

**ONLINE WORKSHOP
ON
SAMPLE SIZE DETERMINATION & POWER
ANALYSIS IN HEALTH RESEARCH**

(May 11th -13th, 2024)

Organized by

**Resilient Foundation For Academic Innovation & Scientific
Research, New Delhi**

(Registered with NITI Aayog, Govt. of India)

ONLINE WORKSHOP ON SAMPLE SIZE DETERMINATION & POWER ANALYSIS IN HEALTH RESEARCH

(May 11th -13th , 2024)

About Workshop:

Sample size calculation is very important part for any health research due to ethical, scientific and logistic reasons. This workshop aims to introduce importance of computing sample size in health research as well as provide practical exercise to compute sample size for various study designs, variables, objectives and hypotheses. The workshop concentrates on the concepts behind various formula for sample size, the execution of each of these formula using a free on-line software like **Statulator** and finally the scientific way of reporting the computed sample size. At the end of this workshop, the participants are expected to be confident enough to compute sample size for various types of study designs in health research.

About Resilient Foundation :

Resilient Foundation for Academic Innovation & Scientific Research, New Delhi is a not-for-profit organization registered under section 8 of the companies' act 2013 India. The organization is established having primary aim to promote academic & research activities through knowledge sharing, innovation, skill development and capacity building in various sectors like academia, industry and government for betterment of society. For more details please visit

<https://theresilientfoundation.org/>

Objective of the Workshop:

During the COVID-19 pandemic, the virtual academic engagement is resultant more productive and gives a better outcome. Keeping in view of the immense benefits of the online workshop in the present educational set-up, **Resilient Foundation for Academic Innovation & Scientific Research, New Delhi** is pleased to offer **Online Workshop on Sample Size Determination and Power Analysis in Health Research**. for the faculty members, research scholars, health professionals, industry personals, researchers and UG/PG students of medical colleges in the country from **11th -13th May, 2024**. The workshop aims to bring together faculties, health professionals and researchers to exchange and share their experiences and research results on all aspects of sample size calculation & power analysis in health research.

The expected outcome of the workshop:

At the end of workshop, participants would be able to:

- Understand the concepts behind various formulas of sample size
- Calculate the sample size for different study designs
- Use online free software like Statulator for sample size calculation
- Understand to report the calculated sample size

THE COURSE CONTENT OF THE WORKSHOP

Day	Topics Covered	Date & time
Day-1	<ul style="list-style-type: none"> ❖ Understanding of statistical Inference and importance of sample size in the study ❖ Brief about normal distribution, sampling distribution, confidence interval, study designs ❖ Concept of margin of error, variability, and estimating sample size for prevalence, mean, correlation, and sensitivity/specificity ❖ Introduction of online calculator and practical examples 	<p>Date: 11th May, 2024 Time: 6:30PM-08:30 PM</p>
Day-2	<ul style="list-style-type: none"> ❖ Adjustment needed in computation of sample size for estimation and practical examples using online calculators ❖ Hypothesis testing, brief about errors, and other key factors ❖ Sample size determination in hypothesis testing for one sample and two sample mean and proportion ❖ Practical examples using online calculator 	<p>Date: 12th May, 2024 Time: 06:30 PM-08:30 PM</p>
Day-3	<ul style="list-style-type: none"> ❖ Sample size determination under different study designs: Cohort, Case control design, diagnostic studies ❖ Concept of paired study design ❖ Sample size determination under paired study design ❖ Reporting of sample size paragraphs ❖ Practical examples using online calculators ❖ Discussion and queries 	<p>Date: 13th May, 2024 Time: 06:30 PM-08:30 PM</p>

Methodology

- Online live classes by eminent experts from reputed organizations of the country
- Participatory discussion with Q&A
- Demonstrations
- Hands on Session on free software like Statulator
- Study materials such as ppt & recordings of the all sessions

Nature of Participants

Faculties, health professionals , medical students, post-doctoral fellows, industry professionals , UG, PG students of medical colleges and relevant areas etc.

Duration & Time

Three Days (11th -13th May, 2024)

Timing (02 Hours): 06:30 PM-08:30 PM

Registration Process:

Step-I: Fee Payment:

1. Registration Fee for all participants = Rs. 300 /-

Registration fee will be deposited through NEFT/RTGS/Net Banking in the given bank account:

Account Name	Resilient Foundation for Academic Innovation and Scientific Research
Branch	Janakpuri, C-3, New Delhi
Account Number	052288700000196
IFSC Code	YESB0000522

Step-II After payment, please make registration through the given google form (Please fill the details of your payment)

Registration Form (for all participants)

<https://forms.gle/CLkniEJ2MejLu3oK7>

Step-III: After submitting google form, you will get confirmation on your registered email from organizers in which link for joining official what's app group will be shared.

Workshop Rule

Highlights of the Workshop-

1. Registered participants will get e-certificates
2. Study material in the form of ppt and video recording of all sessions will be provided to all registered participants.
3. **Workshop** by Subject Experts from reputed Institute like AIIMS, New Delhi
4. **Workshop** will be on the Zoom meeting platform.

For further queries, please mail us at : resilientfoundation123@gmail.com
or call at +91-8840112492.

Last Date of Registration: 10th May, 2024

Our Resource Person



Dr. RAJEEV KUMAR MALHOTRA

Senior Scientist (Statistics), Dr BRA IRCH, AIIMS Delhi

Educational Qualification:

Ph.D. (Biostatistics) from the Department of Biostatistics and Medical Informatics, UCMS under the University Department of Community Medicine, Faculty of Medical Sciences, Delhi University. 2013

Research and Teaching Experience:

More than 25 years of research experience in guiding and statistical analysis of faculty PGs, and PhD students starting from planning to study to the interpretation of study results. Published 1 research articles in National and International journals, wrote two chapters and co-author of a book "Medical Biostatistics". Co-supervisor in the MD thesis for more than 20 students. Co-investigator in various projects. Bio-statistical lectures for radiotherapy MD students and in academic session of the Dr BRA IRCH, AIIMS, Delhi.

Awards

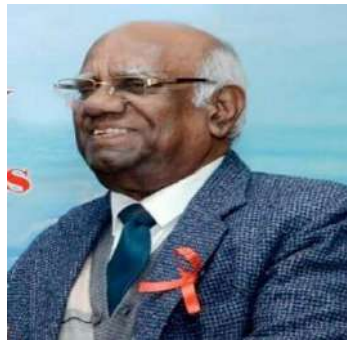
The Prof B.G. Prasad Award awarded by the Indian Society of Medical Statistics for the best-published paper in the year 2020. Indian Paediatric Journal Awarded the highest citation award to our paper titled "Receiver Operating Characteristic (ROC) Curve for Medical Research" published in 2011 at Noida on 8th December 2019.

Dr. Abhaya Indrayan Award for recognition of paper titled "Receiver Operating Characteristic (ROC) Curve for Medical Research" received at the Annual Conference of the National Academy of Medical Sciences organized at Mahatma Gandhi Medical College & Research Institute, Pondicherry on 26th to 28th October 2018

Area of Interest:

Generalized linear mixed model, Cancer Epidemiology, Generalized estimating equation (GEE), Survival Analysis, Sample size determination, Longitudinal data analysis, Bootstrapping, Meta-analysis, and Diagnostic methods.

Organising Team of the Workshop



Patron

Prof. (Dr.) Padam Singh
Former Additional Director
General
Indian Council of Medical
Research (ICMR), New Delhi

Co - Patrons



Dr. Ashoo Grover
Senior Scientist
ICMR, New Delhi



Dr. Smita Asthana
Senior Scientist
ICMR- NICPR, Noida



Prof. Karan P. Singh
School of Medicine, University of
Texas, USA



Mrs. Richa Singh
Director
Resilient Foundation for Academic
Innovation & Scientific Research,
New Delhi

Workshop Coordinators



Dr. Harlokesh Narayan Yadav
Additional Professor
Dept. of Pharmacology
AIIMS, New Delhi
(Convenor)



Dr. Sushil Kumar Shukla
Professor
Uttar Pradesh University
of Medical Sciences, Saifai
Etawah, U. P.
(Convenor)



Dr. Meenu Goel
Assistant Professor
Mata Sundri College for Women
University of Delhi(
(Organizing Secretary)



Dr. D.K. Yadav
Assistant Professor
NIHF, New Delhi
Nodal Officer, Mission Karmayogi
MoHFW, Govt. of India
(Organizing Secretary)



Dr. Gayatri Vishwakarma
Principal Scientist
ZYDUS LIFESCIENCES LTD
Zydus Research Centre
Ahmedabad, Gujarat, India



Dr. Prangyada Reecha Joshi
Assistant Professor
SCB Medical College and
Hospital, Cuttack, Odisha



Dr. Neha Singh
(Sr. Scientist) Virology
lab, Dept. of
Microbiology
Pt. JNM, Medical
College, Raipur, C.G



Dr. Pushpanjali Ojha
Assistant Professor
(Trauma Pathology)
RIMS, Ranchi, Jharkhand,
India