

## REPORT ON VIRTUAL WORKSHOP ON RESEARCH METHODOLOGY & BIostatISTICS FOR UNDERGRADUATE MEDICAL STUDENTS



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 aim of the workshop is to advance the comprehension of participants and their abilities regarding various aspects of conducting research; that is, theoretically, and with experience. This workshop sought to provide an inclusive overview of the research endeavor from the outset of developing research ideas to the conclusion of data analysis to the down-stream implications; implemented for the purpose of creating fundamental knowledge and principles of research methodology.

On 6<sup>th</sup> of September 2024, workshop was organized with a total of 236 students from Tagore Medical College, Chennai and Sree Mookambika Institute of Medical Sciences, Kulasekaram, Kanyakumari. The sessions were organized in their lecture halls of their campus with PowerPoint presentations on large LCD screens. A faculty member from the community medicine department was appointed by the institution to oversee the workshop.

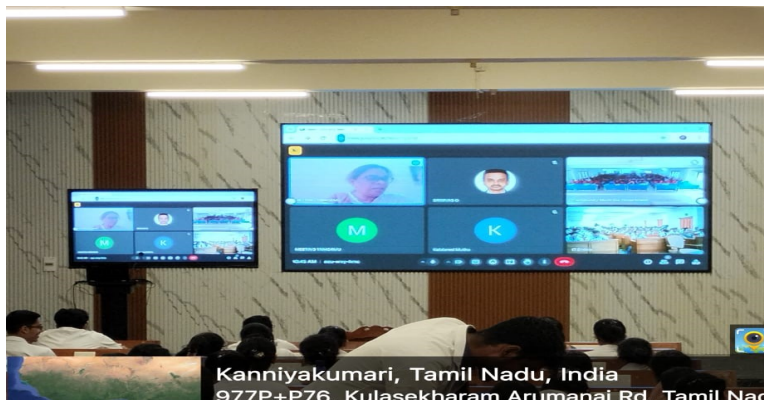
The workshop adhered to a methodical timetable, beginning with a QR code designed for a pre-test in the area of Research Methodology and Biostatistics. The day was characterized by lectures interspersed with activities that engaged students, promoted participation, and extended students' comprehension of essential topics. Concluding the workshop, students received another QR codes for a post-test and feedback, which allowed students the opportunity to review their learning and share useful insights.

### THE KEY TOPICS COVERED ARE:

1. Research Ideas /Questions & Objectives
2. Searching and Organizing Literature
3. Research Designs
4. Basic Biostatistics in Health Research
5. Research protocol

The workshop featured distinguished experts from prestigious institutions including **All India Institute of Medical Sciences (Nagpur)**, **Madras Christian College, NIE-ICMR**, **Karpagam faculty of Medical Science & Research (Coimbatore)**

Tagore Medical College & Sree Mookambika Institute of Medical Sciences:



## INTERACTIVE SESSIONS BY THE EXPERTS

0:47 | aou-xrxy-hmc

SRINIVAS G (Presenting)

If you don't know how to use them, it will never be enough.

Dr Srinivas G, Department of Epidemiology, The Tamil Nadu Dr. M. G. R. Medical University

MEETING TNMGRMU

SRINIVAS G

Community Medicine Depart...

IT Smims

MEETING TNMGRMU

Kalaiarasi Muthu

This screenshot shows a Zoom meeting interface. The main window displays a presentation slide with a photograph of a person standing on a path of sticks leading to a red dot in a desert. Below the photo is a quote: "If you don't know how to use them, it will never be enough." The presenter is identified as Dr. Srinivas G, Department of Epidemiology, The Tamil Nadu Dr. M. G. R. Medical University. The meeting controls at the bottom show a timer at 0:47 and the meeting ID aou-xrxy-hmc. The participant list on the right includes several 'MEETING TNMGRMU' icons and two video thumbnails for 'Community Medicine Depart...' and 'IT Smims'. A profile card for 'Kalaiarasi Muthu' is also visible.

15:30 | aou-xrxy-hmc

To exit full screen, press Esc

Case\_Writing a Research Protocol

Activity

- What are the details to be included under the methodology of a research protocol?
- Scan the QR code to add your answers

MEETING TNMGRMU

MEETING TNMGRMU

Community Medi...

IT Smims

MEETING TNMGRMU

Ilavenil K

Kalaiarasi Muthu

This screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Case\_Writing a Research Protocol" with an "Activity" section. The activity asks for details to be included under the methodology of a research protocol and provides a QR code for scanning. The meeting controls at the bottom show a timer at 15:30 and the meeting ID aou-xrxy-hmc. The participant list on the right includes several 'MEETING TNMGRMU' icons and two video thumbnails for 'Community Medi...' and 'IT Smims'. A profile card for 'Kalaiarasi Muthu' is also visible.

5:07 | aou-xrxy-hmc

MEETING TNMGRMU

MEETING TNMGRMU

Community Medi...

IT Smims

MEETING TNMGRMU

Ilavenil K

Kalaiarasi Muthu

Innovation Career goals

Research Protocol | September 2024

This screenshot shows a Zoom meeting interface. The main window displays a presentation slide with the title "Innovation Career goals" and the subtitle "Research Protocol | September 2024". The meeting controls at the bottom show a timer at 5:07 and the meeting ID aou-xrxy-hmc. The participant list on the right includes several 'MEETING TNMGRMU' icons and two video thumbnails for 'Community Medi...' and 'IT Smims'. A profile card for 'Kalaiarasi Muthu' is also visible.

## COMAPRISION SCORES OF PRE-TEST & POST-TESTS:

Figure 1: Pre-Test Score

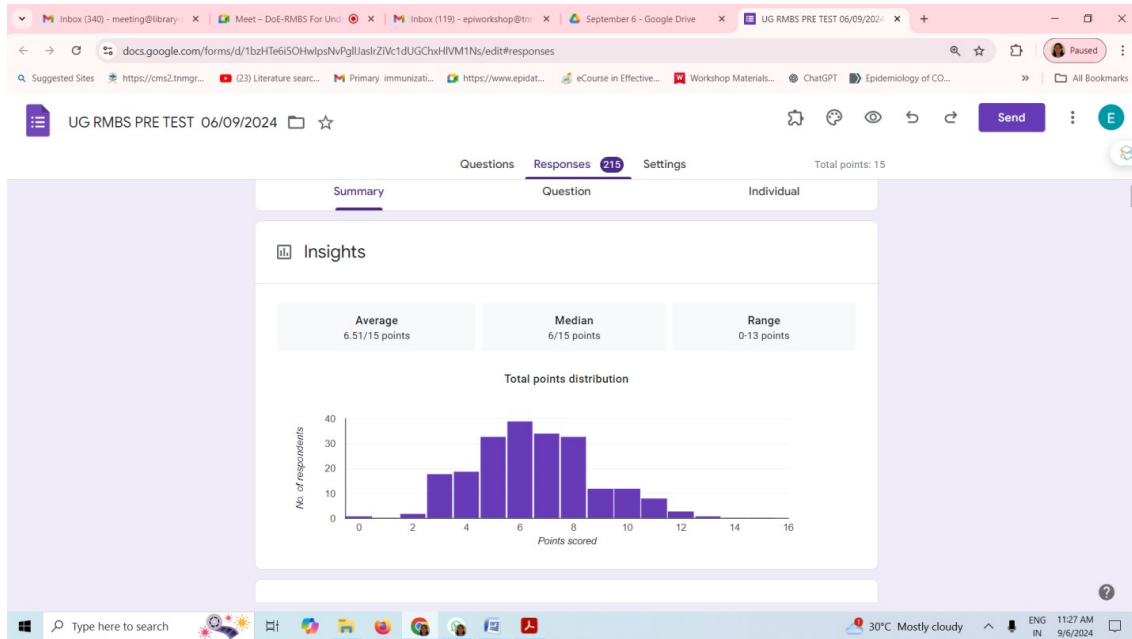
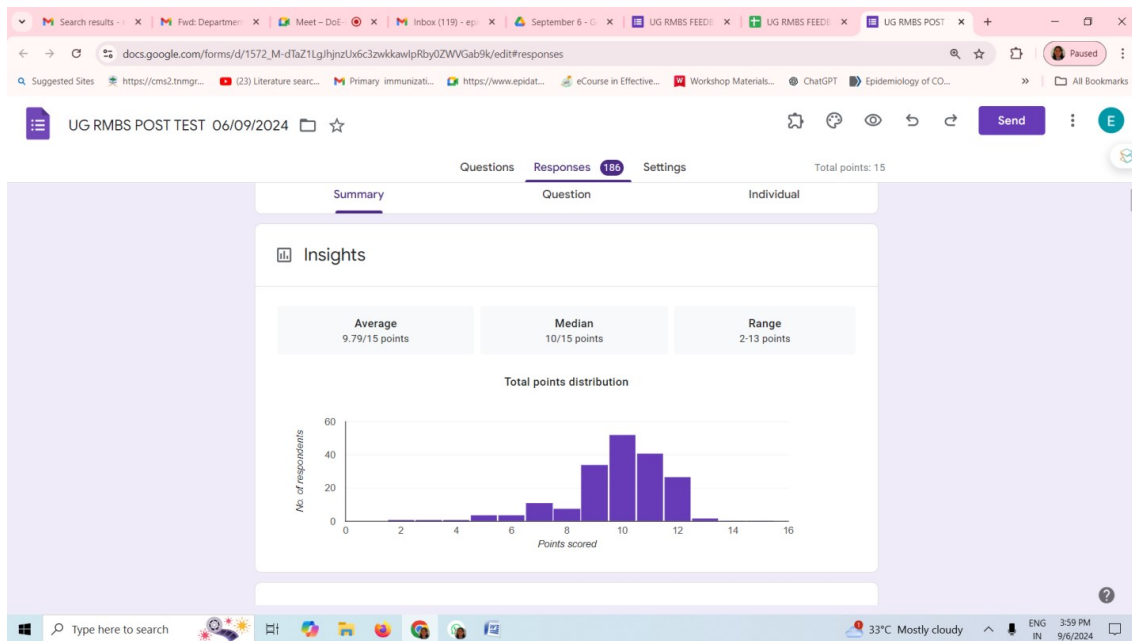


Figure 2: Post-Test Score



## **OVERALL FEEDBACK FROM THE COLLEGES:**

The meticulously organized workshop was incredibly valuable for us as third-year MBBS Part-1 students. Dr. Jasmine S.Sundar's opening address set an engaging tone, laying a solid foundation for the rest of the sessions.

We're deeply grateful for the comprehensive exploration of a wide range of topics. Dr. G. Srinivas, Professor and Head of the department, gave us a clear and insightful introduction to health research. T.S. Guga Priya's session on "Research Ideas/Questions & Objectives" and Dr. Senthil Kumar lecture on "Searching and Organizing Literature" were both incredibly enlightening.

Dr. Yuvaraj discussion on "Research Designs" gave us a solid understanding of various methodologies, while Dr. Pari Dayal talk on "Basic Biostatistics in Health Research" made the complex concepts more accessible. Dr. Ilavenil session on "Research Protocol" was not only interactive but also highly informative, and Dr. Jasmine S. Sundar's "Pre-test & Post-Test" session helped us reinforce what we learned throughout the day.

A special thank you to the presenters for practically demonstrating tools like PubMed and using interactive polls during the sessions on research ideas, research design, and research protocol formulation. These practical demonstrations truly brought the concepts to life and enhanced our understanding.

Overall, this workshop provided us with invaluable insights and practical skills that will greatly benefit our future academic and research pursuits.