

**Department of Clinical Research
Himalayan Institute of Medical Sciences
Swami Rama Himalayan University**

Guest Lecture Report in Online Mode

Topic: Data Processing and Analysis

Date: 20th March 2026

Venue: Seminar Room, Department of Clinical Research, HIMS, SRHU

Organized by: Department of Clinical Research, HIMS, SRHU

Speaker: Mr Sushant Singh, Co Fonder ClinicalVeda, Hyderabad

No. of Participants: 14

Introduction

A guest lecture on the topic “Data Processing and Analysis” was organized by the Department of Clinical Research, Himalayan Institute of Medical Sciences (HIMS), Swami Rama Himalayan University (SRHU). The session aimed to provide participants with a comprehensive understanding of the methods and techniques involved in handling, processing, and analysing research data, particularly in the context of clinical research and healthcare studies.

Overview of the Topic

The lecture covered essential concepts related to data management, processing, and statistical analysis. The speaker emphasized the importance of accurate data handling in ensuring the reliability and validity of research outcomes. Key aspects such as data collection methods, data cleaning, coding, validation, and storage were discussed in detail. The session also highlighted the role of statistical tools and software in data analysis, including descriptive and inferential statistics. The importance of maintaining data integrity, confidentiality, and compliance with ethical and regulatory guidelines was also emphasized.

Activities and Observations

During the lecture, participants were introduced to the step-by-step process of data handling, starting from raw data collection to final interpretation of results. The speaker explained techniques for data cleaning, handling missing data, and identifying outliers to ensure quality datasets.

Various statistical methods such as measures of central tendency, dispersion, hypothesis testing, and basic regression analysis were discussed. Practical examples were provided to illustrate how data is transformed into meaningful insights in clinical research. The use of statistical software for efficient data analysis was also briefly demonstrated.

The speaker also addressed common challenges in data processing, including data inconsistencies, bias, and errors, along with strategies to minimize them.

Interaction and Learning Outcomes

The session was interactive, with participants actively engaging in discussions and asking questions related to data handling and statistical analysis. The lecture enhanced their understanding of the importance of data accuracy and the role of statistical analysis in evidence-based decision-making. Participants gained insights into how proper data processing contributes to credible research findings.

and supports clinical and regulatory decisions. The session also helped them develop a clearer understanding of the responsibilities of clinical research professionals in managing and analysing data effectively.

Conclusion: The guest lecture on “Data Processing and Analysis” was highly informative and academically enriching. It provided valuable knowledge on the systematic handling and analysis of research data. The session successfully achieved its objectives by strengthening participants’ understanding of data management and statistical analysis, thereby contributing to their academic and professional development in the field of clinical research.

Dr Nikku Yadav
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Mr. Sushant taking a virtual session on Data Processing and Analysis