

Workshop Series 2020 – 21

Multilevel Modeling in Health Research

May 18 -22, 2020

(Last date of registration: May 4, 2020)

Course Director: **Prof. Sanjay Zodpey, Director**

Course Coordinator: **Dr. Niveditha Devasenapathy, Associate Professor**



Training Venue:

Indian Institute of Public Health- Delhi

Public Health Foundation of India

Plot 47, Sector 44, Institutional area, Near HUDA City Centre metro station, Gurgaon-122002

Haryana, India

Key Contact person: Ms Tanuja Bhandari, Assistant Manager – Trainings

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About the workshop

Individual's health and behavioural outcomes are dependent on several factors arising not just from the individual self but also from surrounding contexts like family, neighbourhood, workplace, social organizations and health care facilities. Only multilevel research can examine the effects of one factor at one level while controlling for potential confounding at another level or examine the interactions among factors situated at different levels. Multilevel modeling (MLM) techniques are designed to explore and analyse data that have hierarchical or clustered structure which is very common in data collected in the biological and social sciences.

This five day workshop aims to impart basic understanding in the concept behind multilevel models, formulate questions that can be answered by these models, build a model for a given research question and interpret statistical outputs. The workshop will consist of lectures, discussion of case studies and hands on Stata 15 practice sessions using example datasets. This workshop is suitable for researchers of public health, clinical care, social and behavioral sciences. This workshop is at intermediate to advanced level, hence participants applying for this workshop are expected to have a strong hold on basic statistics and regression analysis using any statistical software package preferably Stata.

Registration Fee

Indian National: 12500 INR per participant

Foreign National: 25000 INR per participant

The registration fee includes course kit, lunch and snacks. Please note that the travel, boarding and lodging expenses will be borne by the participants themselves. However, the organizers will be able to provide a list of hotels or guest houses nearby the institute upon request. The registrations will be confirmed first come first serve basis.

The seats are limited therefore, registrations will be confirmed on first come first serve basis.

Course Contents

- Review of standard linear and logistic regression models
- Recognize hierarchical structures in data
- Account for clustering using
 - Robust variance method
 - Generalized Estimating Equation method (GEE)
 - Random Effect Methods (REM)
- Use of random effects to explore individual variation in outcomes
- Analysis of Longitudinal data/ Repeated measurements
- Methods to explore cross level interactions
- Interpretation and reporting of fixed and random effects

About the faculty

Dr. Niveditha Devasenapathy, Associate Professor is a medical doctor by training and is a full-time faculty at the institute. She has a formal degree in clinical trials and received training in advanced epidemiology and applied bio-statistics. She has around 14 years of experience in the field of health research and applied statistics. She is involved in design and conduct of in-house academic programs in health research and has the experience of having conducted several workshops for health professionals of diverse background.

Who should attend?

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How to apply?

Interested participants may email their completed registration form at trainings@iiphd.org and submit the fee by E-transfer or by Demand Draft in favor of "Public Health Foundation of India" payable Delhi and dispatch to the key contact person. **Bank details for E-transfer will be shared upon request. We do not accept cash.**

International participants are requested to submit the fee **only by E-transfer.**

Disclaimer: In case of cancellation of the workshop due to any unforeseen circumstances like natural calamities, imposition of curfew declared by government, any emergency situation at the institute or any medical emergency of the workshop teaching staff, the full registration fee shall be refunded to the candidates. However, other costs like travel bookings and stay arrangements incurred by the participant shall not be borne by the institute.