



VALLABHBHAI PATEL CHEST INSTITUTE (VPCI)

University of Delhi, Delhi, India

Organizes

NATIONAL WORKSHOP ON BIOMEDICAL RESEARCH METHODS

ONLINE MODE

Date

September 2nd to 5th, 2021

Organizing Chairman

Prof. Rajkumar,
Director, VPCI

Organizing Secretary

Dr. Ravishankar,
Dept. of Biostatistics,
VPCI

Joint Organizing Secretary

Dr. Nitin Goel,
Dept. of Respiratory Medicine,
VPCI

Joint Organizing Secretary

Dr. Mandira Varma Basil,
Dept. of Microbiology,
VPCI



ABOUT THE INSTITUTE

The Vallabhbhai Patel Chest Institute (VPCI) is a unique postgraduate medical institution devoted to research, teaching and patient care in the field of chest diseases. It is a University of Delhi maintained institution and is funded entirely by Ministry of Health and Family Welfare, Government of India. The Institute is ideally located in the heart of the main campus of the University of Delhi, providing the requisite academic environment. The Institute fulfills the national need for providing relief to large number of patients in the community suffering from Chest Diseases. It has eminently discharged its role and has earned a unique place in the field of Chest Medicine. The main objectives of VPCI are to conduct research in Basic and Critical Care Medicine and Allied disciplines, to develop new diagnostic technologies and disseminate scientific knowledge related to these areas to personnel of other institutions in the country and to provide specialized investigative and management services to patients.

ABOUT THE WORKSHOP

A study which involves a rightful study design, sample size calculation, sampling method, data collection, data analysis, interpretation and reporting of results becomes more impactful and achieves higher recognition. It is important for any researcher aiming for a high quality research in Biomedical Sciences to have a clear understanding of key concepts of Epidemiology, Biostatistics and Research Methodology. The National Workshop on Biomedical Research Methods which is being organized by Vallabhbhai Patel Chest Institute (VPCI) covers fundamental topics pertaining to each of these three domains. The workshop is delivered on a virtual platform which, makes it convenient for participants to attend from any part of the country. Interactive online sessions will be delivered by eminent faculty from VPCI and other reputed institutions.

TARGET AUDIENCE

The workshop is open to graduates/post-graduates/PhD scholars/professionals of any of the disciplines concerning to Biomedical Sciences.

DATE AND TIME

The workshop will be conducted during 2nd to 5th September 2021 on a virtual platform.

2 nd and 3 rd September, 2021	2.00 PM to 6.00 PM
4 th and 5 th September, 2021	10.00 AM to 2.00 PM

COURSE CONTENT

The National Workshop on Biomedical Research Methods covers important topics pertaining to the following three domains;

1. Biostatistics:

- » Types of variables and scales of measurement.
- » Summarization of data – measures of central tendency and dispersion.
- » Introduction to sampling methods – probability and nonprobability sampling methods.
- » Introduction to statistical inference – estimation and hypothesis testing.
- » Overview of commonly used parametric and nonparametric tests.
- » Overview of commonly used statistical tests for categorical data.
- » Correlation and Regression – Pearson's & Spearman's correlation coefficient, Simple and Multiple linear regression, Logistic regression.
- » Measures of diagnostic accuracy – sensitivity, specificity, positive predictive value, negative predictive value, Receiver Operating Characteristic (ROC) curve.
- » Introduction to sample size computation – sample size for estimation of mean & proportion, sample size computation for comparison of two means & proportions.
- » Introduction to Survival analysis – Kaplan-Meier curve, Cox proportional hazards model.

2. Epidemiology and Research designs:

- » Introduction to Epidemiological study designs – descriptive and observational study designs
- » Descriptive study designs – case reports, case series, survey.
- » Analytical study designs – cross-sectional, case-control, cohort.
- » Randomized controlled trial (RCT).
- » Introduction to systematic reviews and meta-analysis.

3. Research Methodology:

- » Framing a research question.
- » Review of literature – literature search, keywords, medical subheadings.
- » Preparation of research proposal.
- » Development of questionnaires, validity and reliability assessment.
- » Preparing a scientific manuscript for publication.
- » Reference management using Mendeley software.

TENTATIVE PROGRAM SCHEDULE

Day 1: 02/09/2021	
1.30 to 2.00 PM	Inauguration of the workshop
2.00 PM to 2.30 PM	Types of variables and scales of measurement
2.30 PM to 3.00 PM	Summarization of data – measures of central tendency and dispersion
3.00 PM to 3.45 PM	Introduction to sampling methods – probability and nonprobability sampling methods
3.45 PM to 5.00 PM	Introduction to statistical inference – estimation and hypothesis testing
5.00 PM to 6.00 PM	Introduction to Epidemiological study designs – descriptive and observational study designs, Descriptive study designs – case report, case series, survey
Day 2: 03/09/2021	
2.00 PM to 3.00 PM	Overview of commonly used parametric and nonparametric tests Overview of commonly used statistical tests for categorical data
3.00 PM to 4.00 PM	Correlation and Regression – Pearson's & Spearman's correlation coefficient, Simple and Multiple linear regression, Logistic regression
4.00 PM to 5.00 PM	Analytical study designs – cross-sectional, case-control, cohort
5.00 PM to 6.00 PM	Measures of diagnostic accuracy – sensitivity, specificity, positive predictive value, negative predictive value, Receiver Operating Characteristic (ROC) curve
Day 3: 04/09/2021	
10.00 AM to 11.00 AM	Introduction to Survival analysis – Kaplan-Meier curve, Cox proportional hazards model
11.00 AM to 12.00 PM	Randomized controlled trial (RCT)
12.00 PM to 1.00 PM	Introduction to sample size computation – sample size for estimation of mean & proportion, sample size computation for comparison of two means & proportions
1.00 PM to 2.00 PM	Introduction to systematic reviews and meta-analysis
Day 4: 05/09/2021	
10.00 AM to 10.30 AM	Framing a research question
10.30 AM to 11.30 AM	Review of literature – literature search, keywords, medical subheadings
11.30 AM to 12.00 PM	Preparation of research proposal
12.00 PM to 12.30 PM	Development of questionnaires, validity and reliability assessment
12.30 PM to 1.00 PM	Preparing a scientific manuscript for publication
1.00 PM to 2.00 PM	Reference management using Mendeley software

DISTINGUISHED FACULTY

- » Prof. Rajkumar, Director, VPCI, Delhi.
- » Dr. Mandira Basil Varma, Professor, Dept. of Microbiology, VPCI, Delhi.
- » Dr. Nitin Goel, Assistant Professor, Dept. of Respiratory Medicine, VPCI, Delhi.
- » Dr. Ravishankar N, Assistant Professor, Dept. of Biostatistics, VPCI, Delhi.
- » Dr. Uma Tyagi, Librarian, VPCI, Delhi.
- » Dr. Siddharth Raj Yadav, Assistant Professor, Dept. of Respiratory Medicine, VPCI, Delhi.
- » Dr. Ajita Kapur, Assistant Professor, Dept. of Pharmacology, VPCI, Delhi.
- » Dr. Jayeeta Bhadra, Assistant Professor, Dept. of Biochemistry, VPCI, Delhi
- » Dr. N. Sreekumaran Nair, Professor and Head, Dept. of Biostatistics, JIPMER, Puducherry.
- » Dr. Binu VS, Assistant Professor, Dept. of Biostatistics, NIMHANS, Bengaluru.
- » Mrs. Nilima, Scientist 1, Dept. of Biostatistics, AIIMS, Delhi.
- » Dr. Vaman Kulkarni, Assistant Professor, Dept. of Community Medicine, AIIMS, Bibinagar, Telangana.
- » Dr. Ramesh C, Assistant Professor, Dept. of Medical Surgical Nursing, Sri Ramachandra Institute of Higher Education and Research (SRIHER), Chennai.

REGISTRATION FEE AND INTAKE

The registration fee for the workshop is ₹ 500/- per participant, which is non-refundable. Maximum intake for the workshop is 100 participants and the selection is purely based on a first-cum-first-serve basis.

HOW TO REGISTER?

Participants can deposit the registration fee to the following account:

Details of Bank Account for remittance through NEFT/RTGS	
Name of A/C holder	Director, VPCI
A/c No	10851300976
Name of Bank & Branch	SBI, VP CHEST INSTITUTE, DELHI
IFSC code	SBIN0010435

After depositing the registration amount, the participants should send the following details by e-mail to nwbrm.vpci@gmail.com

Details of the participant	
Name	
Address	
Mobile No.	
Amount transferred through NEFT/RTGS	
Transaction Date	
Transaction / UTR No.	

Last date for registration and sending the registration details is **31/08/2021**

CONTACT

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