural sciences; social determinants of health – A historical analysis of morbidity, mortality, birth rates from the beginning of the last century; society, social structure; film appreciation; social stratification and social inequality; caste, class and gender; roots, dimensions and magnitude of inequity in health look at important health indicators across caste in NFHS data (or) gender differentials in NFHS data; social change; industrialization, urbanization, social mobility, implications on health of individual and groups; disparities in urban health – health situation of urban poor; economics and health; health and development, globalization and health; equity, indices of equity, socio-economic classifications; power, authority, bureaucracy, state and government, decentralization, context of policy making in developing countries; decentralization under NRHM – role of PRI vis-à-vis doctors, culture, norms, values, role, status, identity; cultural & social barriers for behaviour change – female age at marriage or low female age at marriage – cause, consequences and differentials; socio-economic and cultural determinants of child malnutrition in India; case finding and case holding in TB; an understanding from social and behavioural science perspective; medical pluralism, professional and folk systems of medicine position of alternative medical systems in Indian Public Health

#### 3. Epidemiology – I

Dynamics of disease transmission

- Applications of epidemiology
- Natural history of disease
- Levels of prevention
- Measuring the occurrence of disease – morbidity and mortality
- Measures of frequency – incidence and prevalence
- Measures of association– risk, odds, OR, RR, AR and AR%
- Hills criterion: from association to causation Study designs– Observational and experimental studies; cross sectional, case control, cohort and randomised controlled trials
- Screening concepts
- Assessing validity and reliability of diagnostic and screening tests –Sensitivity, specificity, Positive Productive Value (PPV) and Negative Productive Value (NPV)
- Deriving inferences from epidemiologic studies
- Conceptual understanding of Bias, confounding, and interaction

## 4. Biostatistics & Data Management – I

### Introduction to Biostatistics

- What is biostatistics? Why learn Biostatistics? Relevance of biostatistics in the field of public health.
- Understand the use and abuse of statistics in day-to-day life, in magazines, books, articles, etc.
- Elementary concepts, types of variables, measurement scales, types of data, data classification, relationship between variables etc.
- Data presentation: Tabular and Graphical presentation

### Descriptive Statistics

- What is Descriptive Statistics? How, where and Why use this in public health?
- Measures of central tendency (arithmetic mean, geometric mean, harmonic mean, mode, median) and usage of these measures in daily life.
- Measures of dispersion (range, interquartile range, standard deviation, variance, coefficient of variance), Measures of skewness and kurtosis and correct usage of these measures in different situations.
- Frequency distribution, cumulative frequency distribution, quartiles, quintiles, percentiles

### Probability and Probability Distributions

- Introduction to probability: Basic terminology, theoretical and subjective probability.
- Additional rule, multiplication rule, conditional probability, joint probability, marginal probability
- Bayes Theorem: Inverse Probability, Sensitivity and Specificity, ROC curve and discuss applicability in real life
- Discrete and continuous random variables.
- Probability distribution function, cumulative distribution function.
- Discrete Distribution: Binomial and Poisson distribution, Continuous distribution: Uniform and Normal distribution and usage of these distribution in public health
- Properties of normal distribution, area under normal curve, z score, probability tables, quantile-quantile plots(Q-Q) plots

### Sampling Distributions and Estimation

- Defining sample and population, parameter and statistic, why sample and how to collect a sample.
- Concept of standard error and sampling error, Small sampling distribution
- Sampling distribution for mean: Single sample mean and difference between two sample means.
- Sampling distribution of proportion: Single sample proportion and difference between two sample proportions.
- Central limit theorem, parametric estimation – point / interval estimation, confidence intervals, point and interval estimation

### Sampling Technique and Sample Size Determination:

- Sampling design, Needs of a sample, Steps in sampling design

- Types of sampling designs: Probability and non-probability sampling, Advantages and disadvantages of sampling
- Sample size determination and Power analysis, why sample size is important
- How low power can affect study results, factors which influence the power of statistical tests.

### **Data Management:**

- Data loading from and to different formats
- Data capture by developing interactive questionnaires in excel /epi-info (entering, editing, updating and sorting data, importing and exporting data, manipulating data using formulae).
- Maintaining database structures, data verification and validation, data checks, range checks, consistency checks, check for duplicates, data calculation

## **5. Demography**

- **Introduction to demography and its data sources**

Definition and scope; relation with other disciplines, Basic measures and concepts Sources of data in demography viz., census of India, sample registration system, National Family Health Survey, District level health Surveys, National Sample Survey and other surveys, Nature and use of demographic data for policy making

- **Composition, structure and growth of population**

Sex ratio, age dependency ratio, population pyramid, rate and growth of population, Natural Increase, linear, geometric and exponential growth rate, Demographic Transition, Demographic Dividend, dwindling sex ratio in India: Implications to our society, Calculation: Composition, structure and growth of population

- **Fertility measures**

Concepts, calculation, scenario: Crude birth rate, general fertility rate, age specific fertility rate, total fertility rate, gross reproduction rate, net reproductive rate, child-women ratio, proximate determinants of fertility; viz., percentage of women in Union, Percentage of women in breastfeeding, contraceptive prevalence rate, abortion rate and changing fertility scenario in India, Fertility and Religion in India

- **Mortality measures**

Concepts, calculation, scenario: Crude death rate, age specific death rate, cause specific death rate, measures of infant & child mortality, maternal mortality ratio and changing mortality scenario in India, Impact of HIV/AIDS on demographic profile

- **Migration and health**

Measuring migration, Immigration or immigrations rate and emigration or out migration rate, Net Migration Rate, Migration selectivity, demographic, educational and economic, causes of migration, relevance of push and pull factors, migration and health, Migration and rapid urbanization: Impact on health and environment

- **Life tables**

Definition and use of Life tables, construction of life tables, Population projection: different methods, ageing of population: Is it an issue in India?

- **India's population policy**

Evolution of population policies in India and National, Population Policy links with other policies: NHP, NRHM Population programme in India: History of different approaches and its linkages with politics

- **Group project**

Students will take one particular topic in demography like fertility/mortality/migration issues in India / state: analyse, interpret data and present the findings

## **6. Environmental and Occupational Health – I**

Introduction to the environmental burden of disease in India and Globally, basic concepts like environmental health; ecology; toxicology, environmental health economics; the inconvenient truth; estimating exposure, dose, response and outcome, definition, exposure assessment, dose response relationship, toxicological paradigm, analysis of human exposure, estimating exposure, dose, response and outcome, water pollution; types of pollution; major sources, water quality standards, water supply and treatment; indoor and outdoor air pollution; human and man-made sources, health effects, control measures, water quality analysis, solid waste management, biomedical waste, air quality monitoring, noise pollution, ventilation, light, housing; sources of noise pollution, mitigating factors and tolerance levels, health effects, housing and health, housing for migrant and low-income populations; radiation, meteorological environment, principles of radiation physics, measurement, risks, control and management, the management of biomedical waste in a hospital setting, globalization and its impact on the environment, climate change, bioterrorism, detailed discussion and debate on global warming and its impact in India, estimating the tolerance level of noise, land use, depletion of natural resources, toxic substances analysis, environmental impact assessment, definition, objectives principles and steps in carrying out the assessment, GIS, environmental disasters, food safety and sanitation, common food borne diseases hazards, food preservation, food and drug administration act, food testing for chemicals, environmental legislations in India, air pollution act, noise pollution act, water pollution control act, etc.. Critical analysis of the implementation of the EH legislation.

## **7. Health Policy Management – I (Health Policy and Systems)**

Introduction and course overview; Introducing Health Policy – definitions of policy, the policy life cycle, policy triangle, basis of health policy, types of health policies levels of policy making for health, national health policy; Health superstructure key institutions – treatment of health in the constitution, hierarchies of key institutions involved in making and executing decisions and their respective roles at national, state, district and primary level, regulatory institutions, major health programmes, introduction to major international organizations and donors, their roles vis-à-vis national health,; Health services overview – curative and preventive services, primary, secondary and tertiary services, public health service delivery system in India – rural and urban functions, staffing and administration of different levels of health care institutions, private health care industry;

Foundations of health policy making – disease burdens, health needs, right to health, types of equity, evidence-based health, cost benefit and cost effectiveness, administrative efficiency; theories or policy process – types of scale of policy, the policy triangle of actors, contexts, content and process, policy actors and actor interests, distributions of power in society as they bear on health; elitist models, vulnerable groups, rational and incremental models of policy making top-down and bottom-up approaches; health services lab – equity, access and quality – types of equity in health service, significance of equity, how can equity be improved, types or access to health, measures to improve access, meanings of quality in health services, different perspectives, quality enhancement – fund flows, financing mechanisms, government private and donor spending; contemporary situation, health insurance; situation, models, approaches, national health accounts, financing models; health financing;

Policy analysis – applying the policy triangle, defining a policy issue and reviewing the literature for process and contexts, mapping the actors; simple stakeholder matrix for a policy issue, with respective type of involvement, extent of influence, shifts in position; analysing policy – different policy issues will be allocated to different groups, which they will be asked to analyse using a known framework (policy triangle)

and prepare a presentation; comparative health systems – health care delivery models, financing systems, extent of state and private role, cost of health care, elements of a brief reviewing the knowledge, focusing the message presentation of findings, writing a policy brief; national health policies and programmes – treatment of health in constitutions, national health policy, AYUSH policy, legal framework for health, major health programmes under the MoHFW, National rural and urban health missions, guest lecture by a representative of a prominent government health department, emphasis on policy processes; human resources in health – definitions and role of health, workforce, levels and structure of health workforce; global and national; migration of health workforce– internal and external; issues in health workforce, absenteeism, incentives, training and retraining, private sector and health – private sector in health care delivery, the private sector in related areas – health technology, pharmaceuticals, health insurance, regulatory measures and implementation gaps, prominent civil society organizations in health, and their roles. structural adjustment, decentralization, integration, topical reform initiatives, NRHM, SAP; regulating private health sector; health sector reforms; public private partnerships - PPP concept, PPPs at level of service delivery, PPPs in health financing and industry, examples of PPPs in contemporary health, PPPs for health / civil society and health; pharmaceuticals and health sector – drug spending pattern in India, market structure and production priorities, R&D in drug market, pharmaceutical policies; primary health

Original declarations and modifications, historical processes, principles of PHC, local, national and global dimensions, PHC today; international health agreements – international laws, trade agreements impacting on health, health treaties, covenants and international declarations, international health actors and processes – major donors in India and globally, international health governance and priorities, policy transfer, international health – journal club discussion on a major international health policy issue of contemporary relevance such as anti-retroviral drug production and TRIPS the 10/90 gap, global tobacco control, etc., planning for health – introduction, planning process, project cycle management, systems approach to project planning, planning a health service, planning health services for an administrative unit (city / block/ PHC), key considerations, operational issues, planning for health, health information systems

– Introduction, types of health information, sources of information, census, applying information, implementation of health plans, Monitoring & Evaluation of systems, designing health programme – the framework for designing a programme, good vs. bad programmes, epidemiology to determine the need of the program, program goals, programme structuring, utilizing research, health technologies – types of technology in health, demand and supply gaps, cost and quality issues, emerging issues and new technology; globalization and health – global health inequities, what is globalization? Intellectual property rights, implications on access to medicines in developing countries, GATS – general agreements on trade in services – globalization and health – implications for disease patterns implementing a health programme – implementation issues in programme design (man, material and money) public vs. private services, addressing vulnerable populations, meeting requirements of donors, designing a health programme – monitoring and evaluation of a programme, mid-course correction / modification, national health policy , contemporary themes in national health

– NRHM /NUHM, recent health reforms, typical themes in health policy, student evaluation; governance in health – planning for large populations, oversight, priority setting, accountability, performance, assessing success, a prominent guest lecturer in the field will be invited.

## Semester II

### 9. Health Policy Management – II (Health Management with Introduction to Health Economics)

- Health care environment and organizational stakeholders, governance – vision, mission, values and goals, management and working in teams
- Managerial decision making – managing and working in teams, management styles
- Introduction to project cycle management (PCM), project cycle management tools,
- Managing implementation – PCM tools
- Logistics management PCM tools
- Quality assurance in health projects
- Measuring performance and quality assurance
- Budgeting and financial management and HR in health organization
- Managerial expectations and employee performance, Demand and supply of health care
- Factors affecting health and Economic evaluation
- Revenue generation and pooling, health care markets

### 10. Environmental and Occupational Health – II

Environmental health economics – concept and its relevance to environmental health programs in India, genetically modified food, pesticides, introduction to the burden of occupational health, definition, concepts, industrial health, industrial medicine and occupational health, history, occupational health hazards, diseases due to temperature, heat exhaustion, heat cramps, heat stroke, cold related hazards, acclimatization, personal protective measures. Asbestosis, coal workers lung diseases, silicosis, byssinosis, Bhopal gas tragedy after 25 years and its trends, metal exposures diseases – health effects of exposure to uranium, mercury, lead, coal mine workers; cotton industry workers; gender, women and work, women and occupational health, exposures to organic and inorganic chemicals, diseases associated with hydrocarbons and other solvents, occupational health services; introduction; health screening procedures; demos of equipment, OHS: Identifying hazards at work place – risk assessment and communication, making the society green – walk nature trail (coordinating with centre for environmental education); risk assessment and communication Occupational health services – surveillance systems (Periodic medical examination); ergonomics and work site health promotion; occupational health legislations in India and its real implementation, identifying hazards – textile industry, hospital, hotels, institutes, IT offices, etc.. Introduction to medical entomology – mosquito; sand fly; fleas; insecticides; ticks and itch mites etc., life history and its impact on the environment; role of health professionals as a responsible citizen, risk assessment and communication, review of the course and wrap up.

### 11. Social and Behavioural Sciences – II

Health seeking for neonatal and childhood morbidities; socio-cultural determinants of care seeking for delivery; institutionalization of medicine, professionalization in medicine, professional ethics and medical practice; health as commodity, medicine as ideology; social and behavioural aspects of epidemiology; community organization, psychological processes – principles of perception and learning, motivation, attitude etc. theories and models to understand individual behaviour; health behaviour and the ecological models, psychological process – 2-attitude, personality and motivation; role of attitude, prejudice, stereotypes, stigma in care seeking and care giving – social and behavioural issues in control and prevention of HIV/AIDS; stress and coping behaviour; coping strategies – progressive muscular relaxation; cognitive imagery techniques, measurement of stress through a psychometric test.

### 12. Epidemiology – II

- Concepts behind Surveillance
- Investigation of an outbreak
- Epidemic and types of epidemics

- Critical appraisal of epidemiological studies
- Using epidemiology to evaluate health services
- Introduction to standardization
- Introduction to infectious disease epidemiology
- Introduction to Non communicable diseases epidemiology
- Introduction to Nutritional epidemiology of India
- Identifying the roles of genetic and environmental factors in disease causation
- Questionnaire design, survey design and conducting research in epidemiological studies

### 13. Journal Club

### 14. Biostatistics & Data Management – II

#### Hypothesis Testing

- Need for hypothesis testing, defining null and alternative hypothesis. · Type I/II error. p value, level of significance, z statistic, rejection and acceptance region.
- Parametric Test: One sample / two sample tests, z test, independent t/ paired t, one-tailed/two tailed tests of significance and needs in daily life.
- Non-parametric tests: single sample test, sign test, run test, median test, Mann-Whitney U test, Wilcoxon signed rank test, Wilcoxon rank sum test, Kolmogorov-Smirnov Test and where do they apply?

#### Analysis of Variance

- Theory of ANOVA: Essentials of ANOVA, global test for significance F statistic.
- ANOVA table, single factor ANOVA, multiple comparison tests and adjusted p values, two factor ANOVA.
- ANOVA concepts and interpretation, repeated measures ANOVA concepts usage
- Kruskal-Wallis is one-way analysis of variance by ranks, Friedman test for repeated observations

#### Categorical Data Analysis

- Describing and interpreting contingency tables
- Comparing two proportions using chi-square, testing independence in two-way contingency tables, 2xc contingency tables, kx2 contingency tables, Testing independence in multiway tables

#### Correlation and Regression

- Correlation: correlation concepts and use, types of correlation, correlation analysis using interval, ordinal and categorical data, correlation analysis.
- Introduction to linear regression, regression model, assumption, Principle of least squares, line of best fit
- Regression diagnostics, coefficient of determination, residual analysis, lack of fit test
- Model adequacy, confidence intervals and hypothesis testing
- Multiple linear regression model, model transformation
- Model prediction, leverage, influence and outliers, model violations and model adequacy

## 15. Research Methods

- Introduction to research methods – theory and main streams – definition of research, background on the theoretical basis of research methods (different roots and ideologies), definition and qualitative and quantitative research including differences, strengths, weaknesses and application
- Overview of literature review – importance and relevance of literature reviews, identification of resources for conducting reviews, preparation of a brief literature review document for the given topic of study
- Problem statement and formulation of research objectives – problem description, features of well-framed research objectives and hypothesis, framing aim, objectives and research questions for a study with a discussion of how these may vary for quantitative and qualitative research, framing the research concept and defining variables, making a conceptual framework for the study, meaning of variables, and identification of various variables that need to be incorporated in the study. Finalization of specific research objectives for the research project that has been chosen. Development of a conceptual framework for the study
- Ethics in research – values and codes of practice, principles of informed consent, confidentiality and responsibilities to research participants, responsibilities to oneself and co-workers, ethical dilemmas and conflicts, critical discussion of ethics in research
- Development of informed consent forms
- Reliability and validity – the meaning and importance of reliability and validity in research, differences between validity and reliability, types of reliability and validity explained in the context of quantitative and qualitative research

### Overview of study design

- Location of the study and sampling for a quantitative study – choice of appropriate location for a research study, review of concepts in sampling, sample size and power, description and application of various sampling techniques in the context of designing a survey.
- Types of survey methods and recruitment of subjects for research – choosing a location of the given study topic, choosing sample technique and determining sample size for the study
- Quantitative tools for data collection – description of various quantitative data collection tools, questionnaire design, bias and concept of piloting
- Designing a questionnaire for the chosen topic
- Data collection plan and data management
- Data collection for survey
- Discussion on problems faced during data collection and transcription and develop a plan for quantitative analysis
- Introduction to qualitative research in public health – understanding differences from Quantitative research, contribution of qualitative research in health
- Introduction to reflexivity and Discussion of different approaches such as ethnography, action research, PRA.
- Sampling and subject recruitment in qualitative research - Choosing a location, defining sample and sample size for a qualitative study, understanding differences between a qualitative and quantitative sample, recruitment of study participants
- Data collection techniques in qualitative research -
  - A. Overview Introduction to different techniques for data collection: e.g. case interviews, focus group discussions, observational techniques, documentary evidence.
  - B. Documentary evidence use of existing sources, public records, personal documents, methodological issues in using documentary evidence

-Data collection techniques in qualitative research –

C. Observation Participant and non- participant observations, Ethnography and participant observations, overt and covert roles.

- Data collection techniques in qualitative research

– Interviews-

Interview techniques: developing skills of interviewing, cultural factors and interviewing, private/public accounts, social differences in interviews, elite interviewing, and key informant interviews.

- Data collection techniques in qualitative research - D. Focus group discussion - Different kinds of group interviews, focus groups, natural groups, developing appropriate methods for the setting. Show examples of FGD guides to the class.

- Conduct one FGD in the class and discuss the FGD. FGD to be recorded.

- Qualitative data- transcription and cleaning - (Manage and store collected data, bearing in mind issues of record identification, confidentiality, etc)

- Data analysis in qualitative research (Theoretical basis) - Principles of different approaches in analysis, Thematic content analysis, Grounded theory, Rigour in analysis, other analysis, Validity, generalizability and transferability. - Note- this course does not cover qualitative data analysis in detail.

- Report writing and class presentations - Different sections of the research report in a standard format, (students to be shown research papers and how these have been structured). Students to be exposed to the basics of giving a presentation on a research topic.

Research methods in Public Health and allied disciplines -Collaborating across disciplines and institutions, linking research methods with epidemiology, different methods for different questions, trans-disciplinary work, communicating across disciplines.

## **16. Leadership, communication and training skills**

– Introduction – knowing each other, ground rules, workshop expectations, workshop objectives and introduction to the course, key leadership and management principles – management and leadership theories, difference between leaders and managers, public health leadership, leadership styles – classical leadership styles, situational leadership and identifying one's own role

- Attitudes, behaviour, relations and gaps, communication, theories and channels and modes of communication, communication styles, verbal / nonverbal, individual differences, small group communication, failures in communication, persuasion

- Advocacy – agenda setting

- Teams – theory of teams, stages of team development, team and group, group dynamics, team roles, Belbin team roles, team building, conflict management, theories, sources, resolution

- Communicating within the organization – up, down and horizontal; transactional analysis; creative problem solving, brainstorming, NGT, looking at leaders, leadership and performance –the Pygmalion effect, risk and crisis communication, Am I a leader

- Leadership abilities, leadership competencies, my current competencies, my professional competencies, leveraging my abilities to be a leader

- Organizational communication tools; - use of language, emails, telephones, letters, ethics in workplace, conducting effective team meetings; where do meetings go wrong, decision making in meetings, dos and don'ts, time management

- Facilitation skills, VIPP technique for multistakeholder planning situation, preparing for a training needs assessment, training agenda and training logistics, writing a training manual, training evaluation, summing up of training techniques used, relook at workshop objectives and evaluation and closure.

## Semester III

### 18. Monitoring & Evaluation

- Overview of M&E – Introduction, Overview of M&E, M&E Plans;
- Frameworks – Conceptual; Log Frame; Results Framework; M&E Framework
- M&E case studies-1 - Nutrition program case study
- M&E case studies-2 - Balance scorecard case study
- Developing objectives and indicators
- Objectives and Indicators
- Non-routine sources and their quality
- Objectives and Indicators
- HMIS/other data sources and its quality
- HMIS Lab
- HMIS – Using the PRISM tool
- HMIS – PRISM tool
- Evaluating data quality
- Data quality
- Assessing M&E systems
- Impact evaluation - Overview
- Study designs

### 19. Disaster Preparedness and management

#### Disaster Preparedness and management

Objectives- To sensitize the student on India's vulnerability to disasters, to help them understand the disaster management cycle, to impart information on the aftermath of disasters, to equip the student the skills required to plan preparedness activities including rapid surveys

· Importance of this course in the larger discourse on public health and pandemic preparedness, historical perspective of disasters and its management

India's vulnerability to disasters, major disasters in the last 3-5 years, administrative structure

& role of international organizations. · Extent of damage in a disaster situation (infrastructure, human resources, services, communication; how survival of relief workers is threatened)

· Acute illnesses (epidemics); Chronic illnesses; Health needs of women; Health needs of children; Effect on health services;

· Rapid assessment/ surveys,

· Mass casualty – preparedness and management

· Hospital evacuation;

· Media management & communication;

· Vulnerable populations and ethics;

· Long term implications of disaster, psychosocial aspects · Self-preservation

· Disease surveillance & response

· Coordination of relief activities; logistics; & communication ·

· Preparation for presentation of preparedness plan

## 20. Tracks – Student has to opt any one of the following tracks:

### 1. NCD Epidemiology

- Disease burden of NCDs in India (cardiovascular, respiratory, cancer, diabetes, mental health)
- Conceptual knowledge behind DALY and QALY
- Controlling for confounding and effect modification and dealing with bias in NCD
- Life course epidemiology
- Critical appraisal of NCD epidemiological studies
- Designing and analysing NCD epidemiological studies

**2. Biostatistics & Data Management:** Applied regression analysis (linear, linear and logistic), survival analysis, design and analysis of sample surveys, design and analysis of clinical trials, systematic reviews and meta-analysis, longitudinal data analysis

**3. Public Health Surveillance:** Introduction to Surveillance – Definition and history of surveillance and purposes of surveillance; Basic concepts in surveillance – acute and chronic disease surveillance, active and passive surveillance and sentinel surveillance; Establishment of a surveillance system – potential sources of data; challenges in surveillance programs for developing countries; health problems of public health importance to be under surveillance, devising appropriate case definitions for surveillance, inter and intra-sectoral coordination in surveillance program, establishment of a reporting format, analysis and dissemination of surveillance data; Evaluation of a surveillance system; National programs for surveillance: NSPCD to IDSP; Integration and IDSP; Staffing and organizational set up under IDSP; diseases under surveillance in IDSP and reporting units; MIS under IDSP – reporting formats at different levels and data handling under IDSP; Partnerships in IDSP – forging and managing partnerships; Outbreak – Diagnosis and follow up action under IDSP – Prediction of outbreaks and time trends of diseases; diagnosing an outbreak; outbreak response; NCD Surveillance in IDSP; Need for NCD Surveillance and survey conduction; Use of information technology in IDSP.

### 4. Public Health Disability & Research:

#### Unit I. Introduction: Disability, Public health and Development

- What is Disability?
- Disability Facts and FYIs, Both Globally and Within India
- Public Health Approaches to Disability- Interdisciplinary Nature of Public health
- Principles of Planning: Programme Planning Cycle
- Social and Psychological Experience of disability
- Types of Stigma, Poverty Disability Cycle, Disability Stigma, etc

#### Unit II. Defining Disability

- ICF and Medical Model of Disability
- Social Model of Disability
- Human Rights and Disability- Inclusionment Theory/ UN Convention on the Rights of persons with Disabilities.
- Panel Discussion on Models of Disability

#### Unit III. Disability Epidemiology

- Introduction to Epidemiology
- Introduction to Basic Statistics and their application to disability studies
- Assessing and Diagnosing Disability
- Disability Surveys, Survey Designs, and Examples of Survey Data
- Disability Statistics and Demographics
- Determinants of Disability and Preventable Disability
- Developing preventative strategies for avoidable disabling conditions in own areas

- Disability Disparities- return discussion of disability and poverty cycle

#### **Unit IV. - Managing Disability**

- Introduction to the Community Based Rehabilitation Matrix
- Convergence of CBR with public health approach
- Public Resources and Services for the Disabled, Disability Policy
- Public and Private Interaction in providing Disabled Services
- Human Rights and Advocacy for the Disabled- A look at how policy affect benefits and concessions for the disabled
- Inclusion Programs for the Disabled; Partnerships for disability rights and employment
- Disability in context- from grassroots movements to policy change.
- SWOT analysis on disability services and rights for the disabled for a particular country/region/locality

#### **Unit V. Research in Disability**

- Disability Theories- Comparison of Research completed using these theories
- Selected Topics in Disability: Sociology of Disability
- Selected Topics in Disability: Anthropology of Disability
- Developing a Plan for Disability at district/unit level using the planning cycle- identifying the problem and determining the objectives
- Developing a plan...- Prioritization and monitoring tool
- Service Learning Visits and Presentations
- Discussion on Service Learning Visits- What was learned and how can we apply this after course is finished

#### **Semester IV**

#### **22. Dissertation (including internship)**

#### **23. Gender, Vulnerable Population**

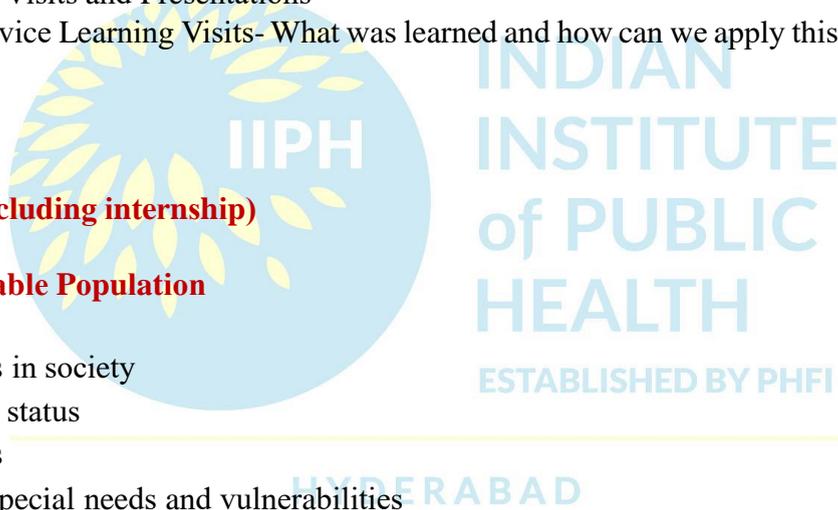
- Gender and Health
- Gender inequalities in society
- Inequities in health status
- Inequities of access
- Women's health - special needs and vulnerabilities
- Men's health – special needs and vulnerabilities
- Men's health – special needs and vulnerabilities
- Gender-based and sexual violence
- Policies and movements around gender and health
- Children's rights and child health

#### Vulnerable populations

- Marginalized populations – inequities in health states and access to health
- Rural health
- Urban health inequities
- Migrant health
- Health of tribal and indigenous populations
- Health of scheduled caste populations and religious minorities
- Health and sexual minorities

#### Vulnerable Populations

Case Study: (e.g. Tribal health, MSM and HIV, slum populations)



## 24. National Health and nutrition programmes

- Systems approach
- Aims, goals, targets and objectives - Input, process, output, outcome and impact
- Health Care Delivery System in India - Organization of Health Services in Rural & Urban areas;
- Role of Private Sector and Civil Society
- AYUSH
- Informal Providers
- Health care delivery systems in developed countries – Lessons for India
- Health Care Delivery System in India; Organization of services; Role of various sectors: Public and private; modern and traditional Role of Civil Society; Health care delivery systems in developed countries – Lessons for India; National Health Programmes; Evaluation of a health programme
- National Health Programmes in India –
  - National Vector-borne disease control programme – malaria, lymphatic filariasis, kala-azar, Japanese encephalitis, dengue fever / dengue haemorrhaging fever, chikungunya fever,
  - National Leprosy Eradication Programme – NLEP
  - Revised National Tuberculosis Control Programme – RNTCP
  - National AIDS Control Programme – NACP
  - National programme for control of blindness – NPCB
  - Iodine Deficiency disorder programme – IDDP
  - Universal Immunization Programme – UIP
  - Reproductive and Child Health Programme – RCH
  - Janani Suraksha Yojana – JSY
  - National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases, and stroke (NPCDCS)

### **Integrated Disease Surveillance Project (IDSP) Nutrition Programmes:**

- Vitamin A Prophylaxis Programme
- Prophylaxis against nutritional anaemia
- Iodine Deficiency Disorders control programme
- Special nutrition programme\Balvadi nutrition programme
- ICDS programme
- Mid-day meal programme / scheme

## 25. Recent / emerging issues

Emerging Infectious Diseases;

- Diseases due to new agents; human monkeypox, new types of diarrhoeal diseases, legionnaires disease; Ebola haemorrhage fever, AIDS, Hanta virus, Creutzfeldt-Jakob disease, hepatitis-E, severe acute respiratory syndrome, hepatitis
  - C, zika virus
  - Diseases due to known variants of Pathogens Re-emerging Infectious Diseases
  - Malaria, Kala-azar, dengue fever, plague,
- Control of emerging and re-emerging diseases

## 26. Ethics and Public Health Laws

### Ethics

- Introduction and basic principles
- Course overview, objectives
- Brief historical overview of ethics

- Basic moral theory, universal and relative ethics
- Fundamental bioethical principles
- Introduction to key readings

#### Ethical foundations of public health

- Equity (types of equities and inequities)
- Justice (types of justice and injustice)
- Utilitarianism and population rights approaches
- Individual rights perspectives
- Rights and duties
- Relational ethics: trust, respect, process

#### **Health and human rights**

- Health as a human right
- Principles: Availability, Accessibility, Acceptability, Quality
- Stigma and discrimination - Special groups: women, children, the disabled, migrants, indigenous populations, minorities.

#### **Individual vs population health**

- Case study: (e.g. Tobacco control, family planning, vaccination programmes, mass Treatments / chemoprophylaxis, mandatory HIV testing) Professional ethics, Rights and duties (of employers, employees, donors and financiers, recipients of services)
- Professional respect and due process
- Professional codes and laws
- Ethical decision-making in public health

#### **Research ethics – 1**

- Principles of research ethics
- Purposes and ideals of health research
- History of research ethics
- Natural research ethics
- Social research ethics
- Rights and duties (of participants, researchers and donors)

#### **Research ethics – 2**

- Research procedures and practices (fieldwork ethics, consent, confidentiality and anonymity)
- IRB requirements - Publication ethics (Attribution, authorship acknowledgment, citation, plagiarism)
- Ethical Debates

Case study: clinical research in developing countries

#### **Public Health Laws**

- What are rights? Is there a right to public health?
- Duties of Government and the public health authority as per law
- National Health Law: Legal system in India and interaction between the Courts, Legislators and regulatory authorities
- Rights and Duties of Patients and Health Care Providers & Redressal Mechanisms
- Legal status of Public Health Management during Disaster, public health emergencies & epidemics.
- Notifiable Diseases and Locally Endemic Diseases – Legal requirements
- Environment health legislations
- Legislations for women empowerment and health
- Special Provisions for groups with special health needs



- i. International conventions / treaties and regulations related to public health
- ii. International Health Regulations
- iii. Universal Declaration of Human Rights
- iv. Emergency Public Health Law
- v. Legislation related to Quality of Professional Education and Services;
- vi. Legislation related to Census, Birth and Death
- vii. Legislation related to Biotechnology & Patenting
- viii. Legislation related to Tobacco and Drug Control
- ix. The Transplantation of Human Organs Act 1994
- x. The Prevention of Food Adulteration Act 1959
- xi. The Protection of Human Rights Act 1993
- xii. Legislation for Women Empowerment and Health
- xiii. Legislation for Child Protection and Health
- xiv. Legislation related to the Welfare Rehabilitation of Disadvantaged
- xv. Occupational Health & Legislation
- xvi. Environment Health Legislations

## **27. Grant writing**

Participant's introduction, area of interest for proposal writing analysis. Introduction to overview of the grant writing module i.e. broad goal, overall objectives, type of pedagogy, assessment, essential reading, and topics covered. Introduction to identify and prioritize topics for proposal, identify funding sources, Introduction to different components of proposal, Introduction to various proposals and why they fail. Areas to critique to improve the proposals to succeed, Introduction to preparation of statement of problem, Importance of review of available literature for proposal writing, Introduction to formulation of objectives, Introduction to appropriate usage of research methods, Introduction to Log frame, Introduction to work plan, Introduction to budget, Introduction to monitoring and evaluation, Plan for project administration, monitoring and utilization, Introduction on how to prepare concept notes, executive summaries, preparation of letter of intent. How the proposal is evaluated by various funders, Tips for grant writing, Overview of finalizing and reviewing the proposal, Presentation of the proposal to funders

## Annexure-IV: Reference Books for MPH course

1. Park's Textbook of Preventive & Social Medicine, 23rd Edition
2. Oxford Textbook of Public health, 4th edition
3. Maxcy-Rosenau-Last Public health and preventive medicine, 15th edition, 2007
4. WHO Technical Report series
5. World Health Bulletin
6. WHO Chronicle
7. Weekly Epidemiological Record
8. A foundation for Analysis in the Health Sciences Sixth Edition Author: Wayne W. Daniel, Georgia State University
9. Fundamentals of Biostatistics- fifth edition-Bernard Rosner, Harvard University
10. Demography and Population Problems, Rajendra K, Sharma, Atlantic Publishers and Distributors.
11. The Methods and Materials of Demography, Second Edition 2nd ed. Edition, David A. Swanson, Jacob S. Siegel.
12. Lilien filed - foundation in epidemiology
13. Leon Gordis- Epidemiology
14. Making health Policy- Kent Buse, Nicolas Mays & Gill Walt
15. GOI (2002). National Health Policy (2002) Dept. of Health, Ministry of Health and Family Welfare, New Delhi.
16. NRHM Mission Document
17. Health for All - Declaration of Alma Ata
18. Beetle, Andre, 2002, Sociology: Essays in Approach and Method, Oxford University Press.
19. Glanz K, Rimer BK, Viswanath K, eds. 2008. Health Behaviour and Health Education: Theory, Research, and Practice (4th Ed). San Francisco: Jossey-Bass.
20. Annandale, E., the Sociology of Health & Medicine: a Critical Introduction. Polity Press, 1998
21. Mary-Jane Schneider, Introduction to Public Health, 2nd Ed... Jones and Bartlett, 2006.
22. Essentials of Public Health - BJ Turnock. Jones & Bartlett, 2007
23. MEASURE Evaluation (2007). M&E Fundamentals – A self-guided mini-course
24. Website of National Disaster Management Authority
25. WHO Health Library for disasters.
26. Go I IDSP Programme Modules

## Annexure-V: Proposed Scheme of Examination for MPH Course

The course will be assessed with both Internal Assessment and Final Examination at the end of 1st year and 2nd year.

University shall conduct two examinations in a year i.e., one regular and one supplementary examination at an interval of 4-6 months between the two examinations. Not more than two examinations will be conducted in a year.

### MPH Course Examinations:

#### First year University examination at the end of 2nd semester

Sl.No.	Subjects	No. of papers	Theory Max.Marks	Practical & Viva (Max.Marks)	Internal Assessment Marks	Total Marks
1	Introduction to Public Health & Health Policy Management	1 (one)	70	20+10=30	50	150
2	Social and Behavioural Sciences	1 (one)	70	20+10=30	50	150
3	Epidemiology	1 (one)	70	20+10=30	50	150
4	Biostatistics, Data Management & Demography	1 (one)	70	20+10=30	50	150
5	Environmental & occupational Health	1 (one)	70	20+10=30	50	150

The candidates failed on one or more subjects in 1st year may be promoted to 2nd year. But the candidate should pass all the subjects of 1st year to get eligibility to appear for 2nd year or Final year exams.

#### Theory examinations: 3 hours

2 essay questions carrying 10 marks each =20 marks

6 short answer questions carrying 5 marks each =30 marks

10 brief answer questions carrying 2 marks each =20 marks

Internal Assessment will be done in both semesters for a total of 50 marks for each paper/subject.

#### Internal Assessment marks assigned:

1st semester: 25 Marks (Class participation 10+ Assignments 15)

2nd semester: 25 Marks (Class participation 10+ Assignments 15)

#### Final year University Examination at the end of 4th semester

Sl.No.	Subjects	No. of papers	Theory Max Marks	Practical & Viva Max Marks	Internal Assessment Marks	Total Marks
1	Monitoring & Evaluation	1 (one)	70	20+10=30	50	150
2	Disaster Preparedness & Management	1 (one)	70	20+10=30	50	150

3	Selected Track: Biostatistics, Data Management (or) Non Communicable diseases Epidemiology	2 (Two)	70+70=140	40+20=60	50	<b>250</b>
4	Gender, Vulnerable population (Part-A) National Health & Nutrition Programs & Recent /Emerging issues (Part-B)	1 (one)	70	20+10=30	50	<b>150</b>
5	Dissertations:	Report-200 marks (Two externals 100+100)	---	Viva—100 Marks	---	<b>Total: 300 Marks</b>

Serial No. 1 to 3 : 50 Marks (Class participation 15+Assignments 35)

Serial No. 4 (PART-A) : 25 Marks (Class participation 10+Assignments 15) (PART-B) : 25 Marks (Class participation 10+Assignments 15)

**Valuation of theory answer scripts:** Double valuation as in other PG courses of the University.

**Pass Marks:**

Theory	50%
Practical's & Viva	50%
Internal Assessment	50%
Total Aggregate	50%
Dissertations	Report- 50%, VIVA Voce-50% Total-50%

**Examiners:** There shall be two examiners for the conduct of practical and viva voce examination in each subject. Out of two examiners one shall be internal and one shall be external from outside the University/outside the state preferably from the institutions where MPH course is available.

Internal Assessment will be done in respective semester for a total of 50 marks for each paper/subject

**Submission of Dissertation report:** Two months before commencement of 2nd year theory Examinations.

Dissertation reports will be evaluated by two external examiners for 200 marks each and the average marks will be taken. Viva –voce for the dissertation will be done along with practical's of second year examinations.

**Eligibility for examiners:** Practical & viva will be conducted by one internal examiner and one external examiner with teaching eligibility of more than five years in the concerned discipline.

## Dr Rajan Shukla, Professor and Dean Public health practice and Community Engagement



**Qualification:** MBBS (GMC), MPH(UoM, USA), DPH (GMC)

### **Brief Write up on profile / Short Bio:**

Dr Shukla has over 30 years of experience, starting from emergency clinical care, health program management, teaching and training, Health Program evaluation, Health system strengthening, public health research, Public Health surveillance, designing and implementing integrated health programs for strengthening health systems. He is a medical professional turned public health specialist, dedicated towards empowering communities and health systems in adopting new scientific evidence to local context, using local resources to address the public health challenges, improve population health outcomes and promote social development. Health is both an input and outcome of development and hence needs to be addressed as the main determinant of social development. He works on reducing inequities by empowering marginalized communities to access high quality health care services and providing supportive environment to practice healthy behaviour as a means to promote sustainable social development.

- a) **Areas of Expertise:** Maternal and Child Health, Eye Health, Public health surveillance, Health system, Project Management, Monitoring Evaluation and Learning, Health policy, Health insurance Health Economics
- b) **Email:** [rajan.shukla@iiphh.org](mailto:rajan.shukla@iiphh.org)
- c) **Contact details:** [Rishab242@gmail.com](mailto:Rishab242@gmail.com)
- d) **LinkedIn Profile:** [www.linkedin.com/in/dr-rajan-shukla-6b9a0512](http://www.linkedin.com/in/dr-rajan-shukla-6b9a0512)
- e) **Twitter ID:** Rajan4healthSys handle @rajan4HealthSys
- f) **Orcid ID:** <https://orcid.org/0000-0002-1958-7396>

**Areas of interest:** Health system strengthening, Maternal and Child Health including nutrition, Eye Health, Public Health surveillance, emergency preparedness, Program Evaluation, Health program designing and implementation

**Publications:** Over 30 publications

**Current Research activities / Projects:** ECD, Cancer Screening, public health management cadre strengthening, IHR 2005 implementation monitoring strengthening in SEARO region

**Teaching / Academic Involvement:** Health Policy and program Management, Health Economics, Health Systems, MCH, Public Health surveillance

## Dr. Shailaja Tetali - Professor, Dean Research & Policy Support



**Qualifications-** MBBS, MPH, MMS (Karolinska Sweden), PhD (LSHTM)

### **Brief profile /Short Bio:**

Shailaja has been with PHFI since 2009. She is a medical doctor trained at Sree Ramachandra Medical College Chennai, and has a Double Masters- MPH from Sree Chitra Tirunal Institute Trivandrum, and Masters in Medical Sciences from Karolinska Institute, Sweden.

Her PhD in injury epidemiology from LSHTM (UK) was through the Wellcome Trust Fellowship. Her interests are to explore the public health impacts of transportation choices, especially on injuries, physical activity and air pollution. She continues to work on safe and sustainable mobility and injury Epidemiology, arising from everyday journeys to work, school and other anthropogenic activities. She also leads teaching, curriculum development, short term trainings and student mentoring.

**a) Areas of Expertise:** Injury and disability prevention; environment and occupational health; Operations Research in health; Monitoring & Evaluation; Disaster management and preparedness

**b) Email ID:** [Shailaja.t@iiphh.org](mailto:Shailaja.t@iiphh.org)

**c) LinkedIn Profile:** <https://www.linkedin.com/in/shailaja-tetali-984b2a46/>

**d) orcid ID:** 0000-0001-7006-6935

**Areas of interest:** Injury and disability prevention; environment and occupational health; Operations Research in health; Monitoring & Evaluation; Disaster management and preparedness; Blood safety; Infection Control & Patient Safety

### **Awards and Honors:**

- 2022 Indian Development Foundation Award for Injury prevention efforts
- 2020 Global Road Safety Leadership Fellow, USA
- 2017 Australia Awards Fellowship (Department of Foreign Affairs and Trade), Melbourne, Australia
- 2016 Wellcome Trust PHFI PhD Fellowship Award, UK
- 2015 Best Poster Presentation Award, PHFI Research Symposium, India
- 2015 AusAID award in injury prevention, Brisbane, Australia
- 2014 Harold Gussen International Award for Blood Safety, Japan

**Publications:** [https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=shailaja+Tetali&oq=sh](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=shailaja+Tetali&oq=sh)

### **Current Research activities / Projects:**

Shailaja has worked in over 40 projects as PI/Co-PI and has 42 publications and 3 book chapters and print media write-ups.

**Teaching / Academic Involvement:** Teaches MPH, PG Diploma in Public Health Management, short courses in Environmental health, Disaster preparedness, Research Methods, Injury prevention & Disability. She is actively involved in student supervision -1 PhD (ongoing), 40 Masters/ Diploma theses

## Dr. Raghupathy Anchala - Professor, Dean Academics and Training



**Qualification:** MBBS (AFMC, Pune);

Diploma in Tuberculosis and Chest Diseases - DTCD (BJMC, University of Pune);

MPH with specialisation in infectious diseases and microbiology (GSPH, University of Pittsburgh, USA);

PhD in Public Health and Primary Care (Cambridge, UK)

### **Brief Write up on profile / Short Bio:**

Raghu is a Public Health and Primary Care expert and a Chest Physician with a passionate interest in teaching sound epidemiological concepts/methods and research methods to students. He has a proven track record in implementation and operational research. Adept in Program Management and establishing industry and academia collaborations, he has been instrumental in driving the MPH program and placement of numerous students pursuing MPH in various NGOs and CSR Foundations.

His current research revolves around multimorbid NCDs in urban slums and rural areas, cascade of care pathways for people suffering from hypertension and diabetes, clinical decision support systems for people suffering with NCDs at primary care level and operational /implementation research in Tuberculosis.

- a) **Areas of Expertise:** Epidemiology, NCDs, primary care, implementation research, operations research, health system strengthening, clinical decision support systems for managing NCDs at primary care.
- b) **Email ID:** [raghupathy.a@iiphh.org](mailto:raghupathy.a@iiphh.org)
- c) **Contact details:** 9618010188
- d) **LinkedIn Profile:** <https://www.linkedin.com/in/raghupathyanchala1publichealth/>
- e) **Twitter ID:** @docraghu8
- f) **Orcid ID:** <https://orcid.org/0000-0003-4733-211X>

**Areas of interest:** Multimorbidity, implementation research, operations research, health system strengthening, clinical decision support systems

### **Awards and Honour's:**

1. Emerging Leader, World Heart Federation - 2015
2. Recipient of Welcome Trust – PHFI PhD Research Fellowship and Cambridge Commonwealth Trust Scholarship, 2010 to 2013
3. Recipient of Future Faculty Fellowship and AITRP (AIDS International Training Program: Fogarty Fellowship) from PHFI and University of Pittsburgh respectively in 2007 and 2008 to pursue Masters in Public Health at Graduate School of Public Health (GSPH), University of Pittsburgh (USA).

4. “OUTSTANDING STUDENT AWARD”, Masters level, 2008 – University of Pittsburgh, award given for academic excellence in MPH course based on GPA (3.99 out of 4), and practicum on ‘Comparison of bronchodilatory and reversibility effects of Salbutamol versus Ipratropium among varying severity scales of Bronchial Asthma and COPD’
5. Life Member Indian Chest Society and National College of Chest Physicians – India
6. Member – European Respiratory Society and European Society of Cardiology
7. Distinction in Biochemistry and Otorhinolaryngology during MBBS
8. University of Poona Topper in I MBBS

**Publications:**

**Pubmed:** <https://pubmed.ncbi.nlm.nih.gov/?term=raghupathy+anchala>

**Scopus:**

<https://www.scopus.com/authid/detail.uri?authorId=53163188000>

**ORCID:** <https://orcid.org/0000-0003-4733-211X>

**Current Research activities / Projects:** Cascade of Care for Multimorbidity in urban slums of Pune Home based pulmonary rehabilitation in stable Interstitial Lung disease patients.

Teaching / Academic Involvement: Epidemiology basic and advanced modules, NCD and ID epidemiology, research methods

HYDERABAD



**Qualification: MS in Clinical Psychology ,Ph.D. in Cognitive & Behavioural Neurosciences**

**Brief Write up on profile / Short Bio:**

I have a background and training in clinical psychology (post-graduate) and cognitive and behavioural sciences research training with a special focus on disordered populations (doctoral training). My doctoral research work included being trained to explore and improve understanding of language and cognition from a multi-disciplinary approach, i.e., behavioural sciences, linguistics, neural networks, animal studies, neuroanatomical and clinical research, etc, combining both theoretical approaches along with applied and clinical research. This approach and training, has fuelled and shaped my understanding of the field.

Since the completion of my doctoral research, I have worked in several capacities, including academic and research positions across various institutes and organizations. My earliest work experience included working as a Lecturer early in my career at a Speech and Hearing Institute in Bangalore. In addition, I have also worked briefly in education research, pedagogy, curriculum development and student assessment. I have also worked briefly as a consultant at an NGO working in maternal and child health, in monitoring and evaluation. My most recent work experience included being the research coordinator for a multi-centre ICMR National Task Force project to develop and validate a pan India comprehensive and multilingual screening battery for dementia. (<http://brandp.in/icmr/index.html>). I am continuing to work in this area and future studies include working on illiterate cognition and developing and validating tools to effectively tap into it, understanding gender disadvantage in dementia, improving the overall health system efficacy in screening and diagnosing common neurological conditions, and also move towards developing more community based multi-factorial interventions and rehabilitation measures to delay the onset of dementia and slow cognitive decline.

Since my joining the Indian Institute of Public Health, Hyderabad as Assistant Professor and I have been involved in several projects that include working in projects focussed on prevention and screening of diabetic retinopathy, retinopathy of prematurity, developing research platforms to capture multimorbidity in an intergenerational rural cohort, strengthening multi-sectoral approaches in primary health care settings, vaccine hesitancy etc. In addition, my role at the Institute also involves teaching of several courses. My research interests include areas of cognitive science, understanding health behaviours, factors impacting behaviour change, public mental health, using a social determinants approach to understand health outcomes, gender and vulnerable populations and health outcomes, policy development and analyses, ageing **research with special focus on dementia and efforts at dementia prevention and rehabilitation, and cognition across the lifespan and the factors that impact it.**

dementia. (<http://brandp.in/icmr/index.html>). I am continuing to work in this area and future studies include working on illiterate cognition and developing and validating tools to effectively tap into it, understanding gender disadvantage in dementia, improving the overall health system efficacy in screening and diagnosing common neurological conditions, and also move towards developing more community based multi-factorial interventions and rehabilitation measures to delay the onset of dementia and slow cognitive decline.

Since my joining the Indian Institute of Public Health, Hyderabad as Assistant Professor and I have been involved in several projects that include working in projects focussed on prevention and screening of diabetic retinopathy, retinopathy of prematurity, developing research platforms to capture multimorbidity in an intergenerational rural cohort, strengthening multi-sectoral approaches in primary health care settings, vaccine hesitancy etc. In addition, my role at the Institute also involves teaching of several courses. My research interests include areas of cognitive science, understanding health behaviours, factors impacting behaviour change, public mental health, using a social determinants approach to understand health outcomes, gender and vulnerable populations and health outcomes, policy development and analyses, ageing **research with special focus on dementia and efforts at dementia prevention and rehabilitation, and cognition across the lifespan and the factors that impact it.**

- a) **Areas of Expertise:** Behavioral and Cognitive Sciences, Mental Health & Ageing Research, Psychometrics
- b) **Email ID:** [gowri.iyer@iiphh.org](mailto:gowri.iyer@iiphh.org)
- c) **LinkedIn Profile:** [linkedin.com/in/gowri-krovi-iyer](https://www.linkedin.com/in/gowri-krovi-iyer)
- d) **Twitter ID:** @gowri85385581
- e) **orcid ID:** <https://orcid.org/0000-0002-5001-1563>

**Areas of interest: Mental Health across the life span, Understanding cognition across the life span ,Ageing, Health seeking behaviour and behaviour change, Cognition across the life span**

#### **Publications:**

- Lieber J, Banjara SK, Mallinson PAC, Mahajan H, Bhogadi S, Addanki S, Birk N, Song W, Shah AS, Kurmi O, Iyer G, Kamalakannan S, Kishore Galla R, Sadanand S, Dasi T, Kulkarni B, Kinra S. Burden, determinants, consequences and care of multimorbidity in rural and urbanising Telangana, India: protocol for a mixed-methods study within the APCAPS cohort. *BMJ Open*. 2023 Nov 27;13(11):e073897. doi: 10.1136/bmjopen-2023-073897. PMID: 38011977; PMCID: PMC10685937.
- Ali, Sana.S, Iyer, Gowri, Mahajan, Hemanth, Nanda Kishore K [submitted]. “Dynamics of Covid-19 vaccine hesitancy among primary HCWs in an urban city in India.
- Iyer, Gowri, Nanda Kishore. K, Mahajan, Hemanth, Ali, Sana [manuscript under progress]. “Exploring the impact of mental wellbeing, risk perception, and public trust on vaccine hesitancy: A multilingual survey in Telangana during the COVID-19 pandemic.”
- Kaul, Subash; Paplikar, Avanthi; Varghese, Feba; Alladi, Suvarna; Sharma, Meenakshi; RS, Dhaliwal; Goyal, Sheetal; Aralikatte Onkarappa, Saroja; Arshad, Faheem; Gollahalli, Divyaraj; Ghosh, Amitabha; Iyer, Gowri; Justus, Sunitha; Khan, Arfa; Kandukuri, Rajmohan ; Mathew, Robert; Mekala, Shailaja; Menon, Ramshekhar; Pauranik, Apoorva; Nandi, Ranita; Narayanan, Jwala; Nehra, Ashima; MV, Padma; Ramakrishnan, Subasree; Sarath, Lekha; Shah, Urvashi; S, Vivekanandhan; PN, Sylaja; Varma, Ravi; Verma, Mansi; Vishwanath, Yeshaswini. MoCA in five Indian languages: A brief screening tool to diagnose dementia and MCI in a linguistically diverse setting [2022] *International Journal of Geriatric Psychiatry*. 2022; 1- 11. <https://doi.org/10.1002/gps.5808>
- Avanthi Paplikar, Feba Varghese, Suvarna Alladi, V. P. Vandana, K. J. Darshini, Gowri K. Iyer, Rajmohan Kandukuri, Gollahalli Divyaraj, Meenakshi Sharma, R. S. Dhaliwal, Subhash Kaul,

Aralikatte Onkarappa Saroja, Amitabha Ghosh, J.Sunitha, Arfa Banu Khan, Robert Mathew, Shailaja Mekala, Ramshekhar Menon, Ranita Nandi, Jwala Narayanan, Ashima Nehra, M. V. Padma, Apoorva Pauranik, Subasree Ramakrishnan, Lekha Sarath, Urvashi Shah, Manjari Tripathi, P. N.Sylaja, Ravi Prasad Varma, Mansi Verma, Yeshaswini Vishwanath, ICMR Neuro Cognitive Tool Box Consortium (2022), Picture-naming test for a linguistically diverse population with cognitive impairment and dementia. In International Journal of Language & Communication Disorders.

- Verma M, Tripathi M, Nehra A, Paplikar A, Varghese F, Alladi S, Narayanan J, Dhaliwal RS, Sharma M, Saroja AO, Arshad F, Divyaraj G, Ghosh A, Manae TS, Mekala S, Menon RN, Hooda R, Iyer GK, Sunitha J, Kandukuri R, Kaul S, Khan AB, Mathew R, Nandi R, Padma MV, Pauranik A, Ramakrishnan S, Sarath L, Shah U, Sylaja PN, Varma RP and Vishwanath Y (2021) Validation of ICMR Neurocognitive Toolbox for Dementia in the Linguistically Divers Context of India. *Front. Neurol.* 12: 661269.
- Paplikar A, Vandana VP, Mekala S, Darshini KJ, Arshad, F, Iyer G K, Kandukuri R, Raj D, Kaul S, Patterson K, Alladi S. [2021]. Semantic memory impairment in dementia: A cross-cultural adaptation study. *Neurol Sci.*
- Avanthi Paplikar, Suvarna Alladi, Feba Varghese, Shailaja Mekala, Faheem Arshad, Meenakshi Sharma, Aralikatte Onkarappa Saroja, Gollahalli Divyaraj, Aparna Dutt, Ratnavalli Ellajosyula, Amitabha Ghosh, Gowri K Iyer, J Sunitha, Rajmohan Kandukuri, Subhash Kaul, Arfa Banu Khan, Robert Mathew, Ramshekhar Menon, Ranita Nandi, Jwala Narayanan, Ashima Nehra, M V Padma, Apoorva Pauranik, Subasree Ramakrishnan, Lekha Sarath Urvashi Shah, Manjari Tripathi, P N Sylaja, Ravi Prasad Varma, Mansi Verma, Yeshaswini Vishwanath, ICMR-NCTB Consortium, [2021] Bilingualism and Its Implications for Neuropsychological Evaluation, *Archives of Clinical Neuropsychology*,
- Menon R, N, Varghese F, Paplikar A, Mekala S, Alladi S, Sharma M, Aralikatte Onkarappa S, Gollahalli D, Dutt A, Ghosh A, Dhaliwal R, S, Hooda R, Iyer G, K, Justus S, Kandukuri R, Kaul S, Banu Khan A, Nandi R, Narayanan J, Nehra A, Vasantha P, M, Pauranik A, Mathew R, Ramakrishnan S, Sarath L, Shah U, Tripathi M, Padmavathy Narayana S, Varma R, P, Verma M, Vishwanath Y: Validation of Indian Council of Medical Research Neurocognitive Tool Box [2020]. Validation of Indian Council of Medical Research Neurocognitive Tool Box in Diagnosis of Mild Cognitive Impairment in India: Lessons from a Harmonization Process in a Linguistically Diverse Society. *Dement Geriatr Cogn Disord* 2020;49:355-364.
- Paplikar, A., Iyer, G., Varghese, F., Alladi, S., Kaul, S., Mekala, S., Sharma, M., Tripathi, M., Ghosh, A., Menon, R., Ellajosyula, R., Saroja, A. O., Nehra, A., Dutt, A., P. N Sylaja, Narayanan, J., Varma, R.V., M.V Padma, P. 2 Mathuranath, Shah, U., Pauranik, A., Mathew, R., Dharamkar, S., Gollahalli, D., Nandi, R., Sarath, L., Verma, M., Kandukuri, R., Justus, S. Khan, A., Hooda, R., Ravi, S. K. [2020]. A Screening tool to detect aphasia in patients with stroke in Indian languages. ICMR Neurocognitive Tool Box Consortium. *Annals of Indian Academy of Neurology*, 23(8), 143-148.
- Iyer, G. & Kannuri, N.K. (2020) How the Social and Behavioural Sciences Can Help Us Beat the Pandemic. *The Wire Science*, April 2020.
- Mallaadi, BV, Iyer, GK, Murthy, GV, Gilbert, C, Shukla, R, Gudlavalleti, AG, Yamarthi, P, Mukpalkar. S [2020]. Establishing support groups to support parents of preterm babies with retinopathy of prematurity: a pilot study. *Indian Journal of Ophthalmol* 2020; 68, Suppl, S1: 128-30
- Iyer, G., Mekala, S., Paplikar, A., Sharma, M., Tripathi, M., Ghosh, A., Menon, R. S., Ellajosyula, R., Saroja, A.O., Kaul, S., Nehra, A., Dutt, A., Sylaja, P.N., Narayanan, J., Padma, M.V., Mathuranat, P. S., Shah, U., Pauranik, A., Mathew, R., Gollahalli, D., Nandi, R., Sarath, L., Verma,

- M., Varghese, F., Justus, S., Khan, A., Hooda, R., Alladi, S.[2019]. Standardising dementia diagnosis across linguistic and educational diversity: Study design of the Indian Council of Medical Research-Neurocognitive Tool Box (ICMR-NTB). *Journal of International Neuropsychology*.
- Iyer, G, Alladi S, Bak T, Mekala S, Mamidipudi A, Rajan A, Chaudhuri J R, Kaul S. (2014). Education does not play the same role in dementia in India as in the West: Bilingualism, occupation, rural dwelling and stroke modify the relationship. *Dementia e Neuropsychologia*, Vol. 8 n-1 2 - Apr/May/Jun de 2014, 132-140.
  - Iyer, Gowri. (2006). Cross-linguistic studies of lexical access and processing in monolingual English and bilingual Hindi-English speakers. Doctoral Dissertation. University of California, San Diego & San Diego State University.
  - Szekely, A., D'Amico, S., Devescovi, A., Federmeier, K., Herron, D., Iyer, G., Jacobsen, T., Arévalo, A., Vargha A., & Bates, E. (2005). Timed action and object naming. *Cortex*, 41(1), 7-25
  - Szekely.A, Jacobsen.T, D'Amico.S, Devescovi.A, Andonova.E, Herron.D, Lu. C, Pechmann.T, Pléh.C, Wicha.N,Federmeier.K, Gerdjikova.I, Gutierrez.G, Hung.D, Hsu.J, Iyer.G, Kohnert.K, Mehotcheva.T, Orozco- Figueroa.A, Tzeng.A, Tzeng.O, Arévalo.A, Vargha.A, Butler.A, Buffington.R, Bates.E (2004). A new on-line resource for psycholinguistic studies. *Journal of Memory and Language*, 51(2), 247–250.
  - Székely, A., D'Amico, S., Devescovi, A., Federmeier, K., Herron, D., Iyer, G., Jacobsen, T., & Bates, E.(2003) Timed picture naming: Extended norms and validation against previous studies. *Behavior Research Methods, Instruments & Computers* 35(4), 621-633.
  - Bates, E., D'Amico, S., Jacobsen, T., Székely, A., Andonova, E., Devescovi, A., Herron, D., Lu, C- C., Pechmann, T., Pléh, C., Wicha, N., Federmeier, K., Gerdjikova, I., Gutierrez, G., Hung, D., Hsu, J., Iyer, G., Kohnert, K., Mehotcheva, T., Orozco-Figueroa, A., Tzeng, A., & Tzeng, O. (2003). Timed picture naming in seven languages. *Psychonomic Bulletin & Review*, 10(2), 344-380.
  - Zacks, J., Tversky, B., & Iyer, G. (2001). Perceiving, remembering, and communicating structure inevents,*Journal of Experimental Psychology: General*, 130 (1): p. 29-58.
  - Iyer, G., Saccuman, C., Bates, E., & Wulfeck, B. (2001). A Study of Age-of-Acquisition Ratings in Adults. *Center for Research in Language Newsletter*, 13(2). La Jolla: University of California, San Diego.
  - Bates, E., Andonova, E., D'Amico, S., Jacobsen, T., Kohnert, K., Lu, C-C., Székely, A., Wicha, N., Federmeier, K., Herron, D., Iyer, G., Pechmann, T., Devescovi, A., Orozco-Figueroa, A., Gutierrez, G., Hung, D., Hsu, J., Tzeng, O.,Gerdjikova, G., Mehotcheva, T., and Pleh, C. (2000). Introducing the CRL International Picture- Naming Project (CRL-IPNP). *Center for Research in Language Newsletter*, 12(1). La Jolla: University of California, San Diego.

### **Dr. Josyula K. Lakshmi, Professor**



**Qualification:** BHMS, MS, PhD

#### **Brief Write up on profile / Short Bio:**

Dr Josyula K. Lakshmi has a Bachelor's degree in Homoeopathic Medicine and Surgery, a Master of Science in Health Promotion, and a PhD in Health Promotion and Disease Prevention, and Gerontology. She has engaged in research, teaching, training, and student-mentoring in health promotion; environmental health; health governance; the workforce engaged in traditional, complementary and alternative medicine; road safety; communication; physical activity; nutrition; research methods and ethics; and ageing. Her study

findings, analyses, and commentaries have been published in peer-reviewed academic journals, books, technical and general interest periodicals, and blogs. She has presented at numerous conferences, and participated as a resource person at training workshops and symposia.

- a) **Areas of Expertise:** Health Promotion & Disease Prevention; Gerontology; Women's Health; Planetary Health
- b) **Email ID:** [ijklakshmi@iiphh.org](mailto:ijklakshmi@iiphh.org), [ijklakshmiiph@gmail.com](mailto:ijklakshmiiph@gmail.com)
- c) **Contact details:** +91-9618261526
- d) **LinkedIn Profile:** Sirshendu Chaudhuri  
(Link: <https://www.linkedin.com/in/josyula-k-lakshmi>)
- e) **Twitter ID:** @JKLakshmi164849
- f) **orcid ID:** 0000-0002-9141-7324

**Areas of interest:** Health governance and equity; medical pluralism; health promotion: environmental health, communication, physical activity, nutrition, ageing, injury prevention, women's health; ethics in public health research and practice

#### **Awards and Honours:**

1. Second place: PHFI short film competition (2014)
2. Indo-US Science and Technology Forum Post-doctoral research fellowship, 2012
3. First prize ('individual' category): ITaP Green Week Podcast Contest on environment-friendly ideas (2008)
4. Dr. Donald L. Corrigan Health and Kinesiology Award (2006)
5. Ross Fellowship (2003 - 2004)
6. F.N. Andrews Fellowship (1999 - 2001)
7. Gold Medal and citation as "Best student in the areas of Medicine, Dentistry, Veterinary Medicine, and Agricultural Sciences" (1997) – awarded by Prasanthi Society, Hyderabad, India
8. Gold Medal – Bachelor in Homoeopathic Medicine and Surgery (1996) – awarded by the University of Health Sciences, Andhra Pradesh, India
9. Dr. N.V. Srinivasa Rao memorial prizes: Homoeopathic Materia Medica & Homoeopathic Philosophy (1996).

#### **Publications (20 latest):**

1. Ojji D. B., Salam A., Sani M. U., Ogah O. S., Schutte A. E., Huffman M. D., Pant R., Ghosh A., Dhurjati R., **Lakshmi Josyula K.**, Ripiye N. R., Orji I. A., Kana S. A., Abdussalam T., Olawumi A. L., Alfa I. M., Orimolade O. A., Ajayi M. O., Rodgers A. Low-Dose Triple-Pill vs Standard-Care Protocols for Hypertension Treatment in Nigeria: A Randomized Clinical Trial. *JAMA*. 2024;(-):[Epub ahead of print]. <https://www.ncbi.nlm.nih.gov/pubmed/39215620>
2. Yashdeep Gupta, Deksha Kapoor, **Josyula K. Lakshmi**, Devarsetty Praveen, Joseph A Santos, Laurent Billot, et al. Antenatal oral glucose tolerance test abnormalities in the prediction of future risk of postpartum diabetes in women with gestational diabetes: Results from the LIVING study. *Journal of Diabetes*. 06 May 2024. <https://doi.org/10.1111/1753-0407.13559>
3. Simone Pettigrew, Michelle I. Jongenelis, **Josyula K. Lakshmi**, Claire Johnson, Palak Mahajan, D. Praveen, Rachita Gupta. Developing and testing front -of-pack nutrition labels in India: An experimental study. *Food Quality and Preference*, 112: 105025. ISSN: 0950-3293. <https://doi.org/10.1016/j.foodqual.2023.105025>
4. Gupta Y, Kapoor D, **Lakshmi JK**, Praveen D, Santos JA, Billot L, et al.; LIVING Collaborative Group. The incidence and risk factors of postpartum diabetes in women from Bangladesh, India and Sri Lanka (South Asia) with prior gestational diabetes mellitus: Results from the LIVING study. *Diabetes Res Clin Pract*. 2023 Aug 31;204:110893. doi: 10.1016/j.diabres.2023.110893. Epub ahead of print. PMID: 37657646.
5. S. Darwin Subramanee, Kingsley Agho, **Josyula Lakshmi**, Md. Nazmul Huda, Rohina Joshi, and Blessing Akombi-Inyang. Child Marriage in South Asia: A Systematic Review. *Int. J. Environ. Res. Public Health* 2022, 19, 15138. <https://doi.org/10.3390/ijerph192215138>
6. Kibuchi, E., Barua, P., Chumo, I., Teixeira de Siqueira Filha, N., Phillips-Howard, P., Mithu, M., Kabaria, C., Quayyum, Z., Whittaker, L., Dean, L., Forsyth, R., Selim, T., Aktar, B., Sai, V., Garimella, S., Saidu, S.,

- Gandi, I., **Josyula, L. K.**, Mberu, B., Elsey, H., Leyland A.H, and Gray, L. (2022). Effects of social determinants on children's health in informal settlements in Bangladesh and Kenya through an intersectionality lens: a study protocol. *BMJ Open*, 12(6), e056494. <https://doi.org/10.1136/bmjopen-2021-056494>
7. Bintu Mansaray, Laura Dean, Phil Tubb, **Kunhi Lakshmi Josyula**, Linet Okoth, Ivy Chumo, et al. (2022) Implications of COVID-19 for safeguarding in international development research: learning, action and reflection from a research hub. *BMJ Global Health* 2022;7:e008122. doi:10.1136/ bmjgh-2021-008122
  8. Nikhil Tandon, Yashdeep Gupta, Deksha Kapoor, **Josyula K. Lakshmi**, Devarsetty Praveen, Amritendu Bhattacharya, et al., for the LIVING Collaborative Group. Effects of a Lifestyle Intervention to Prevent Deterioration in Glycemic Status Among South Asian Women With Recent Gestational Diabetes A Randomized Clinical Trial. *JAMA Network Open*. 2022;5(3): e220773. doi:10.1001/jamanetworkopen.2022.0773
  9. **Josyula, LK**, Murthy, S, Karampudi, H, and Garimella, S (2021) Isolation in COVID, and COVID in Isolation—Exacerbated Shortfalls in Provision for Women's Health and Well-Being Among Marginalized Urban Communities in India. *Frontiers in Global Women's Health*. [https://doi.org/10.3389/fgwh.2021.769292\\_](https://doi.org/10.3389/fgwh.2021.769292_)
  10. **Josyula K. Lakshmi**, Shailaja Tetali, Dane Moran, Shirin Wadhvaniya, Shivam Gupta, Gururaj Gopalakrishna, and Adnan A. Hyder. Traffic, training, and turnover: Experiences of research personnel in collecting road safety data in Hyderabad, India. *WHO South-East Asia Journal of Public Health* 2021; 10:47-52.
  11. Tewari A, Praveen D, Madhira P, **Lakshmi JK**, Joshi R, Kokku SB, et al. (2020) Feasibility of a Lifestyle Intervention Program for Prevention of Diabetes Among Women With Prior Gestational Diabetes Mellitus (LIVING Study) in South Asia: A Formative Research Study. *Frontiers in Global Women's Health*, 1:587607. doi: 10.3389/fgwh.2020.587607
  12. Janani Shanthosh, Deksha Kapoor, **Lakshmi K Josyula**, Anushka Patel, Yashdeep Gupta, Nikhil Tandon, et al. (2020) Protocol for process evaluation of a randomised controlled trial of a Lifestyle Intervention IN Gestational Diabetes (LIVING) in India, Bangladesh, and Sri Lanka. *BMJ Open*;10:e037774. doi: 10.1136/bmjopen-2020-037774
  13. **Josyula K. Lakshmi**, Radhika Shrivastav, Kiran Saluja, Monika Arora (2020) Evaluation of a school-based tobacco control intervention in India. *Health Education Journal* 2020: 79(7): 775-787. <https://doi.org/10.1177/0017896920927452>
  14. **[The ARISE Hub]** Aktar B, Alam W, Ali S, et al. (2020) How to prevent and address safeguarding concerns in global health research programmes: practice, process and positionality in marginalised spaces. *BMJ Global Health* 2020;5:e002253. doi:10.1136 bmjgh-2019-002253
  15. Yashdeep Gupta, Deksha Kapoor, **Lakshmi K Josyula**, Devarsetty Praveen, Aliya Naheed, Ankush K Desai, et al. (2019) A lifestyle intervention programme for the prevention of type 2 diabetes mellitus among South Asian women with gestational diabetes mellitus [LIVING study] – Protocol for a randomised trial. *Diabetic Medicine*, 36(2):243-251. doi: 10.1111/dme.13850.
  16. Srinivas P. L. N. Patnaik, **Lakshmi K. Josyula**, Rashmi Pant (2018) Socioeconomic correlates of anemia awareness in adolescent schoolgirls: Insights from a district in India. *Journal of Health Management*, 20(3): 1–10.
  17. Wadhvaniya S, Gupta S, Mitra S, Tetali S, **Josyula LK**, Gururaj G, Hyder AA (2017) A comparison of observed and self-reported helmet use and associated factors among motorcyclists in Hyderabad city, India. *Public Health*, 144: S62 - S69.
  18. Sheikh K, **Josyula LK**, Zhang X, Bigdeli M, Ahmed SM. Governing the mixed health workforce: learning from Asian experiences. *BMJ Global Health* 2017;2: e000267. doi:10.1136/ bmjgh-2016-000267
  19. **K. Lakshmi Josyula**, Kabir Sheikh, Devaki Nambiar, Venkatesh V. Narayan, T.N. Sathyanarayana, John D. H. Porter. "Getting the water-carrier to light the lamps": Discrepant role perceptions of traditional, complementary, and alternative medical practitioners in government health facilities in India. *Social Science and Medicine*, Vol 166: 214-222. <http://dx.doi.org/10.1016/j.socscimed.2016.08.038>

**J. K. Lakshmi.** Delhi Medical Council ruling on cross-system practice by practitioners of AYUSH. *National Medical Journal of India*, Vol 29 (2): p114.

### **Current Research activities / Projects:**

NCD Equity; SAHELI (Team Science project on early hysterectomy); SAHI MHM (intervention on sustainable menstrual hygiene management)

### **Teaching / Academic Involvement:**

MPH: Social and Behavioural Sciences in Health; Environmental and Occupational Health; Research Methods; Gender and Vulnerable Populations

Training: Disaster Preparedness and Management

### **Dr. Sirshendu Chaudhuri, Associate Professor**



**Qualification:** MBBS, DPH, MD (Community Medicine)

#### **Brief Write up on profile / Short Bio:**

Dr Sirshendu Chaudhuri (MD, DPH) is working as an Associate Professor, IIPH- Hyderabad. He is passionate about teaching and involved in institutional research activities. Previously he has served ICMR National Institute of Epidemiology, Chennai; Apollo Institute of Medical Sciences and Research, Chittoor, AP; Christian Medical College, Vellore; and Government of West Bengal. His areas of research interests include- Core Epidemiology, Primary Health care, Public Health Surveillance, Maternal and Child Health, Non-Communicable diseases, Capacity building in Public Health, Big data analysis, and research ethics. He has over 50 publications in national and international journals. He is An Editorial Board member of PLOS Global Public Health journal. He is the Member Secretary of the Institutional Ethics Committee, IIPHH.

- a) **Areas of Expertise:** Epidemiology, Public Health Surveillance, Primary Health care, Maternal and Child Health
- b) **Email ID:** [sirshendu@iiph.org](mailto:sirshendu@iiph.org)
- c) **Contact details:** 040-4900 6000 (Extension 6009)
- d) **LinkedIn Profile:** Sirshendu Chaudhuri (Link <https://www.linkedin.com/in/sirshendu-chaudhuri>)
- e) **Twitter ID:** @sirshendusisu
- f) **orcid ID:** 0000-0002-7375-7851

#### **Areas of interest:**

Epidemiology, Public Health Surveillance, Primary Health care, Maternal and Child Health, Big data analysis,

**Publications:** Over 45 publications

#### **Current Research activities / Projects:**

Operations Research and Capacity Building (ORCB) in eyecare; by Seva Foundation; Research and training mentorship to MediCity Institute of Medical Sciences, by MIMS-SHARE India; Audit of Andhra Pradesh

Health System; by the Comptroller Auditor General of India; Evaluation of 'Analysis of Human Resources of Health for Health System Strengthening and Primary Health Care Delivery' in Telangana; Delphi Project to develop consensus on gall bladder carcinoma epidemiology and management; E2E Research fellowship; by Pfizer; Comprehensive study on strengthening the Public Health Management Cadres at the PHC-level, Divisional-level, and District-level in Andhra Pradesh, India; by Government of Andhra Pradesh

**Teaching / Academic Involvement:**

**Faculty for MPH and PGDPHM course. Course coordinator for MPH and PGDPHMD**

**Dr. Varun Agiwal, Assistant Professor**



**Ph.D. (Statistics):** Central University of Rajasthan, Ajmer, Rajasthan, India

**M.Sc. (Statistics):** Central University of Rajasthan, Ajmer, Rajasthan, India

**B.Sc. (Mathematics):** Maharshi Dayanand Saraswati University, Ajmer, Rajasthan, India

**Brief Write up on profile / Short Bio:**

Dr. Varun Agiwal is working as a Senior Lecturer at the Indian Institute of Public Health, Hyderabad. Before this role, he held a position as a Statistical cum Lecturer at Jawaharlal Nehru Medical College in Ajmer. With a teaching background spanning four years, Dr. Agiwal specializes in instructing on subjects such as biostatistics, demography, and related topics. He utilizes various statistical software including MS-Excel, STATA, Epi-Info, and R, to enhance the learning experience.

- a) **Areas of Expertise:** Health-based biostatistics, big data analytics, statistical modelling, and time series analysis.
- b) **Email ID:** [varun.agiwal@iiphh.org](mailto:varun.agiwal@iiphh.org)
- c) **Contact details:** 91-8619356695
- d) **LinkedIn Profile:** <https://www.linkedin.com/in/varun-agiwal-35278168/>
- e) **orcid ID:** 0000-0003-1955-8832

**Areas of interest:**

Data modelling, Big data analytics, and predictive model

**Awards and Honors:** Awarded two times international travel grant,

**Publications: 50**

**Current Research activities / Projects:**

1. Operational Research in Capacity Building (ORCB)-SEVA.
2. Indian Health Outcomes, Public Health & Economics (IHOPE)-LVPEI & IIM-Ahmedabad.
3. Midi City-Institute of Medical Sciences.
4. Experience to Evidence (E2E) - Pfizer

**Teaching / Academic Involvement:**

The teaching cover descriptive statistics, probability theory, statistical inference, regression analysis, and experimental design. The teaching plan also focus on expanding students' knowledge and skills in advanced statistical methods. I serve as the Examiner Coordinator and contribute to various committees, including Academic, Library, Ethics, Grievance Redressal, Souvenir and Progress Reports, and Journal Club.



**M.B.B.S, M.D (Community Medicine), Diploma in HIV and Family Education (IGNOU)**

**Brief Write up on profile /Short Bio:**

Dr. Nirupama is a dedicated public health professional, specializing in research, teaching, and administration. With a focus on non-communicable diseases and mental health among adolescents, she has made significant strides in understanding and improving health outcomes in this demographic. Her interest lies in navigating various aspects of public health, including health systems strengthening, telemedicine, occupational health, and healthcare utilization. Driven by her passion for teaching, she aims to mould future public health enthusiasts while striving to make a lasting impact through her research endeavours. With a commitment to research excellence and a desire to create positive change, she is poised to continue her impactful contributions to the field of public health.

- a) Areas of Expertise: 1. Epidemiology 2. Non-communicable diseases
- b) Email ID: Nirupama.ay@iiphh.org
- c) Contact details:
- d) Mobile: +918547090430
- e) LinkedIn Profile: <https://www.linkedin.com/in/nirupama-a-y-142a1a1ab/>
- f) X ID: @nirupama\_a\_y
- g) ORC-ID: <https://orcid.org/0000-0002-0548-3078>

**Areas of interest:**

- 1. Adolescent health- focus on mental health
- 2. Non-communicable diseases- focus on life course epidemiology
- 3. Health system strengthening and healthcare utilization.
- 4. Telemedicine
- 5. Public health nutrition Bioethics

**Publications**

Over 25 papers in national and international peer-reviewed journals, with 7 research paper presentations at national and international conferences.

<https://www.researchgate.net/profile/Nirupama-A-Y>

**Current Research Activities /Projects**

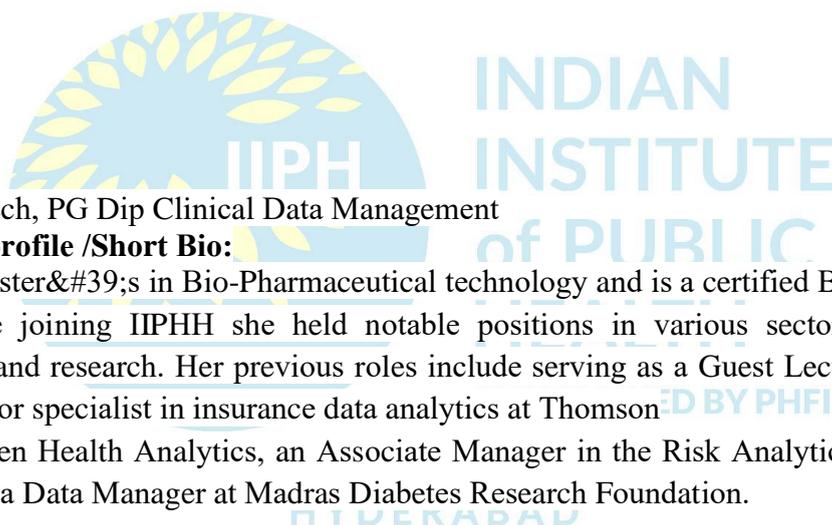
- 1. Project coordinator for WHO-SEARO initiatives focusing on health system strengthening and emergency preparedness, including the evaluation of IHR monitoring tools during the COVID-19 pandemic.
- 2. Co-PI for the Health Technology Assessment India project, collaborating with DHR-HTA In to establish a regional resources hub at IIPH-Hyderabad.
- 3. Involved in capacity-building initiatives for the public healthcare sector in Telangana & Andhra Pradesh, piloting interventions based on nurturing care framework for early childhood development in collaboration with UNICEF(AcECD).
- 4. Contributing as a team member for operational research capacity building for SEVA partners in India & Nepal, focusing on technical expertise, report development, and research & training implementation.

5. Leading the E2E Clinical Research Fellowship Program, funded by Pfizer, overseeing clinical research and evidence generation in oncology, infectious diseases, and dermatology, while ensuring project coordination, stakeholder liaison, and report development.
6. Participating as a team member in clinical research and evidence-generation efforts with MIMS-SHARE India, providing technical expertise and supporting report development, research, and training implementation.

### Teaching / Academic Involvement

1. Teaching faculty in modules of Introduction to Public Health, Health Policy Planning and Management, Epidemiology, Environmental and Occupational Health, Public Health Nutrition, Logistic Planning and Drug Distribution, and National Health Programs for PGDPHM and MPH courses.
2. Module coordinator and teaching faculty for Public Health Nutrition, Non-Communicable Diseases, and National Health & Nutrition Programs.
3. Mentored PGDPHM and MPH candidates in their dissertations.

### Subhashini Sivasankaran- Lecturer



**Qualification :** MTech, PG Dip Clinical Data Management

#### Brief Write up on profile /Short Bio:

Subhashini has a Master's in Bio-Pharmaceutical technology and is a certified Base and Advanced SAS programmer. Before joining IIPHH she held notable positions in various sectors including academia, insurance, banking, and research. Her previous roles include serving as a Guest Lecturer at SRM School of Public Health, a senior specialist in insurance data analytics at Thomson Reuters's Truven Health Analytics, an Associate Manager in the Risk Analytics department at Scope International, and as a Data Manager at Madras Diabetes Research Foundation.

- a) **Areas of Expertise:** Computational Statistics and Database Management
- b) **Email ID:** [Subhashini.s@iiphh.org](mailto:Subhashini.s@iiphh.org)
- c) **Contact details :** 9500062412

**Areas of interest:** Health Data management and analysis using various tools

#### Awards and Honors:

1. The 'Beyond and Above' Excellence Award by Thomson Reuters
2. Received the Endowment Scholarship during PG Diploma in Clinical Data Management to attend a Course in FDA Regulations & SAS conducted by Cranfield University, London through video conferencing.
3. Presented a paper titled "Protein Engineering Staphylokinase – Hirudin" in National level technical symposium, organized by Department of Biotechnology, held at Bharath Institute and won SECOND PRIZE.

#### Publications:

Addressing healthcare needs of people living below the poverty line: A rapid assessment of the Andhra Pradesh Health Insurance Scheme - The National Medical Journal Of India Vol. 24, No. 6, 2011 Authors: M.Rao, S.S.Ramachandra, S.Bandyopadhyay, A.Chandran, R.Shidhaye, S.Tamisettynarayana, A.Thippaiah, Sitamma M., M. Sunil George, V. Singh, S. Sivasankaran, S. I.

Bangdiwala

Prevalence of diabetes and prediabetes (impaired fasting glucose and/or impaired glucose tolerance) in urban and rural India: Phase I results of the Indian Council of Medical Research–INDia

DIABetes (ICMR–INDIAB) study Received: 3 June 2011 / Accepted: 28 July 2011 © Springer-Verlag 2011  
Authors: R. M. Anjana, R. Pradeepa, M. Deepa, M.Datta, V. Sudha, R. Unnikrishnan, A. Bhansali, S. R. Joshi, P. P. Joshi, C. S. Yajnik, V. K. Dhandhanian, L. M. Nath, A. K. Das, P. V. Rao, S. V. Madhu, D. K. Shukla, T. Kaur, M. Priya, E.Nirmal, S.J.Parvathi,S. Subhashini, R. Subashini, M. K. Ali, V.Mohan, on behalf of the ICMR–INDIAB Collaborative StudyGroup.

Use of a Large Diabetes Electronic Medical Record System in India: Clinical and Research Applications - Journal of Diabetes Science and Technology. Volume 5, Issue 3, May 2011 © Diabetes Technology Society.

Authors: Rajendra Pradeepa, M.Sc., Ph.D., Anbalagan Viknesh Prabu, M.B.B.S., Saravanan Jebarani, D.C.S.E., Sivasankaran Subhashini , M.Tech., and Viswanathan Mohan, M.D., Ph.D., D.Sc., FRCP

Glycemic Index of a few Indian rice varieties – International Journal of Food Science and Nutrition V 2011

Authors: Shobana S, Kokila A, Lakshmi Priya N, Subhashini S, Ramya Bai M, Malleshi NG, Sudha V, Mohan

Diabetes in Asian Indians-How much is preventable? Ten-year follow-up of the Chennai Urban Rural Epidemiology Study (CURES-142) - Diabetes Research and Clinical Practice Volume 109, Issue 2, August 2015 Authors: Anjana RM, Sudha V, Nair DH, Lakshmi Priya N, Deepa M, Pradeepa R, Shanthirani CS, Subhashini S, Malik V, Unnikrishnan R, Binu VS, Patel SA, Hu FB, Mohan V

Reliability and validity of a new physical activity questionnaire for India -International Journal of Behavioral Nutrition and Physical Activity (IJBNPA) Published online 2015 March Authors: Ranjit Mohan Anjana, Vasudevan Sudha, Nagarajan Lakshmi Priya, Sivasankaran Subhashini , Rajendra Pradeepa, Loganathan Geetha, Mookambika Ramya Bai, Rajagopal Gayathri, Mohan Deepa, Ranjit Unnikrishnan, Valsalakumari Sreekumaran Nair Binu, Anura V Kurpad, and Viswanathan Mohan

**Teaching / Academic Involvement:** Teaching management for the MPH batches

**Gracy Andrew - Head – Training**



**Qualification :** MA , Clinical Psychology Diploma in Online Counselling and Therapy (Registered at ACTO, UK)

**Brief Write up on profile /Short Bio:**

Gracy Andrew, A Clinical Psychologist by training comes with 25+ years of experience in the area of youth health. From 2012-2022 Gracy served as WorldBeing India's Vice President and Country Director in India, playing a key role in launching, expanding, and supervising WorldBeing's programs on Emotional Resilience and research efforts in India and Kenya. Before joining WorldBeing in 2012, Gracy was with Sangath Society, a renowned leader in the field of mental

health since its inception in 1996. At Sangath she worked in various capacities including as program head of the adolescent program for several years and as Executive Director for two years. An experienced qualitative researcher, Gracy has worked as a consultant to many organizations. She is co-author of several publications in India and globally. She also has been involved in developing various interventions and training programs for youth in the areas of mental health and adolescent health. Gracy has contributed to training resources at the national level in India including the RKSK, and Ayushman Bharath program. In 2019 she was appointed as a member of the World Health Organization's guidance development group for promotional programs on global adolescent mental health. More recently in 2023, she was commissioned to support development of an integrated school health program at the MoHFW.

a) **Areas of Expertise:** Mental Health, Training, Qualitative research,

b) **Email ID:** [gracy.a@iiphh.org](mailto:gracy.a@iiphh.org)

c) **Contact details:** +91 8527209021

d) **LinkedIn Profile:** <https://www.linkedin.com/in/gracy-andrew-5032683b/>

#### **Areas of interest:**

Mental Health, Adolescent & Youth Health , Qualitative Research, Training development.

#### **Publications :**

- Leventhal, K.S., Cooper, P.L., DeMaria, L.M., Priyam, P., Shankar, H., Andrew, G. and Leventhal S. Promoting Wellbeing and Empowerment via Youth First: Exploring Psychosocial Outcomes of a School-Based Resilience Intervention in Bihar, India. *Front. Psychiatry* (2022)
- Andrew, G., Leventhal, K., Demaria, L., Toussaint, L.L., Tiwari, A. and Leventhal, S. The Self- Help Group Resilience Project: Developing and Piloting a Resilience Intervention in Bihar, India. *Journal of Social Intervention: Theory and Practice*, 31(2), pp.40-60 (2022).
- Sachs, L.K., Andrew, G., Collins C S., DeMaria L., Shanker H. and Leventhal S. Training School Teachers to Promote Mental and Social Well-Being in Low- and Middle-Income Countries: Lessons to facilitate scale-up from a Participatory Action Research Trial of Youth First in India. *International journal of Emotional Education, Special Issue Volume 10, Number 2*, (2018).
- Andrew, G., Sachs, K. and Leventhal, S. Resilience-Based Approaches to Life Skills Education among Youth in India: Results of Three Program Trials. Paper submitted to the Assam, India (2016).
- Leventhal, K., DeMaria, L., Gillham, J., Andrew, G., et al. Psychosocial Resilience Curriculum Provides the "Missin Piece" to Boost Adolescent Physical Health: A Randomized Controlled Trial of Girls First in India. *Social Science & Medicine* 161 (2016) 37-46.
- Leventhal, K., Gillham, J., DeMaria, L., Andrew, G., et al. Building Psychosocial Assets and Wellbeing Among Adolescent Girls: A Randomized Controlled Trial. *Journal of Adolescence*, 45 (2015) 284-295.
- Sachs, K., Andrew, G., Leventhal, S., Gillham, J. and Vélez, C. Risk and Protective Factors for Adjustment Problems Among Adolescent Girls in India. Paper Presented at Western Psychological Association Annual Convention, Reno, NV (2013).
- Shinde, S., Andrew, G., et al. The Impact of a Lay Counsellor Led Collaborative Care Intervention for Common Mental Disorders in Public and Private Primary Care: A Qualitative Evaluation Nested in the MANAS Trial in Goa, India, *Social Science and Medicine* 88 (2013), 48-55.

**Current Research activities / Projects:** Developing short courses at IIPH-H



**SANA QAMAR**  
23 MPH 01



**KAMERA  
SAIRAKSHITHA**  
23 MPH 02



**NAGARJUNAKONDA  
GAYATHRI**  
23 MPH 03



**JUVERIYA BEGUM**  
23 MPH 04



**SANNALA NANDINI**  
23 MPH 05



**KJ RAMYA**  
23 MPH 06



**UNAISA**  
23 MPH 07



**SHANKARI RAMEH  
SUMAN**  
23 MPH 08



**BYRI ANUSHA**  
23 MPH 09



**THIPPARAPU HARI  
CHANDANA**  
23 MPH 10



**GADDAPATI JEEVAN  
KUMAR**  
23 MPH 11



**PATHLAVATH RAJU**  
23 MPH 12



**KOMMU  
DHAMODAR**  
23 MPH 13



**YAMA ANIL**  
23 MPH 14



**BHUKYA KRISHNA**  
23 MPH 15



**AAYUSHI JAISWAL**  
23 MPH 16



**KONDETI SAI  
SOWMYA**  
23 MPH 17



**NAMALA DAMODAR  
RAO**  
23 MPH 18



**KONYALA SOWMYA**  
23 MPH 19



**VELADANDI  
LIKHITHA**  
23 MPH 20



**ZULEKHA  
TABASSUM**  
23 MPH 21



**ASHWINI J**  
23 MPH 22



**GUDETI VEENA**  
23 MPH 23



**GANAPURAM  
SUNIL KUMAR**  
23 MPH 24



**GADPALE AKHILA**  
23 MPH 25



**VALLAMDAS  
CHAITHANYA**  
23 MPH 26



**MEESALA SUMITH  
RAO**  
23 MPH 27



**KURAPATI KOMAL  
CHAITHANYA**  
23 MPH 28



**CHITTARI  
PRASHANTH**  
23 MPH 29



**CHADALAVADA  
BUELAH MONIKA**  
23 MPH 30



**THOLEM PRIYANKA**  
23 MPH 31



**PULUMAMIDI  
VEERESH**  
23 MPH 32





JAMEELA  
23 MPH 33



ARIGELA CHANDRESH  
23 MPH 34



THRIDANDAPANI SRIKARI  
23 MPH 35



PATHAPATI  
CHANDRAHASA  
23 MPH 36



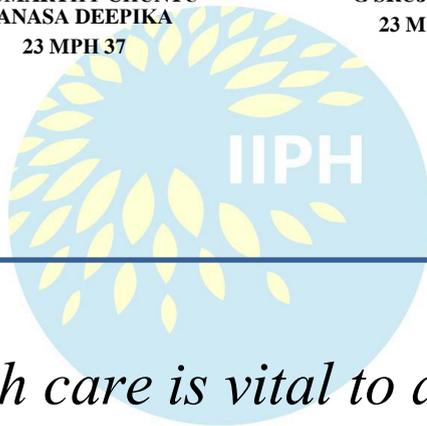
DIGUMARTHY CHUNTU  
MANASA DEEPIKA  
23 MPH 37



G SRUJANA SAI  
23 MPH 38



INDRAJIT BATTACHARYA  
23 MPH 39



INDIAN  
INSTITUTE  
of PUBLIC  
HEALTH

HYDERABAD

*“Health care is vital to all of us some of the time,  
but public health is vital to all of us all of the time”*

**-C. Everett Koop**

**On the Cover:** In 2020, the Directorate of Public Health & Family Welfare, Government of Telangana drafted the Indian Institute of Public Health Hyderabad to provide support to strengthen surveillance and control measures as a part of the COVID-19 containment plan. A team of 42 students pursuing MPH were deputed to take active part in the Covid19 containment program. The faculty and students worked closely with District Medical and Health Officers in 11 different districts of Telangana including Hyderabad, Ranga Reddy, Medchal, Suryapet, Bhupalapalli, Jogulamba Gadwal, Nagarakurnool, Karimnagar, Warangal Urban, Peddapally, Mancherial and Vikarabad. IIPH Hyderabad volunteer team was pressed into tasks such as fever survey, epidemiological mapping, assistance in data entry and analysis of the epidemiological data being collected with the field, monitoring of the community based sanitation, etc. Some students were also included as a part of special taskforce at district collectors’ office at Ranga Reddy district.