



स्वामी राम हिमालयन विश्वविद्यालय
Swami Rama Himalayan University



Workshop on

***Quality Improve - New Paradigm
in Health Research***

17TH – 18TH MAY 2024

Organized by

Department of Community Medicine

&

Department of Biostatistics & Clinical Research

**Swami Rama Himalayan University
Jollygrant, Dehradun, Uttarakhand**

Venue:

***Dunagiri Hall, Rural Development Institute,
Swami Rama Himalayan University,
Jollygrant, Dehradun, Uttarakhand***

Objectives of the workshop

- To develop participants' ability to critically appraise research literature in biostatistics and evaluate the strengths and limitations of study designs, statistical methods, and data interpretation.
- To help participants interpret statistical findings accurately and draw meaningful conclusions from research data, emphasizing the importance of statistical significance, effect size, and confidence intervals.
- To enable participants to apply statistical techniques to analyze data commonly encountered in biostatistical research, such as clinical trials, epidemiological studies, and public health research.
- To familiarize participants with the basic principles of biostatistics, including the types of data, measures of central tendency and dispersion, probability distributions, hypothesis testing, and statistical inference.
- To provide participants with a clear understanding of the principles and concepts involved in research methodology, including the various steps involved in designing and conducting research studies.

Contents of the Workshop

- Variables: relationship & measurement
- Framing Research questions
- Searching of Literature
- Observational study design
- Fundamentals of Interventional Study
- Concept of Bias, confounding and role of chance
- Testing of Hypothesis
- Inferential statistics'
- Multivariable Analysis
- Sample size determination

About the Resource Persons:



Dr. R.M Pandey
Former Professor & Head,
Department of Biostatistics,
AIIMS, New Delhi

Dr. R. M. Pandey, former Professor and Head, Department of Biostatistics, All India Institute of Medical Sciences (AIIMS), New Delhi. In addition to the consultancy given to the AIIMS Faculty, research scientists, students, and the faculty scientific staff, he served as an expert/advisor/consultant to many international and national research institutions, medical colleges, and universities. His expertise lies in providing consultation to, namely, Ministry of Health &

Family Welfare, International Institute for Population Sciences, Indian Council for Medical Research, Department of Biotechnology (DBT), Government of India, the SEARO, and World Health Organization (WHO). He had the following honors and significant events. Ethics Committee: Chairperson of Indian Institute of Public Health (under PHFI), Delhi; Member: United Nations Regional Centre for Biotechnology, under DBT, Government of India; Coordinator: Mandatory 5 days workshop on Research Methodology, Writing, and Communication, for the postgraduate students at the AIIMS; Member: Scientific Advisory Committee of National Institute of Epidemiology (Indian Council of Medical Research [ICMR]), and Regional Medical Research Center (RMRC-ICMR), Government of India; CBR, IISc, Bangalore; National Institute of Medical Statistics, ICMR, New Delhi; Research Advisory Council, BPKIHS, Dharan, Nepal.



Dr. M Jeeva Shankar
Additional Professor,
Department of Pediatrics,
AIIMS, New Delhi

Dr. M Jeeva Sankar, an Additional Professor at AIIMS, New Delhi, is dedicated to advancing newborn health through impactful research and compassionate medical care. With a vision to improve neonatal health in India and globally, Dr. Sankar has led numerous pioneering initiatives in academia, clinical practice, and research. With a robust background spanning from his MD and DM degrees to his extensive experience as a medical officer at the World Health Organization (WHO), Geneva, Dr. Sankar is committed to excellence in both

research and clinical care. His notable achievements include being featured in the top 2% of scientists globally, serving on WHO guideline development groups, and leading multi-million-dollar research programs. Dr. Sankar's contributions extend beyond research, as he actively mentors the next generation of medical professionals and serves as an editorial board member for prestigious journals. Through his relentless dedication and expertise, Dr. Sankar continues to make significant strides in the field of neonatology, ensuring healthier futures for newborns worldwide.

Program Schedule

Day 1

Time	Topic	Faculty
9:00-9:15 AM	Welcome Address and Outline of the workshop	Principal, HIMS, SRHU
9:15-10:00 AM	Variables: relationship & measurement	
10:00- 10:40 AM	Framing research questions	
10:40-10:50 AM	TEA BREAK	
10:50-12:20 PM	Literature searching	Dr. A.K Srivastava
12:20-1:30 PM	Observational studies	
1:30-2:30 PM	Lunch & Networking	
2:30-3:30 PM	Bias, confounding, role of chance	
3:30-4:30 PM	Measures of association	

Day 2

Time	Topic	Faculty
9:00-10:15 AM	Intervention Study	
10:15- 10:25 AM	TEA BREAK	
10:25-11:00 AM	Confidence interval and hypothesis testing	
11:00-11:30 AM	Quality Improvement as an alternative to thesis	Dr. Ashok Deorari
11:30-12:30 PM	Tests of Normality & Parametric Tests	
12:30-1:30 PM	Non-parametric Tests & its applications	
1:30-2:30 PM	Lunch & Networking	
2:30-3:30 PM	Multivariable analysis (linear, logistic, Cox regression)	
3:30-4:30 PM	Sample size determination	

Organizing Team



Chief Patron

Dr. Rajendra Dobhal

Vice Chancellor

Swami Rama Himalayan University

Jollygrant, Dehradun, Uttarakhand



Convenor

Dr. Ashok Deorari

Principal,

**Himalayan Institute of Medical Sciences,
Swami Rama Himalayan University**



Organizing Chairperson

Dr. A.K. Srivastava

Professor & Head

**Department of Community Medicine,
Himalayan Institute of Medical Sciences**



Co-ordinators

Mrs. Akanksha Uniyal

**Department of Biostatistics,
Himalayan Institute of Medical Sciences**



Co-ordinators

Mr. Abhinav Bahuguna

**Department of Biostatistics,
Himalayan Institute of Medical Sciences**