REPORT ON

VIRTUAL WORKSHOP ON RESEARCH METHODOLOGY & BIOSTATISTICS

FOR

UNDERGRADUATE MEDICAL STUDENTS- 26-07-2024

ORGANIZED BY

DEPARTMENT OF EPIDEMIOLOGY

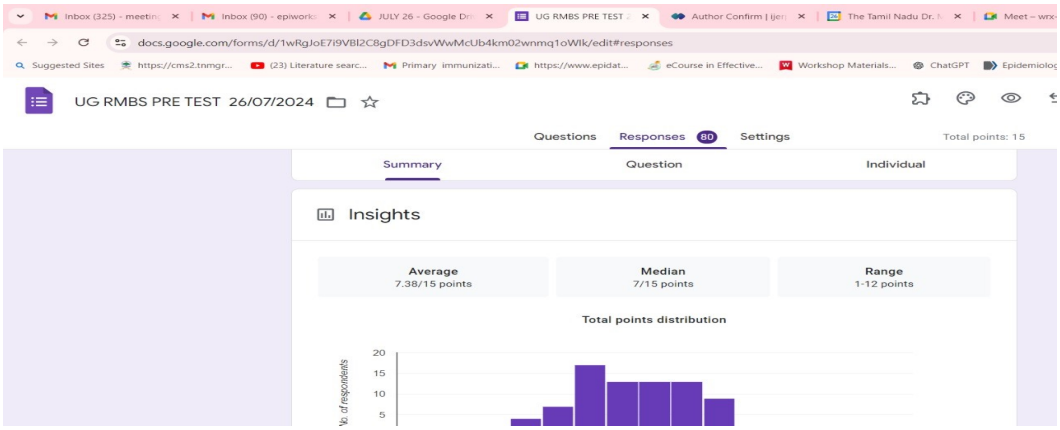
THE TAMIL NADU Dr.M.G.R. MEDICAL UNIVERSITY

Introduction:

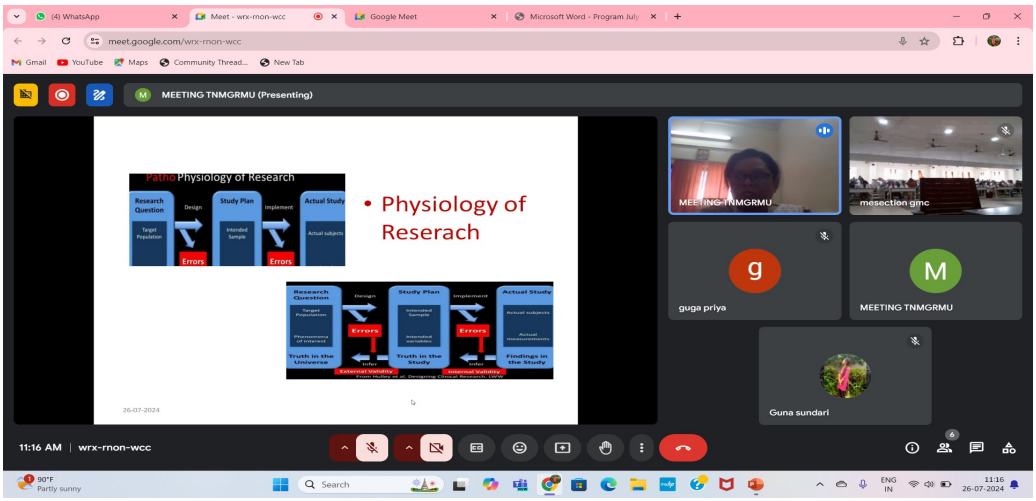
A series of one-day online workshops has been organized for third-year MBBS Part-I Undergraduate Medical students affiliated with The Tamil Nadu Dr. M.G.R. Medical University. The primary purpose of the workshop is to enhance the understanding and skills of participants in the various aspects of conducting research. This workshop aimed to provide a comprehensive overview of the research process, from the initial stages of formulating research ideas to the final stages of data analysis and interpretation. The main objective is to introduce participants to the fundamental concepts and principles of research methodology.

The workshop conducted on July 26, 2024, with 80 students from Government Medical College, Thiruppur in attendance. Sessions were held in the lecture halls on their campus, utilizing LCD screens for PowerPoint presentations. A nodal coordinator from the community medicine department was appointed by the institution to oversee the workshop.

The workshop followed a well-organized agenda, starting off with a pre-test on Research Methodology and Biostatistics, accessible via QR code. The pre-test helps to assess the baseline knowledge of participants. The pretest result was explained to participants.



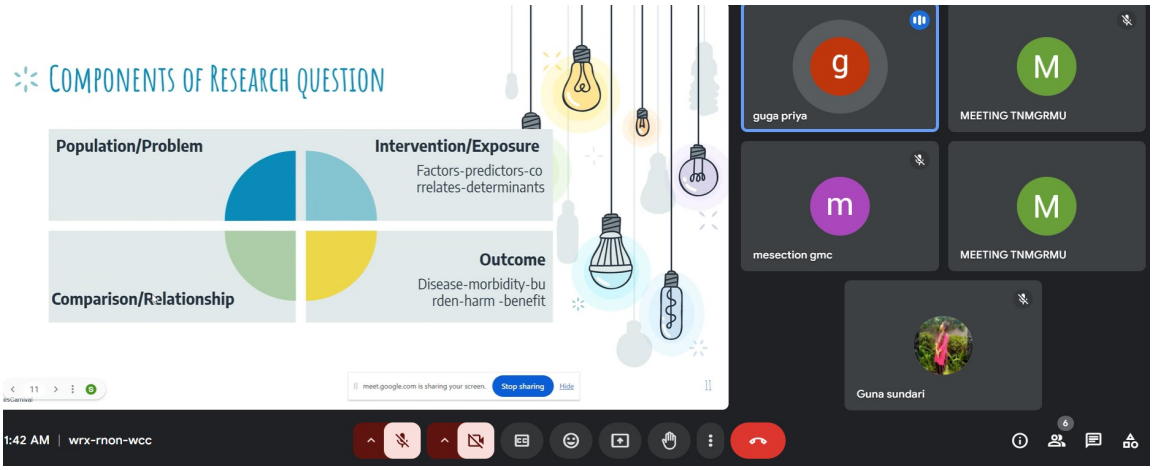
The introductory session of the research methodology workshop was presented by Dr. Jasmine S. Sundar, Senior Assistant Professor in the Department of Epidemiology. Dr. Jasmine began by explaining the importance and history of research, emphasizing its role in advancing knowledge and improving public health outcomes. She then outlined the key ideas and objectives of the workshop, which is designed to equip participants with essential research skills. The workshop is structured around five main skill sessions:



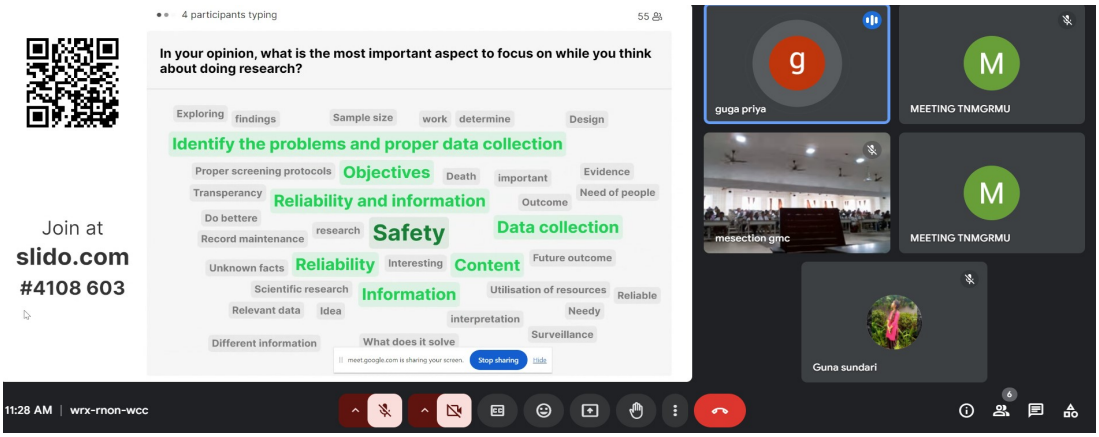
Session: Research Ideas /Questions & Objective

Speaker: Dr.Guga Priya, Prof. Dept of Anatomy, AIIMS,Nagpur

The first session of the research methodology workshop was dedicated to developing research ideas, formulating research questions, and setting clear objectives. The session aimed to equip participants with the necessary skills to identify relevant research topics and translate them into specific, actionable questions and objectives.



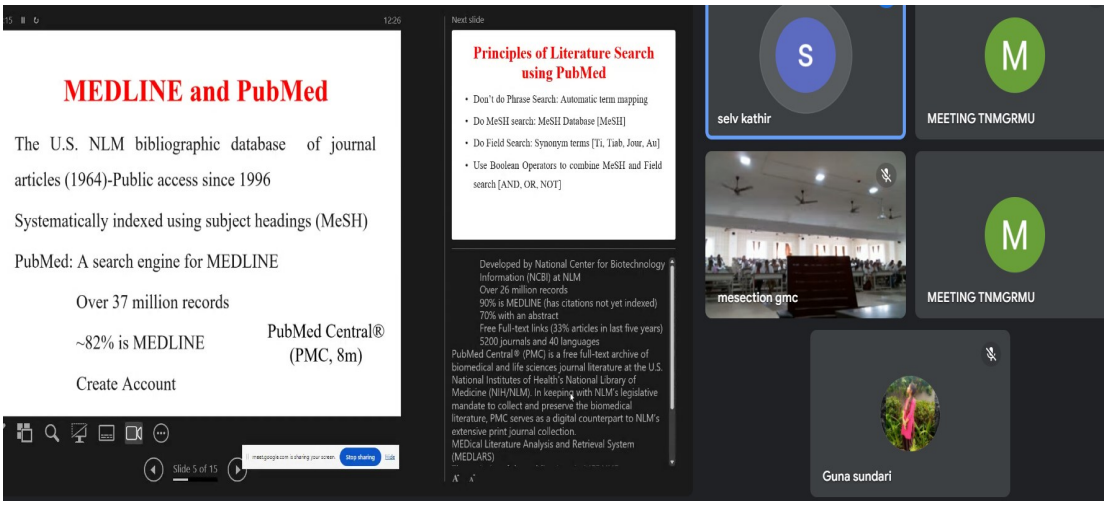
Active participation of students



Session 2: Searching and organizing literature

Speaker: Dr. Kathirvel, Associate Professor, Department of Community Medicine, School of Public Health, PGIMER, Chandigarh

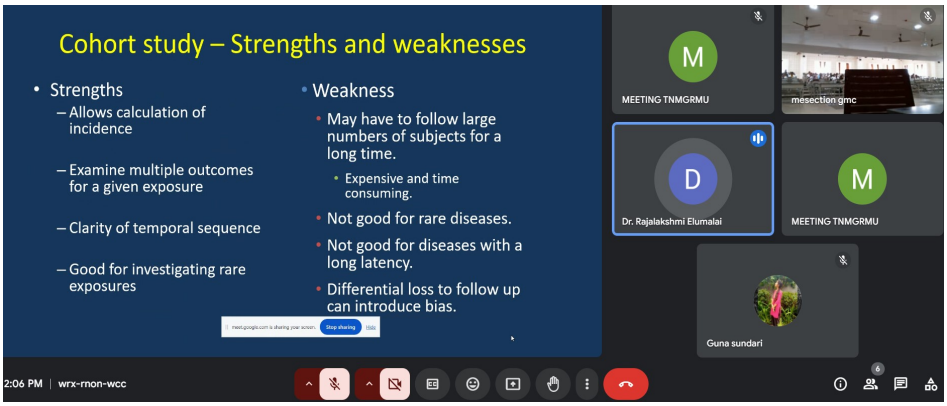
In this session, Dr. Kathirvel, Associate Professor, explained how to use PUBMED for searching and organizing research articles. He included a live demonstration of MEDLINE and PUBMED, as well as a tutorial on citing references in Word documents.



Session 3 : Research Design

Speaker: Dr. E. Rajalakshmi, Research Consultant, TANCAM

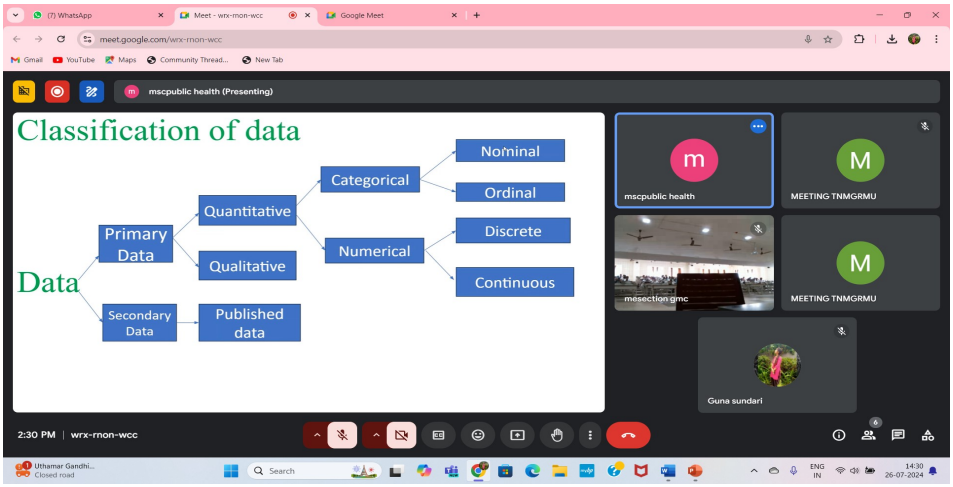
This session emphasized the significance of methodically planning and structuring research studies. Participants explored various research designs, including experimental, observational, and qualitative approaches, and learned how to select the most suitable design for their research questions.



Session 4 : Basics Bio- statistics in Health research

Speaker: Dr. Paridayal, Assistant professor, Department of statistics, Madras Christian College

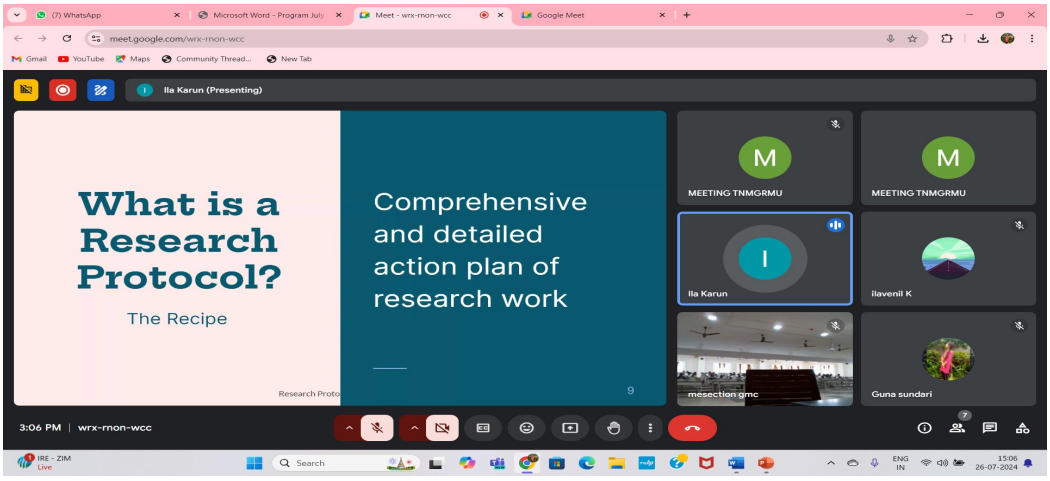
Dr. Paridayal taught statistics in health research during the session. Participants were introduced to key statistical concepts including mean, median, mode, standard deviation, and variance. The session also highlighted the importance of hypothesis testing, p-values, and confidence intervals in interpreting research results.



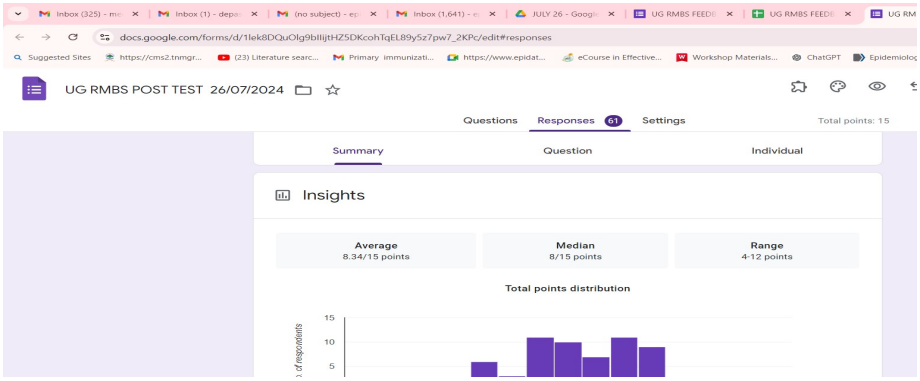
Session 5 : Research protocol

Speaker: Dr. Ilavenil, Assistant professor, Karpagam Faculty of Medical Sciences and Research

Dr. Ilavenil covered detailed steps for designing a research protocol, including selecting appropriate methodologies, defining inclusion and exclusion criteria, and establishing data collection procedures. Ethical considerations and obtaining necessary approvals were also highlighted as critical components of a robust research protocol.



At the end of session post- test were conducted and results were explained to participants.



Dr. Jasmine S. Sundar, Senior Assistant Professor, concluded the research methodology workshop. Feedback was collected from participants using a QR code, and students also provided live feedback, sharing how they gained knowledge and found the workshop useful.