PHFI INSTITUTE of PUBLIC HEALTH SCIENCES

Hyderabad | Bhubaneswar | Bengaluru

CLINICAL EPIDEMIOLOGY

MARCH 9 - 12 , 2026 | IN PERSON

SHORT COURSE FOR
RESEARCHERS, HEALTH AND ALLIED SECTOR PROFESSIONALS, PROFESSIONALS WORKING IN HEALTH TECHNOLOGY ASSESSMENT, EVIDENCE SYNTHESIS,CLINICAL TRIAL INDUSTRIES AND PHARMACOVIGILANCE AND BIOSTATISTICIANS

PHFI Institute of Public Heath Sciences (Deemed to be University)

Background

The burgeoning field of epidemiology can mainly be divided into population epidemiology (with a predominant focus on general population) and clinical epidemiology (individualistic approach). While population epidemiology deals with disease occurrence and reasons for this variation, clinical epidemiology focuses on the variation of clinical prognosis and the reasons for this variation. Clinical prognosis is heavily dependent on diagnosis and treatment. "Clinical epidemiology applies epidemiological methods to individual patients and clinical care,focusing on diagnosis, prognosis, treatment, and prevention,essentially bridging public health research with daily medical practice to improve patient outcomes through evidence-based decisions" [1-4].It aids clinicians to understand risk, evaluate treatments, develop prediction tools, and implement guidelines for better care[1].The larger purpose of clinical epidemiology is primarily to develop epidemiologically sound clinical guidelines and standards for diagnosis, disease progression, prognosis, treatment and prevention.[1-4]

Reference for background section

Trainee profiles

- Research professionals/interested doctors working in private and government hospitals
- Research professionals working in ICMR institutes, NGOs, CSR Foundations
- Epidemiologists, Government Doctors working in primary/secondary/tertiary/ medical colleges; Community Medicine specialists; healthcare professionals working in the private sector; Public Health cadre in state/central organisations
- Faculty members working in govt and private medical colleges
- Professionals working in Health Technology assessment
- Data Scientist dealing with healthcare data and biostatisticians
- Professionals working in evidence synthesis and real world evidence
- Health and Allied sector professionals with work experience of at least 2 years
- Professionals working in Clinical trial industries
- Pharmaceutical industry - Medical, pharmacovigilance and medico marketing teams Audience

Course Objectives

1. To apply evidence-based medicine in clinical decision making
2. To understand and be able to critically evaluate bias and confounding in study designs
3. To understand clinical trial designs and be able evaluate clinical trial outcomes
4. To critically appraise and learn to evaluate the accuracy, effectiveness and yield of screening / diagnostic tests
5. To evaluate cost effectiveness of treatment and preventive interventions in clinical practice
6. To assess quality improvement interventions and outcome measurements in clinical practice

Course contents

- Evidence based medicine - Critical appraisal
- Interpretation of Systematic Reviews & Meta-Analysis
- Clinical decision making
- Evaluating biases in study designs (cohort, case-control, cross-sectional, and Randomized Controlled Trials)
- Risk factors – risk assessments
- Clinical trial outcomes
- Bias, Chance & Confounding
- Conceptual clarity on NNT (Number Needed to Treat) and NNH (Number
- Needed to Harm)
- Assessing the accuracy (sensitivity, specificity) of diagnostic tests
- Evaluating effectiveness of interventions and preventive strategies
- Analysing costs and benefits of healthcare interventions
- Testing quality improvement interventions and Outcome measurements

Evaluation

Theoretical and skill-based assessment in the form of Group Activities and Objective type exams

Course fee

Students/Research Staff: INR 6000
Faculty/Industry Person: INR 10,000
(excluding accommodation)

Limited number of seats

For further details visit the website :
www.phfiiphs.ac.in

PHFI Institute of Public Health Sciences
(Deemed to be University), Hyderabad,
Survey No 384, Towards Himayatsagar Main Road,
Near Outer Ring Road Exit No: 17,
Rajendranagar, Hyderabad - 500030
Telangana, India.

Phone: 040 24006000 / 7207043322

E-mail: shortcourses@iiphh.org

Course instructors

Dr. Raghupathy Anchala

MBBS (AFMC), DTCD, MPH (GSPH, Pittsburgh, USA), PhD (Cambridge, UK)
Dean Academics
Professor of Epidemiology
PHFI – Institute of Public Health Sciences University

Dr. Raghu is a Public Health and Primary Care expert and a Chest Physician with a passionate interest in teaching sound epidemiological concepts/methods; research methods; evidence based medicine; and program evaluation concepts to healthcare providers, students and public health practitioners.He has a proven track record in clinical epidemiology,implementation and operational research. Adept in Program Management and establishing industry and academia collaborations, he has been instrumental in driving the academic programs at PHFI–Institute of Public Health Sciences University and placement of numerous students in various NGOs, government health systems,hospitals and CSR Foundations.
His current research revolves around clinical decision support systems for people suffering with NCDs at primary care level;operational/ implementation research in Tuberculosis; multimorbid NCDs in urban slums and rural areas;and cascade of care pathways for people suffering from hypertension and diabetes.

Dr. Sirshendu Chaudhuri
Associate Professor,
PHFI – Institute of Public Health Sciences University

Dr.Chaudhuri is a trained Epidemiologist currently working in infectious disease epidemiology, prediction modelling in infectious diseases;one health under the Centre for Infectious Diseases and Pandemic Preparedness at the PHFI Institute of Public Health Sciences (Deemed to be University). He has completed his MD in Community Medicine from the prestigious Christian Medical College,Vellore; Diploma in Public Health from the All-India Institute of Hygiene and Public Health.Previously he has served institutions like ICMR National Institute of Epidemiology, Christian Medical College,Vellore and Government of West Bengal. His other areas of research interests include-Disease surveillance, core Epidemiology;research methodology, capacity building in Public Health,big data analysis, and systematic review and meta-analysis (SRMA). He has worked with various clinical groups in the areas of gall bladder cancer, ophthalmology, HIV, mental health, and diabetes for evidence generation and decision making. He is serving as a senior GBD collaborator, thus contributing his role in evidence generation and decision making globally. He has over 80 publications in national and international journals including 'The Lancet'.

Dr.Rajan Shukla

Professor and Dean Public health practice and Community Engagement -PHFI – Institute of Public Health Sciences University

Dr. Shukla has over 30 years of experience, spreading over clinical care, National health program management and evaluation, Health Insurance, teaching and training, Health system strengthening, and Public Health surveillance. He specializes in designing, implementing and evaluating integrated, multi-sectoral, health programs for strengthening health systems. His expertise is in Health Systems, Health Economics and Health Policy Analysis. Currently, he is PI for the ICMR HTAIn regional resource centre and also leads the advanced collaboration for inclusive Early Childhood development.

Dr.Nirupama AY,
Assistant Professor, PHFI – Institute of Public Health Sciences University

Dr. Nirupama is an academician, public health researcher and clinician-turned epidemiologist with an MD in Community Medicine, working at the interface of clinical epidemiology and public health. Experienced in non-communicable diseases, adolescent health, and health equity, with active involvement in research, training, and capacity building. Engaged in national and multi-state initiatives focused on evidence generation, diagnostic and intervention evaluation, and translating clinical and population-level data into policy-relevant, evidence-based public health practice.

Dr.Varun Agiwal
Assistant Professor,
PHFI – Institute of Public Health Sciences University

Dr. Varun Agiwal has expertise in biostatistics, big data analytics, and predictive modeling. He holds a Ph.D. (Statistics) from the Central University of Rajasthan and has over 80 published research articles. He is proficient in a variety of statistical tools, including R, STATA, Matlab, SPSS, and MS-Excel. He has significant teaching experience and has worked on numerous national and international projects. He is engaged in various training and mentoring sessions.

Application form

Last date to apply : 24 February, 2026

Accommodation not included,
assistance can be provided in suggesting nearby options