Introductory course on Research Methodology & Biostatistics

8th-9th January, 2020

The Department of Community Medicine, Hamdard Institute of Medical Sciences and Research (HIMSR) conducted a research methodology workshop titled "**Introductory Course on Research Methodology & Biostatistics**" on 8th and 9th January, 2020. The workshop was conducted in collaboration with National Institute of Medical Statistics and National Institute of Cancer Prevention and Research-Indian Council of Medical Research (ICMR) and Indian Institute of Applied Statistics.

Two eminent faculties from ICMR Dr. Atul Juneja -Scientist E and Dr. Tulsi Adhikari-Scientist E were invited to deliver lectures to the participants. There were 51 participants -1st or 2nd year MBBS students of HIMSR who attended the 2-day workshop conducted at Medical Education Unit Room, 3rd floor, HIMSR.

The main aim of the workshop was to orient undergraduate students with research methodology and give them a basic understanding of study designs, steps involved in conducting a research and data analysis. The workshop also provided hands-on training in designing a research project and deriving some basic descriptive and inferential statistics on Microsoft excel.

The workshop began at 9.00 am on 8th January with a brief Introduction to research methodology and framing of title, objectives and methodology by Prof Rambha Pathak, Professor and Head of Department of Community Medicine HIMSR. Following the introduction, the fundamentals of research methodology and its steps were discussed by Dr Tulsi Adhikari and fundamentals of study designs and their measures were discussed by Dr Atul Juneja. This was followed by Hand-on training where each table was given a hypothetical research scenario and they were asked to discuss it, choose an appropriate study design and formulate the steps in the study. This hands-on training ensured an interactive participation by the delegates and improved their understanding of study designs and steps. The post-lunch session consisted of Fundamental of Statistics, Data, Data Quality & Collection Methods by Dr Tulsi Adhikari and Descriptive Statistics & Data Presentation by Dr Atul Juneja followed by a hands-on session on data presentation.

The second day commenced with a lecture on Ethics in Research by Dr Farzana Islam, Associate Professor, Department of Community Medicine HIMSR. This was followed by a discussion on sampling and sample size by Dr Rashmi Agarwalla, Assistant Professor, Dept of Community Medicine, HIMSR. The workshop then proceeded to hands-on training session on deriving basic descriptive parameters on Microsoft Excel. The post lunch discussion consisted of a session on

fundamentals of inferential statistics taken by Dr Atul Juneja and a session on non-parametric tests, correlation and regression by Dr Tulsi Adhikari. The 2nd day ended with an address by the, Prof. S.S. Anand,Dean HIMSR which was followed by the Valedictory function. The participants greatly appreciated the workshop and were thankful for the opportunity to learn the basics of research methodology.

Some glimpses of the workshop

