About the Institute

The National Institute of Health & Family Welfare is a premier autonomous Institute, funded by the Ministry of Health and Family Welfare, Government of India. It has kept pace with the new thinking and substantially contributed to the health manpower development in the country.

NIHFW serves as an apex 'technical institute' as well as a 'think tank' to promote national health and family welfare programmes in the country through education and training, research and evaluation, consultancy & advisory services, specialized projects, etc.

The Department of Epidemiology and Department of Statistics and Demography of the institute is organizing an offline training course on **"Application of Biostatistics in Epidemiology and Public Health"**.

Course Coordinating Team

Course Coordinators : Prof. Pushpanjali Swain
Prof. Sanjay Gupta

Course Co-Coordinators: Dr. Rajesh Ranjan
Dr. J. P. Shivdasani
Ms. Bhawna Kathuria

Course Associate : Dr. Vaishali Jaiswal
Dr. Raj Narayan

Details of Submission of Course Fee

There is a course fee of Rs. 5,000/- per participant which can be paid by online banking. The bank details are:

Name of the beneficiary : Director, NIHFW
Bank Name & Branch   : SBI, NIHFW, Munirka,
New Delhi-67
Account No.   : 10932790787
IFSC Code No.   : SBIN0010439
Branch Code No.   : 10439
MICR Code No.   : 110002429

Participants should pay the fee for the course only after they receive an acceptance letter from the institute.

Further Correspondence to be

Ms. Bhawna Kathuria
Course Co-Coordinator
Department of Epidemiology

The National Institute of Health and Family Welfare
Munirka, New Delhi-110 067

Email: epid@nihfw.org

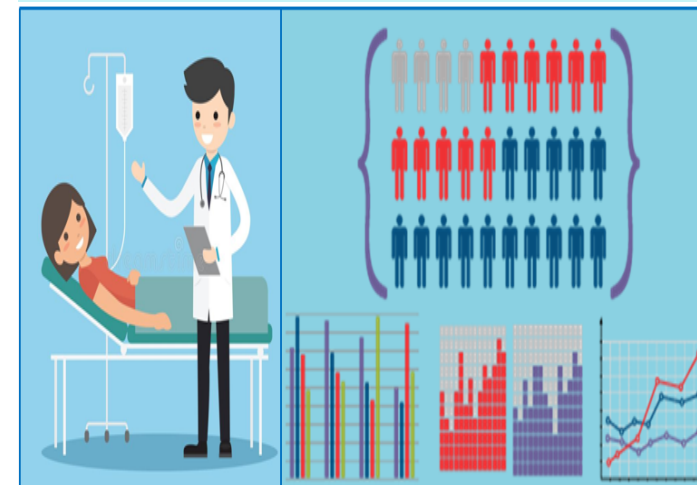**Phone: 011-2616 5959/2 616 6441/**
2618 8485/ 2610 7773
Ext: 373

Fax: 91-11-2610 1623

Training Course on Application of Biostatistics in Epidemiology and Public Health

12th – 16th December, 2022

Department of Epidemiology
and
Department of Statistics & Demography
The National Institute of Health and Family Welfare,
Baba Gangnath Marg, Munirka,
New Delhi - 110067

Phones: 011-26165959/ 26166441/ 26185696/ 26107773
Fax: 91-11-26101623
Website: www.nihfw.org

Introduction

To have a better health care delivery system and health management, the programme managers and academia require evidence which usually comes from research. Research in public health requires an adequate information which comes from quality data and its scientific analysis. Biostatistics is an interdisciplinary scientific field and Biostatisticians develop and apply statistical methods to scientific research in health-related fields, including medicine, epidemiology, and public health etc. The role of the biostatistician is an important one, especially when it comes to designing studies and analyzing data from research problems. Whereas Epidemiologists study the distribution and determinants of health and disease in populations.

Epidemiology and biostatistics both are the cornerstone of public health research and practice. It is very important for program officers, academicians, public health researchers to have basic knowledge and skills of epidemiology and biostatistics and its application.

This training course introduces the health researchers to the quantitative methods that are helpful in public health research and evidence-based public health policy and practice. Statistical and epidemiological concepts will be taught in parallel to promote integration of knowledge across both disciplines.

General Objective

To enhance the knowledge and skills of the health professionals in application of biostatistics in field of epidemiology and public health.

Specific Objectives

This course will prepare the participants:

- To apply basic epidemiological methods in public health settings.
- To describe the biostatistical skills involved in the analysis of health statistics.
- To describe the applications of statistical software in data analysis.

Course Contents

- Introduction to Epidemiology
- Measures of disease occurrence and risk
- Epidemiological Study design- Descriptive, Analytical and Experimental
- Bias in Epidemiological studies and confounding factors
- Surveillance and Screening
- Reliability and validity of screening and diagnostic tests
- Statistical exercises those are applicable in epidemiological studies
- Introduction to Biostatistics in Public Health
- Data Collection- Tools and Techniques
- Data Presentation techniques
- Data summarization
- Sampling technique and sample size estimation
- Introduction to Inferential Statistics and Hypothesis Testing
- Tests of significance
- Correlation and Regression
- Basics of Epi Info

Methodology

The participatory approach will be adopted throughout the course comprising of

- **Lecture cum Discussion**: Each lecture session will be followed by discussion and interaction with participants
- **Case Studies:** Case studies will be discussed
- Hands on training and problem solving exercises.

Duration

5 days (12th—16th December, 2022)
9.30 am - 5.00 pm.

Nature of Participants

The participants will be health professionals working in Medical and Nursing Colleges, SIHFW. Demographers, Epidemiologists, Statisticians and Biostatisticians.

Training Outcome

The course will be helpful in capacity building of the faculty of the medical colleges and other public health personnel to analyze the health statistics in public health research.

Last date for sending nominations

2nd December, 2022