

## About the Institute

The NIHFW, an autonomous organization, under the Ministry of Health and Family Welfare, Government of India, acts as an 'apex technical institute' as well as a 'think tank' for the promotion of health and family welfare programs in the country. The post-graduate education, training, research, evaluation, consultancy and advisory services in the field of health and family welfare have been a major focus of the institute. In order to facilitate continuous upgradation of knowledge and skills of various health personnel across the country, the NIHFW has been conducting training courses in different areas at regular interval. In this endeavor, the Department of Statistics & Demography, NIHFW proposes to conduct an offline training program on 'Sample Size and Power Analysis for Health Professionals' from 7<sup>th</sup> - 9<sup>th</sup> April, 2025.

# Training Course on Sample Size and Power Analysis for Health Professionals

7<sup>th</sup> - 9<sup>th</sup> April, 2025

## **Course Coordinating Team**

Course Coordinator : Dr. Dharmendra Kumar Yadav

Course Co-coordinators: Mr. Subhash Chand: Dr. Raj Narayan

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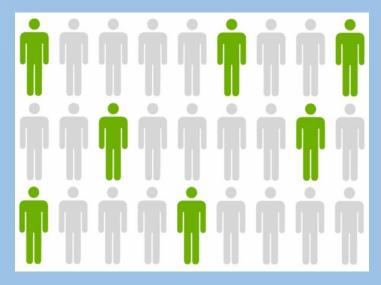
Fax: 91-11-26101623
Web Site: www.nihfw.org

#### **Course Fee**

There is a course fee of Rs. 3000/- per participant which can be paid by only online banking.

Eligible candidates send their nominations on the E-mail: <a href="mailto:sd@nihfw.org">sd@nihfw.org</a>. Required registration fee will be paid by the participants after receiving confirmation by the organizers.

TA/DA of the participants will have to be borne by themselves/ state/ sponsoring organizations.





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### Introduction

The Department of Statistics and Demography (S&D), NIHFW, New Delhi has been conducting the training programmes on Demographic and Statistical methods for the health professionals including faculty of medical colleges. Over the years the feedback given by them indicates that there is a need for conducting a training programme with a special focus on statistical methods and analysis by using standard statistical software such as R/STATA/SPSS etc. Sample size is essential for any health research due to ethical, scientific and logistic reasons.

This training aims to introduce importance of computing sample size in health research as well as provide practical exercises to compute sample size for various study designs, variables, objectives and hypotheses. The training concentrates on the concepts behind various formulas for sample size, the execution of each of these formula using free software's namely G power/ R package, and finally the scientific way of reporting the computed the computed sample size. At the end of this training, the participants are expected to be confident enough to compute sample size for various types of study designs in health research.

## **General Objective**

To orient the participants on sample size calculation and power analysis for health and demographic research.

## **Specific Objectives**

At the end of the training course, the participants would be able to:

- Understand the concepts behind various formulas of sample size
- ✓ Calculate the sample size for different study designs
- ✓ Use the various statistical software for sample size calculation
- Understand to report the calculated sample size

#### **Course Contents**

The course intends to cover topics such as:

- Introduction to sample size calculation in health research
- Introduction to hypothesis tests & confidence intervals for sample size
- Importance of sample size computation
- Sample size for various Research design
- Issues in sample size computations
- Power calculation
- Sample size reporting format

# Methodology

The methodology of the course will comprise of:

- ✓ Lecture
- ✓ Participatory discussion
- ✓ Demonstrations
- ✓ Hands-on training & problem solving exercises and sample size calculation using statistical software.

#### Duration

Three days, Date: 7th - 9th April, 2025.

# **Nature of Participants**

Faculties, Residents from Medical Colleges, Nursing Colleges, SIHFW and Demographers, Statistical officers, Epidemiologist Research scholars/ Health Professionals working from Govt. and Pvt. organisation from anywhere in India are eligible to apply.

## **Last date for Receiving Nomination**

#### 28<sup>th</sup> March, 2025

#### Venue

Computer Centre, The National Institute of Health and Family Welfare, Munirka, New Delhi-110067.