

Workshop Series 2019 – 20

Sample Size Estimation and Sampling Techniques

January 28 -31, 2020 (Tuesday - Friday)

(Last date of registration: January 14, 2020)

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

Course Coordinator: **Dr. Ranjana Singh, Associate Professor and
Dr. Tanica Lyngdoh, Additional 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 – Program (Trainings)

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About the workshop

Sample size estimation is one of the key activities undertaken while designing any research study. An adequate estimate (not less and not more) of sample size is important for ethical, scientific and logistic reasons. This workshop will introduce the statistical concept behind sample size estimation and go on to have practical exercises for sample size calculation of various study designs and outcome variables.

Appropriate sampling techniques are essential to avoid selection bias and improve generalizability of study findings. In this workshop various sampling techniques including randomization methods for experimental designs will be covered with discussions on the advantages and disadvantages of each method.

At the end of the workshop the participants will be able to decide on the appropriate sample size calculation method for the given study design, appreciate the effect of assumptions on sample size calculation and choose the appropriate sampling technique given the sample size.

Registration Fee

Indian National: 10000 INR per participant

Foreign National: 20000 INR per participant

The registration fee includes course kit, lunch and snacks. Please note that the participants will have to bear their own travel, boarding and lodging expenses. However, the organizers will be able to provide a list of hotels or guest houses nearby the institute upon request.

Who should attend?

This workshop is ideal for physicians, medical students, clinical and public health researchers, study coordinators, project managers, medical writers, data managers, pharmaceutical scientists, statisticians, and those working in the health services.

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.

Contents

- Statistical principles for sample size calculation
- Relating study design and analysis with sample size calculation
- Using "nMaster" software for sample size calculation
- Sampling techniques
 - o Probability sampling methods
 - o Calculation of sampling weights
 - Non Probability methods.

About the faculty

Dr Ranjana Singh, Associate Professor is a full-time faculty at the institute with formal training in Statistics, Population studies and Biostatistics. She has around 10 years of experience in the field of health research and applied statistics. Dr Singh is extensively involved in teaching in all in-house and online eCourse academic programs and workshops at the institute. Apart from substantial teaching, she is also engaged in few of the research projects in the field of maternal and child health as a statistician.

Dr Tanica Lyngdoh, MD (Community Medicine), MSc. (Epidemiology), PhD (Epidemiology), Additional Professor. Tanica completed her graduation from Lady Hardinge Medical College, New Delhi and has an MD in Community Medicine from University College of Medical Sciences, New Delhi. She further specialized in Epidemiology from the London School of Hygiene and Tropical Medicine (LSHTM), UK as an external student. She completed her PhD from the University of Lausanne, Switzerland in 2013. Prior to her PhD, she has several years of experience working in a large population-based project in collaboration with the LSHTM. Currently, she works very closely with state governments on capacity building and health systems strengthening. Her areas of interest include cardiovascular risks and diseases, statistical methods, applied statistics, metabolic abnormalities, life-course epidemiology, genetic epidemiology, clinical research design and household cohort studies.